WOOD PROCESSING AND FURNITURE

IN-DEPTH REVIEW OF STRATEGIC TRADE SECTORS IN UKRAINE

USAID COMPETITIVE ECONOMY PROGRAM IN UKRAINE (USAID CEP)

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USAID Competitive Economy Program in Ukraine (USAID CEP) promotes a strong, diverse, and open economy of Ukraine by enhancing the business environment for small and medium enterprises (SMEs), improving competitiveness in promising industries, and enabling Ukrainian companies to benefit from international trade.

This Research Conducted by:

INSTITUTE
FOR ECONOMIC RESEARCH
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List of abbreviations

FTA	free trade area
GVA	gross value added
MFN	most favoured nation
PE	private entrepreneur (short for a physical person – entrepreneur)
RCA	revealed comparative advantage
SME	small and medium-sized enterprises
UAH	Ukrainian hryvnia

I. Sectoral Impact Assessment in wood processing and furniture

Executive Summary

Wood processing and furniture are one of the most traditional sectors of Ukraine's economy, and it is also one of few industries that recently demonstrated a high growth rate, despite the war and economic hardships.

The sector contributes about 0.8% to the GVA. The SMEs dominate in the sector with 88% of value added and 97% of employees. As a result, the market is highly competitive. However, the sector is not very attractive in terms of employee compensation. Wages fall slightly behind the national average, and that at least partly explains that the lack of a qualified labor force is among critical problems for the sector.

The sector is export-oriented, with about half of its output sold outside the country. Trade occurs mostly in semi-processed products making half of imports and exports.

Import barriers in the sector are low as both Ukraine and Turkey apply low import duties, and other types of control are limited. However, Ukraine still restricts the export of raw materials with the help of round wood (timber) export ban. The sector representatives expect that FTA with Turkey would reduce import tariffs and allow diagonal cumulation, stimulating trade both with Turkey and with the EU.

Summary table

Indicator	Value	Year of observation
Value added, % of GVA	0.8	2018
SMEs value added, % of sector total	88	2018
Real output growth, % CAGR, 2018	24.2	2018
Hired employees, thous.	110.3	2018
Average monthly wage, UAH	5 585	2018
Exports, USD bn	1.93	2018
Exports, % of domestic production	49	2017
Imports, USD bn	0.5	2018
Imports, % of domestic consumption	57	2017
Ukraine RCA, world	2.4	2018
Ukraine RCA, Turkey	7.9	2018

Sources: Ukrstat, WITS, authors' estimates

1. The general situation in the sector

1.1. Domestic production

Value-added. Wood processing and furniture are among traditional sectors of Ukraine's economy, inherited from Soviet times. Since 16.7% of Ukraine's land area is forested, Ukrainian manufacturers have access to domestic raw materials. As a result, thousands of businesses work in the sector.

According to the IER estimates based on the official data, the wood processing and furniture sector generated ca. 0.8% of the gross value added in 2018 (see Table 1). That is almost two times more than in 2013. The share increased both due to the growth of the sector itself and the decline of some other industries.

Table 1: Value added in the sector*, 2013 – 2018

	2013	2014	2015	2016	2017	2018
Value added, UAH bn	6.5	9.6	11.2	14.2	21.2	24.4
Value added, % of output	30.0	33.9	29.7	29.1	34.1	30.9
Value added, % of GVA	0.5	0.7	0.7	0.7	0.8	0.8
Value-added produced by SMEs, % of total	-	83.0	84.0	89.0	89.0	88.0
Value added produced by PE, % of total	19.3	14.3	13.7	17.1	16.7	18.0

Source: Ukrstat
*Note: * based on information for private companies*

Company size. In the wood processing and furniture sector, almost 90% of the total value added is produced by SMEs. There are only a few large wood processors and furniture manufacturers, hundreds of medium enterprises, and thousands of micro and small businesses (enterprises and private entrepreneurs).

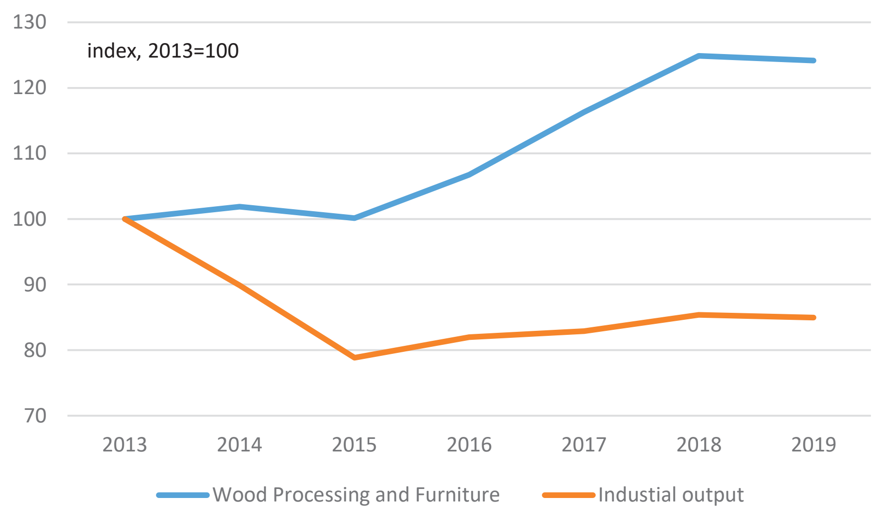
Since the information on value-added by SMEs for 2013 is not available, it is impossible to compare their contribution before and after the war and crisis. Nevertheless, SMEs increased their role in the sector from 83% of value added in 2014 to 88% in 2018.

In 2018, private entrepreneurs produced 18% of the value-added in wood processing and furniture manufacturing. We think that the quick recovery of the sector could boost production growth by private entrepreneurs. During the crisis years of 2014-2015, the PEs' share in the value-added dropped to ca. 14%, but has recovered in 2016. However, other studies claim that big manufacturers use PE legal form (through registering dozens of PEs) and the simplified tax system to decrease the tax burden.[1]

[1] Strategic export plan for furniture manufacturers in Ukraine. Prepared by Ukrainian Industry Expertise (UEX) at the request of the Union of Ukrainian Entrepreneurs (SUP) and the Western NIS Enterprise Fund (WNISEF).

Output trends. In 2014-2015, the output of the wood processing and furniture sector did not drop in contrast to the industry in total (see Figure 1). In particular, wood processing, primarily the sawmill industry, boomed after the introduction of the round wood export ban in 2015.[2] By 2019, the wood processing and furniture sector's real output reached 124% of the 2013 benchmark. By contrast, the overall industrial production was only at an 85-per cent level of its 2013 baseline. In 2019, furniture manufacturing continued growing, but wood processing declined by 4%.

Figure 1: Real output trends, 2013-2018



Source: Ukrstat

Ownership structure. The wood processing and furniture sector are mostly represented by private legal entities (domestic and foreign-owned). The share of public companies on the market is only ca. 1%. As a result, the wood processing and furniture sector are almost entirely private-owned (see Figure 2).

Private entrepreneurs account for 15% of sales in the markets. However, as mentioned above, the PE legal form might be used for minimizing tax payments. Therefore, the role of PEs in the ownership structure might be less significant.

The wood processing and furniture sector seem attractive to foreign investment. According to our estimates, foreign-owned companies accounted for more than one-fifth of sales on the market in 2018. The most prominent furniture manufacturers with foreign investment include Ambiente Furniture Ukraine (a subsidiary of Dutch Actona Company Group), Morgan Furniture (European manufacturer registered in Luxembourg), BRW-Ukraine (Black Red White, Polish manufacturer), and Novyy Styl (Nowy Styl, Polish office furniture manufacturer). The non-exhaustive list of foreign-owned companies in wood processing includes ODEK (the largest producer of plywood in Ukraine, with Dutch capital), Kronospan UA (world's largest

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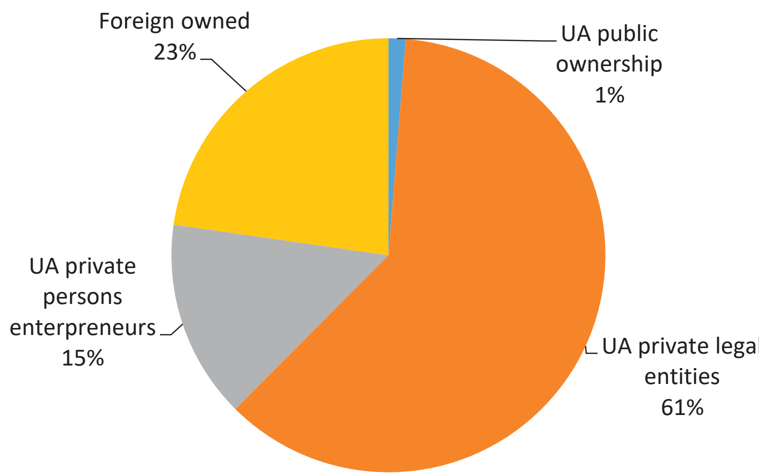
See p. 23, https://uafm.com.ua/wp-content/uploads/2018/07/sup-eksportna-strategiya-dlya-meblevyh-kompanij.pdf.

[2]Anhel Y. Butin A. Results of Ukraine's temporary moratorium on timber export. IER, 2018. P. 23, http://www.ier.com.ua/files//publications/Policy_papers/IER/2018/Timber_moratorium_results_IER_2018.pdf [Ukr.]

manufacturer of wood-based panels), and Ukrainian Sawmills (woodworking plant with Swedish capital).

Figure 2: Ownership structure, 2013-2018



Source: Ukrstat

Market concentration. According to our estimates, the market for wood processing and furniture manufacturing is competitive. Top-8 companies in the “Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials” sector hold only 27% of the market. At the same time, top-8 companies in the “Manufacture of furniture; jewelry, musical instruments, toys; repair and installation of machinery and equipment” sector hold only 10% of the market. This market mostly consists of SMEs and thus is highly competitive. At the same time, the industry has been featuring the development of business networking structures, like the Ukrainian Association of Furniture Manufacturers,[3] and production clusters like the Rivne furniture cluster formally launched in early 2020.

Informal sector. According to the Strategic export plan for furniture manufacturers in Ukraine, 40% of furniture manufacturing was not represented in the official statistics in 2013-2016. The informal sector mostly produces cheap products for the domestic market. As a result, the share of informal manufacturing in the local market increased from 44.9% in 2013 to 57.9%

[3] See: https://uafm.com.ua/en/

in 2016.[4] The decline of purchasing power in Ukraine stimulated demand for products manufactured by the informal sector due to lower prices.[5]

The BRDO estimated that in 2017 there were about 12 thousand illegal sawmills in Ukraine, and only 9.2 thousand were operating legally.[6] Moratorium on round timber exports, introduced in 2015, spurred up the production of sawn wood, but a considerable number of sawing firms are small unregistered sawmills.[7]

1.2. Employment

Sector's role as an employer. In 2014-2015, the number of employees working in the wood processing and furniture sector declined by more than one-tenth. However, the sector recovered in 2016-2017, and in 2018 overcame the 2013 benchmark year by ca. 11%. Alongside this, the share of the sector in the total number of employees in Ukraine increased from 1.2% to 1.6%. It corresponds to the general trends with the industry growing faster than the national economy. At the same time, the wood processing sector employs more workers than the furniture manufacturing sector (see Table 2).

The share of employees working in the sector in SMEs remained steadily high, at 97%, in 2014-2018. That also supports the fact that SMEs dominate in wood processing and furniture manufacturing.

Table 2: Employment in the sector*, 2013 – 2018

	2013	2014	2015	2016	2017	2018
Number of hired employees in the sector. thous.	99.5	89.5	85.4	91.5	101.1	110.3
Hired employees working in sector SMEs. %	-	97.0	97.0	97.0	97.0	97.0
Hired employees in the sector. % of total in the economy	1.2	1.2	1.3	1.4	1.5	1.6
Average monthly wage. UAH	1 926	2 204	2 881	3 513	4 645	5 585

[4] The Plan was prepared by Ukrainian Industry Expertise (UEX) at the request of the Union of Ukrainian Entrepreneurs (SUP) and the Western NIS Enterprise Fund (WNISEF). See p. 6, 15, and 23, https://uafm.com.ua/wp-content/uploads/2018/07/sup-eksportna-strategiya-dlya-meblevyh-kompanij.pdf.
[5] See the Roadmap for the Ukrainian furniture industry development, p. 14 https://uafm.com.ua/wp-content/uploads/2018/07/dorozhnya-karta-dlya-rozvytku-meblevogo-sektoru-ukrayiny.pdf.
[6] See BRDO: The budget of Ukraine loses 200 million hryvnas annually because of illegal sawmills (https://en.brdo.com.ua/main/brdo-budget-ukraine-loses-200-million-hryvnas-annually-illegal-sawmills/). Also see https://fe8a03e2-1131-44e7-a06a-fb468c2a30d4.filesusr.com/ugd/624187_673e3aa69ed84129bdfeb91b6aa9ec17.pdf,
[7] See Sector Selection Assessment Report. Competitive Economy Program. USAID Ukraine, 2019

Average monthly wage. USD	241.0	185.4	131.9	137.5	174.7	205.3
Real average monthly wage. index. 2013=100	100.0	100.2	88.2	94.4	109.0	118.1

Source: Ukrstat
*Note: * based on information for private companies*

Wages. In 2018, the official wage in the wood processing and furniture sector constituted only about three-quarters of the Ukraine private sector average (see Figure 3). Wages in the sector are lower than the average wages over recent years. Even though real wages in wood processing and furniture manufacturing have been increasing since 2016, the official data suggest that the wages in the sector are not competitive. As a result, furniture manufacturing specialists migrate to nearby EU countries.[8]

Figure 3: Average monthly wage, 2013-2018

Source: Ukrstat

Labor turnover. In 2018, 26.6 thousand people quit their jobs in the sector "Wood and paper products, printing". That constitutes 36.5% of the total number of officially employed persons in the sector. At the same time, 30.5 thousand people left jobs in" furniture, other manufacturing, repair and installation of machinery and equipment", which makes 31.5% of all people employed in the sector. That suggests that approximately a third of people working in wood processing and furniture manufacturing change their jobs each year.

[8] See Sector Selection Assessment Report. Competitive Economy Program. USAID Ukraine, 2019

1.3. Sector development assessment

Access to raw materials. As of today, the state preserves the monopoly of the timber supply. Most woods are public owned and managed by the State Forest Agency and other state institutions (Ministry of Defense and others). Most of the logging enterprises belong to the State Forest Agency. For many years, the system of timber sales by logging enterprises was criticized for lack of transparency. There have been a few draft laws on the regulation of the timber market. At the end of 2019, the European Business Association stated that wood processing firms faced problems with access to raw materials. According to it, it is essential to define rules for the wood market legally.[9]

To reduce corruption and illegal logging, in February 2020, the government launched a pilot project for online timber auctions. Experts agree that this step would decrease the number of legislation abuses, but auction prices are volatile, posing a challenge for companies' planning. Some experts advocate the introduction of the system of long-term contracts for timber supplies.[10]

In 2015, the Ukrainian parliament introduced the 10-year moratorium on round timber exports to stimulate wood processing and furniture manufacturing inside the country. According to the IER study, the moratorium boosted the production and exports of processed timber.[11] However, experts highlight, the ban did not help to stop deforestation or the smuggling of raw wood logs. Moreover, the ban violated Ukraine's commitments within the Association Agreement with the EU, and the parties have an ongoing arbitrage on this matter. At the same time, Ukrainian furniture manufacturers have remained dependent on imported semi-processed materials like fiberboard and particle boards (see Exports orientation and imports dependence).

Lack of labor force. The interview showed that the wood processing and furniture manufacturing sector lacks qualified specialists. Young people are less interested in working in such traditional industries.[12] In 2017, less than three hundred students applied to higher education establishments for studies in wood processing and furniture technologies. Besides, fewer school graduates start vocational training in wood processing and furniture manufacturing. Vocational education establishments have outdated training facilities.[13]

Besides, qualified employees migrate to the neighboring countries where they can receive higher wages. For example, firms located close to Poland face problems retaining workers.[14] The firms increase wages to keep specialists. That drives up the cost of production.

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[9] Kuzmenko Y. Export of wood or furniture? EBA, 18 February 2019, https://eba.com.ua/eksport-derevyny-chy-mebliv/ [Ukr.]

[10] Experts: It is impossible to solve the issues in the wood sector without a systemic reform. 26 February 2020. https://uacrisis.org/uk/75047-how-to-reform-forest-management. [Ukr.]

[11] Anhel Y., Butin A. Results of Ukraine's temporary moratorium on timber export. IER, 2018. P. 23, http://www.ier.com.ua/files//publications/Policy_papers/IER/2018/Timber_moratorium_results_IER_2018.pdf. [Ukr.]

[12] See Sector Selection Assessment Report. Competitive Economy Program. USAID Ukraine, 2019. p. 194

[13] Furniture workers in Ukraine are precious as gold: How, where and how much is it possible to earn? https://www.mebelok.com/uk-ua/mebelschik-na-ves-zolota/. [Ukr.]

[14] See https://uafm.com.ua/wp-content/uploads/2018/07/dorozhnya-karta-dlya-rozvytku-meblevogo-sektoru-ukrayiny.pdf.

Competition with informal manufacturers. The sector has a high share of informal production (see Informality). As for the furniture sector, informal manufacturers pay low taxes (or do not pay at all), use cheap and low-quality raw materials. Very often, such informal companies produce copies of branded products and sell them on the domestic market, abusing the intellectual property rights and competition on the Ukrainian market.[15]

Impact of novel coronavirus pandemic. PPV Knowledge Network, an economic development agency, with support of the USAID Competitive Economy Program, researched the effect of COVID-19 pandemic and quarantine measures in logging, wood processing, paper, and furniture manufacturing. According to the survey results, more than 80% of respondents stopped or reduced production. Half of the surveyed firms do not have funds for paying taxes and wages. Firms (71% of respondents) usually are not able to switch production to online mode because of the importance of manual labor. Most respondents (90%) argue that the quarantine and decline of purchase power would hurt the sector.[16]

2. Foreign trade

2.1. Exports and imports

Dynamics of trade. Both imports and exports of wood products and furniture have increased over recent years. Even though the value of exports dropped in 2015, in 2016-18, it recovered and overreached the 2013 benchmark by more than a half. Imports took a harder hit: their value decreased threefold in 2014-15. However, imports started recovering in 2016 and doubled by 2018 (compared to the 2015 import value).

The share of exports of wood products and furniture in the overall exports of Ukraine doubled from 2013 to 2018. Their percentage was growing each year, also due to the decline in other goods exports. At the same time, the share of the sector in imports is still under the 2013 benchmark (see Table 3).

Furniture manufacturers are considered to be well-prepared to access the international market. However, the distribution of their products is usually delegated to third parties as manufacturers (mainly SMEs) do not have sales or marketing specialists to promote exports among permanent employees. Also, Ukrainian companies depend on imported equipment, the latter being supplied mostly by the EU, China, and Turkey. [17]

[15] P. 14-15, https://uafm.com.ua/wp-content/uploads/2018/07/sup-eksportna-strategiya-dlya-meblevyh-kompanij.pdf.
[16] The impact of Covid-19 and quarantine measures on enterprises in the wood sector of Ukraine - the results of the study. PPV Knowledge Networks, 3 June 2020, https://info.ppv.net.ua/study-covid-impact-on-forest-sector/. [Ukr.]
[17] Roadmap for the Ukrainian furniture industry development, p. 21, 42. https://uafm.com.ua/wp-content/uploads/2018/07/dorozhnya-karta-dlya-rozvytku-meblevogo-sektoru-ukrayiny.pdf. [Ukr.]

Table 3: Foreign trade in the sector*, 2013 – 2018

	2013	2014	2015	2016	2017	2018
Value of exports, USD bn	1.29	1.37	1.18	1.27	1.58	1.93
Exports growth, % year-on-year		6	-13	7	24	23
Exports, % of total exports	2.0%	2.5%	3.1%	3.5%	3.6%	4.1%
Value of imports, USD bn	0.75	0.52	0.25	0.32	0.41	0.50
Imports growth, % year-on-year		-30%	-52%	30%	25%	24%
Imports, % of total imports	1.0%	1.0%	0.7%	0.8%	0.8%	0.9%
Trade balance, USD bn	0.54	0.84	0.93	0.95	1.17	1.43

Source: Ukrstat/WITS
*Note: * based on information for private companies*

Trade balance. Ukraine is a net exporter of wood products and furniture. The trade surplus increased by almost three times, from 2013 to 2018. In particular, the trade surplus for furniture has increased after 2014, when imported furniture became more expensive for Ukrainian consumers due to hryvnya depreciation, economic crisis, and decline of real household income.[18] For example, imports of wooden furniture shrank almost four times in 2014-2015.[19] The trade balance with Turkey is also positive. In 2018, Ukraine's exports to Turkey exceeded imports by more than six times.

Imported furniture dominates the high-quality segment of the furniture market. At the same time, Ukrainian furniture substituted medium and lower-medium quality imports due to hryvnya depreciation and lower prices.[20]

The moratorium on round timber exports boosted exports of wood products in the sector. In 2014, the value of round timber exports made about one-fifth of the total cost of wood and wood products exports. In the following years, sawn wood substituted round timber in the structure of shipping, as sawmills increased their production to cover the foreign and domestic demand. In 2018, the value of sawn wood exports made up about one-third of exports of wood products and furniture.

The list of significant export products also includes sheets for veneering (USD 0.2 bn), wooden furniture (USD 0.15 bn), and particle boards (USD 0.09 bn). At the same time, more than one-

[18] Roadmap for the Ukrainian furniture industry development, p. 55. https://uafm.com.ua/wp-content/uploads/2018/07/dorozhnya-karta-dlya-rozvytku-meblevogo-sektoru-ukrayiny.pdf. [Ukr.]

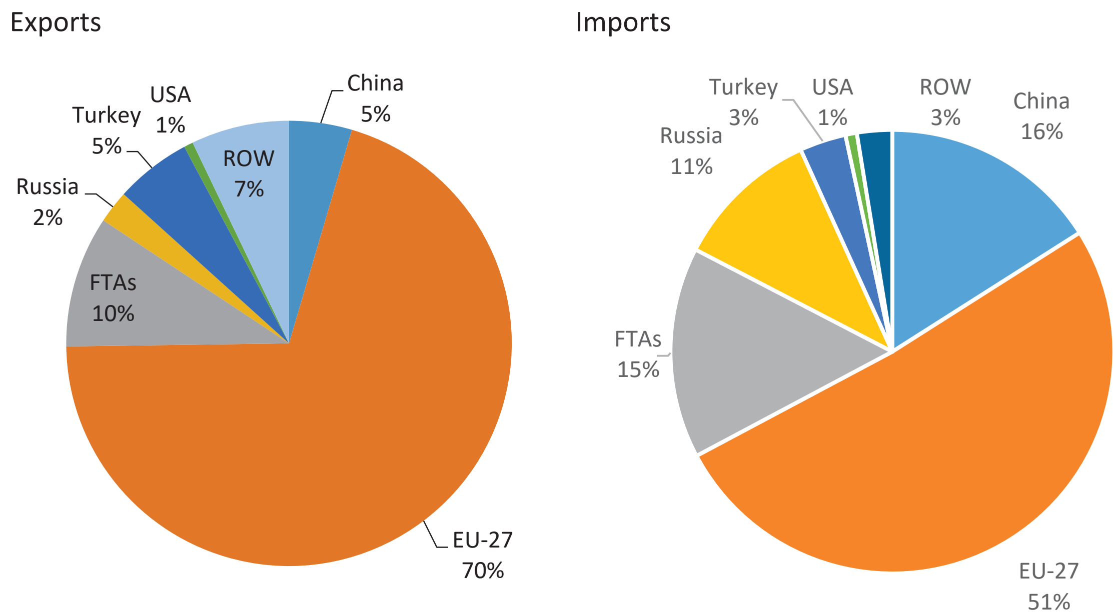
[19] Anhel Y., Butin A. Results of Ukraine's temporary moratorium on timber export. IER, 2018. http://www.ier.com.ua/files//publications/Policy_papers/IER/2018/Timber_moratorium_results_IER_2018.pdf [Ukr.]

[20] Roadmap for the Ukrainian furniture industry development, p. 56 https://uafm.com.ua/wp-content/uploads/2018/07/dorozhnya-karta-dlya-rozvytku-meblevogo-sektoru-ukrayiny.pdf. [Ukr.]

third of imports (USD 0.19 bn) are particle boards and fiberboards, materials for furniture manufacturing. As for the trade with Turkey, different kinds of sawn wood, with a share of 60%, is also the primary exported good of Ukraine, while exports of furniture are tiny. The imports from Turkey consists mostly of fiberboards and wooden furniture.

Key trade destinations. Although the sector export geography is vast, the EU is the leading trade partner, dominating both exports and imports. Besides, exports to Turkey make up 5% of all wood and furniture exports (see Figure 4). That puts Turkey among the top five individual countries that are major export destinations for Ukraine in the sector. By contrast, only 3% of Ukrainian wood and furniture imports come from Turkey.

Figure 4: Key trade destinations, 2018



Source: WITS

Export orientation and import dependence. The sector is export-oriented since exports made up about half of domestic output in 2017 (see Table 4). At the same time, the sector depends on imports of intermediate products, especially the manufacturing of furniture. For example, domestic production of particleboards and fiberboards covers only 50-60% of Ukrainian furniture manufacturers demand, primarily in the lower segments of the market (because of lower quality). As a result, particle boards and fiberboards are the primary import goods. According to the Strategic plan for furniture manufacturers, Ukrainian firms import (in particular, from Turkey) furniture fittings and upholstery since they are rarely produced in Ukraine.[21]

Due to the reliance on imported inputs, the sector representatives consider the conclusion of the FTA with Turkey allowing the diagonal cumulation within the Pan-European-Mediterranean Convention on the rules of origin as an opportunity to boost exports especially to the EU.

Official statistics suggest that imports still dominate in total domestic consumption, although their share can change due to national currency fluctuations. Nevertheless, it does not include the informal part of the sector. As it was mentioned above, approximately 40% of furniture, manufacturing is not accounted for adequately. Mostly, they serve the domestic market.[22]

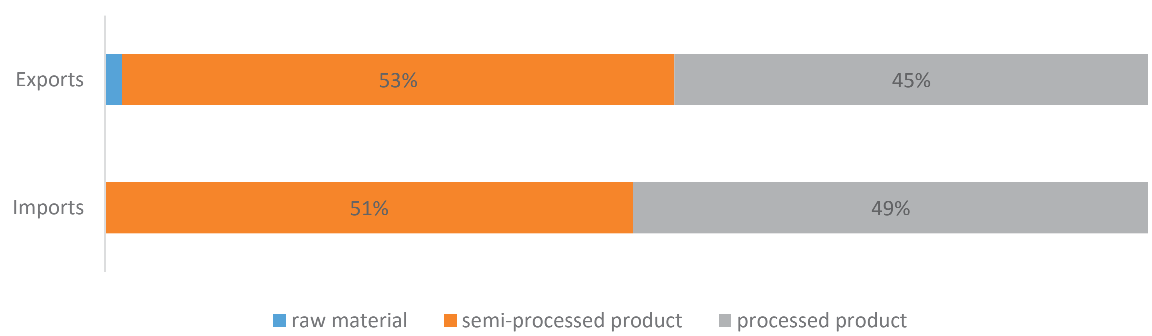
Table 4: Export orientation and import dependence of the sector, 2017

	% of exports in domestic production	**% of imports in domestic consumption**	**% imported inputs in intermediate consumption**
Wood processing and furniture	49	57	22

Source: Ukrstat

Trade by the level of processing. The 2018 data show that semi-processed products make up half of the Ukrainian exports of wood products and furniture and half of Ukraine's imports. Ukraine also imports and exports a significant share of processed products (see Figure 5).

Figure 5: Trade by the level of processing (world), 2018



Source: WITS

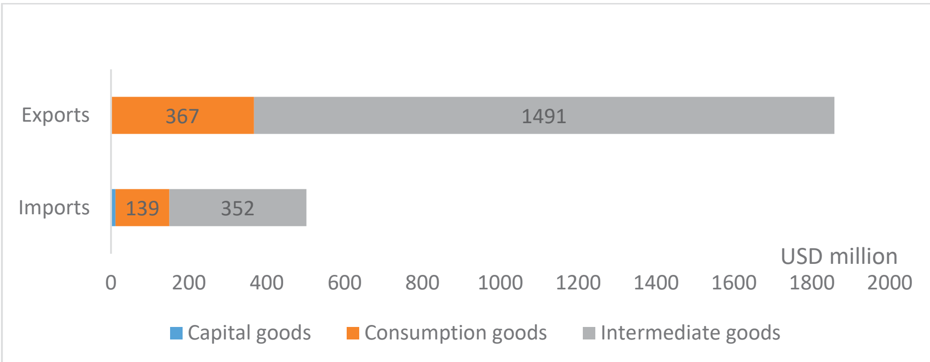
[21] Strategic export plan for furniture manufacturers in Ukraine. Prepared by Ukrainian Industry Expertise (UEX) at the request of the Union of Ukrainian Entrepreneurs (SUP) and the Western NIS Enterprise Fund (WNISEF). See p. 22, https://uafm.com.ua/wp-content/uploads/2018/07/sup-eksportna-strategiya-dlya-meblevyh-kompanij.pdf. [Ukr.]

[22] Strategic export plan for furniture manufacturers in Ukraine. Prepared by Ukrainian Industry Expertise (UEX) at the request of the Union of Ukrainian Entrepreneurs (SUP) and the Western NIS Enterprise Fund (WNISEF). See p. 156, https://uafm.com.ua/wp-content/uploads/2018/07/sup-eksportna-strategiya-dlya-meblevyh-kompanij.pdf. [Ukr.]

Semi-processed goods constitute 74% of Ukraine's exports to Turkey and 24% of imports. At the same time, processed products make up only 4% of Ukraine's exports to Turkey, but 76% of imports. That indicates that the sector exports mostly products with a lower value added.

Trade by end-use. In 2018, intermediate goods made about 80% of total wood products and furniture exports (see Figure 6). Intermediate goods also dominate imports (70% of total value). That proves that the sector relies on imported materials.

Figure 6: Trade by the end-use (world), 2018



Source: WITS

Trade with Turkey mirrors the overall situation. Ukraine exports to Turkey only intermediate goods. Simultaneously, intermediate products dominate imports from Turkey (61% of imports value).

2.2. Revealed comparative advantage

Both Ukraine and Turkey demonstrate the revealed comparative advantage in exports of wood processing products and furniture (see Table 5). However, the countries are strong in exports of different products.

In 2013-2018, Ukraine significantly strengthened the RCA both globally and on the Turkish market. Ukraine's main comparative advantage is in exports of wood processing products, although it has also been improving its performance in furniture. In 2018, Ukraine achieved RCA >1 for furniture compared to RCA <1 in 2013. However, on the Turkish market, Ukraine so far has a comparative advantage only in exports of wood processing products.

Instead, Turkey features revealed comparative advantage only in furniture, both globally and on the market of Ukraine. Also, the changes in the Turkish RCA are much lower than in the case of Ukraine.

Table 5: Revealed Comparative Advantage on the sector level

	2013			2018		
	Wood Processing & Furniture	Wood processing	Furniture	**Wood Processing & Furniture**	Wood processing	Furniture
Ukraine RCA						
World	1.27	1.99	0.80	2.35	4.09	1.13
Turkey	2.10	3.54	0.00	7.89	15.43	0.02
Turkey RCA						
World	1.32	0.75	1.71	1.24	0.68	1.63
Ukraine	0.86	0.63	1.04	0.82	0.47	1.18

Source: WITS, own calculations

At the level of 6 digits of Harmonized Nomenclature (HS), Ukraine has the highest RCA in sheets for veneering and assembled flooring panels on the world market and sheets for veneering and sawn wood on the market of Turkey (see Table 6a).

Table 6a: Revealed Comparative Advantage of Ukraine, top-5 products

HS 2007	Description	2013	2018
	World		
440890	Sheets for veneering of a thickness not> 6 mm (excl. of 4408.10-44)	12.43	32.86
441871	Assembled flooring panels for mosaic floors	12.45	23.76
440795	Ash (Fraxinus spp.), sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness >6mm	6.58	20.03
440791	Oak (Quercus spp.), sawn/chipped lengthwise, sliced/peeled, whether/not planed, sanded/end-jointed, of a thickness >6mm	12.90	14.95
441872	Assembled flooring panels, multilayer	6.03	14.21
	Turkey		
440810	Sheets for veneering, of a thickness not> 6 mm, coniferous	0.02	42.95
440710	Wood sawn/chipped lengthwise, of a thickness >6mm, coniferous	13.91	41.37
440122	Wood, in chips/particles, non-coniferous	6.65	40.95
440890	Sheets for veneering of a thickness not> 6 mm (excl. of 4408.10-44)	3.57	30.13
440910	Wood continuously shaped along any of its edges, ends/faces, whether/not planed, sanded/end-jointed, con	0.89	27.01

Source: WITS, own estimates

Turkey has a comparative advantage in exports of different kinds of fibreboards and seats globally and also on the market of Ukraine (see Table 6b). In 2018, compared to 2013, Turkey gained the revealed comparative advantage in exports fibreboards and plaits to Ukraine but lost the RCA in articles of natural cork and the densified wood.

Table 6b: Revealed Comparative Advantage of Turkey, top-5 products

HS 2007	Description	2013	2018
	World		
441193	Fibreboard of wood/other ligneous materials, of a density >0.5g/cm¦ but not >0.8 g/cm	1.95	11.76
940120	Seats of a kind used for motor vehicles	6.73	6.84
441114	Medium-density of fibreboard of wood/other ligneous materials, whether/not bonded with resins/other organic substances, of a thkns >9mm	6.15	5.91
940140	Seats other than garden seats/camping equip., convertible into beds	8.21	5.78
940350	Wooden furniture of a kind used in the bedroom	5.76	5.73
	Ukraine		
940120	Seats of a kind used for motor vehicles	3.07	28.71
441193	Fibreboard of wood/other ligneous materials, whether/not bonded with resins/other organic substances, of a density >0.5g/cm¦ but not >0.8 g/cm	0.00	18.14
450190	Waste cork; crushed/granulated/ground cork	1.36	4.23
460199	Plaits & similar products of plaiting materials	0.37	4.00
940370	Furniture of plastics (excl. of 94.01)	5.53	3.14

Source: WITS, own estimates

3. Trade regime issues

3.1. Trade regime for exporters to Turkey

The Turkish MFN import duties constitute 2.9% for wood processing products and 2.5% for furniture, respectively, being very moderate compared to Turkish tariffs on other products, especially agro-food. The weighted average import duties faced by the Ukrainian exporters to Turkey are even lower: 0.8% for wood products and 2.2% for furniture as some of the main export products of Ukraine are subject to zero duty. In particular, it is the case of different kinds of sawn wood and wood in chips, together accounting for ca. 80% of the sector’s exports. Sheets for veneering, another vital export product for Ukraine shipped both to Turkey and globally, faces 2.8% duty in Turkey.

Still, the European Business Association (EBA) informs about issues regarding Turkish tariffs for plywood produced in Ukraine. According to the EBA, Turkey applies higher duties for Ukrainian plywood compared to Russian plywood. It is argued that Ukraine and Turkey should introduce a 0% tariff for Ukrainian plywood in the FTA.[23]

To export wood products to Turkey, the producers also have to comply with the Turkish[24] and Ukrainian[25] phytosanitary regulations.

Besides, the exports of wood products and furniture are regulated in Ukraine by the Law On Elements of the State Regulation of Business Operators' Activities Related to the Sale and Export of Timber[26], and the Law On Amending the Law On Elements of the State Regulation of Business Operators' Activities Related to the Sale and Export of Timber on a Temporary Export Ban of Unprocessed Timber.[27] The latter was adopted in 2015, introducing the 10-year moratorium on round timber exports to stimulate wood processing and furniture manufacturing inside the country. It is fully enacted (concerning all tree species) since January 1, 2017.

3.2. Trade regime for importers from Turkey

Ukraine's weighted average import duties towards Turkey are 0.01% for wood products and 1.9% for furniture. As in the case of Turkey, they are lower than the respective MFN duties that are equal to 1.1% for wood products and 6.1% for furniture.

Imports of round wood, fuelwood, sawn wood, and some other wood products are also subject to phytosanitary control.[28] Decree 1177 defines inspections, phytosanitary expertise, disinfection of objects of regulation, and other phytosanitary-related procedures.[29] It also contains the list of goods subject to phytosanitary control.

4. Impact of the FTA with Turkey

We considered several policy shocks to assess the impacts on FTA with Turkey on Ukraine, including:

- the reduction in trade costs due to reduced time required to import or export goods, both on the Ukrainian and the Turkish sides;

[23] Kuzmenko Y. Export of wood or furniture? EBA, 18 February 2019, https://eba.com.ua/eksport-derevyny-chy-mebliv/. [Ukr.]
[24] See http://www.consumer.gov.ua/Pictures/Files/Editor/document/%D1%84%D1%96%D1%82%D0%BE%D1%81%D0%B0%D0%BD%D1%96%D1%82%D0%B0%D1%80%D0%BD%D1%96%20%D0%B2%D0%B8%D0%BC%D0%BE%D0%B3%D0%B8/Turkey_phytovymogy_2017.pdf
[25] See https://zakon.rada.gov.ua/laws/card/3348-12. [Ukr.], https://zakon.rada.gov.ua/laws/show/1177-2019-%D0%BF#Text. [Ukr.]
[26] See https://zakon.rada.gov.ua/laws/show/2860-15#Text [Ukr.]
[27] See https://zakon.rada.gov.ua/laws/show/325-19#Text. [Ukr.]
[28] Cabinet of Ministers Decree "On some issues of official control of goods imported into the customs territory of Ukraine (including for transit)" No 960, 24 October 2018 https://zakon.rada.gov.ua/laws/show/960-2018-%D0%BF#Text. [Ukr.]
[29] See https://zakon.rada.gov.ua/laws/show/1177-2019-%D0%BF#Text. [Ukr.]

- the reduction of non-tariff barriers on goods by both Ukraine and Turkey;
- the mutual elimination of tariffs between Ukraine and Turkey; and
- the reduction of barriers on foreign providers of services for selected categories of services, not including the tourism and hospitality sector.

As the wood processing and furniture sector have quite a liberal trade regime already now and thus, direct policy changes related to this sector are small, indirect effects play a crucial role in defining the sector results.

The model shows that in the case of deep liberalization FTA, the output could reduce by 8.2% for wood processing and by 2.7% for furniture, driven by the reallocation of resources within the economy due to the access to the Turkish goods market. Still, the sector will benefit from the reduction in non-tariff barriers on goods in Turkey and tariff liberalization in Ukraine. However, this positive impact is insufficient to counteract the resource reallocation to other sectors. In the deep liberalization FTA scenario, exports decrease by a substantial 9.9% for wood processing and 4.7% for furniture. Despite the increase in imports by 2.9% for wood products and 4.2% for furniture, the domestic supply shrinks by 3.6% and 1.7%, respectively, resulting in a slight increase in domestic prices.

5. Conclusions and recommendations

Wood processing and furniture are among the traditional sectors of Ukraine's economy, inherited from Soviet times. It is also one of few industries that demonstrated high growth rate over the recent years, despite the war and economic hardships.

The sector contributes about 0.8% to the GVA. The SMEs dominate in the sector with 88% of value added and 97% of employees. As a result, the market is highly competitive. However, the sector is not attractive in terms of employee compensation. Wages fall slightly behind the national average, and it explains one of the vital sector problems, the lack of a qualified labor force. Also, the sector has a significant informal component that undermines the competitiveness of the official manufacturers.

The sector is export-oriented, with the EU being the most significant partner. Turkey accounts for 5% of exports and stays in the top-5 export destinations. The sector's foreign trade is dominated by semi-processed products making half of both imports and exports. The sawn wood constitutes about a third of all sector's exports.

Import barriers in the sector are very moderate as both Ukraine and Turkey apply low import duties, and other types of control are limited. However, Ukraine still restricts the export of raw materials with the help of round wood (timber) export ban.

The sector representatives expect that FTA with Turkey would reduce import tariffs and allow diagonal cumulations, stimulating trade both with Turkey and with the EU. The modelling results show the sector will benefit from the reduction in non-tariff barriers on goods in Turkey and tariff liberalization in Ukraine. However, this positive impact is insufficient to counteract the resource reallocation to other sectors driven by the opening of several highly protected Turkish markets, in particular of agriculture and food.

To facilitate the sector's development and use the opportunities of the potential FTA with Turkey, we recommend focusing on:

- The establishment of a transparent domestic timber market aligned with Ukraine's commitments vis-à-vis its international partners;
- The fight with illegal sawmills and timber smuggling;
- The promotion of sector's clusters uniting the manufacturers at various stages of the value chain, service companies, and educational establishments;
- The development of vocational education to address the lack of the qualified labor force and smoothen the impact of high job turnover in the sector;
- The deeper integration in global value chains, with particular attention to downstream activities and the changes in global logistic patterns in the aftermath of the COVID-19 pandemic.