Firms that design, manufacture, and install “customized wooden interiors” in unique spaces capture higher margins than those that mass produce wooden furniture. Demand for these services stems from high-value commercial buyers (like luxury hotels and retail stores) expanding across the globe.

Hotels, restaurants, and retail outlets in European capitals could be desirable clients for Croatian wood manufacturing firms. However, the firms would need to develop new capacities to serve this market. The necessary capacities include the ability to adaptively design solutions in-house, make custom wood cuts, and deploy an on-site installation workforce.
Industry Snapshot

The wood sector covers many related industries. They include furniture, housing, energy, pulp and paper, and crafts.

The Croatian wood processing industry is a big domestic employer. The industry employs over 27,213 people in directly linked industries and innumerable others in supporting industries. The wooden furniture industry is the largest portion of the wood processing industry in Croatia. However, it is at risk of succumbing to competitive global pressures.

Wood production and processing are important for Croatia’s foreign exchange earnings. Despite comprising less than 1 percent of the national economy, wood production and processing accounted for more than 8 percent of Croatian exports in 2015. These values have increased by over 31 percent since 2012. Profits have also risen since 2015, however this has been at the expense of taxpayers and is the result of polices, which distort the market.

Data Source: FINA
Emerging Strategic Segments

Among wood products, furniture has the highest exported value worldwide. The capital technologies and knowledge required for advanced furniture production are leading this segment into ever higher degrees of specialization.

Firms are increasingly offering customized furniture and interiors and the services to install them. Customized products go beyond simply tweaking the design of furniture. Rather, they imply a more intensive capacity to tailor-make a solution for an individual buyer. The buyer may have an extremely specific set of demands in terms of measurements, space, look, and so on. Installation is a key service because buyers may not have the time or the ability to affix the purchased solution in the desired space.

There are two key types of buyers: (1) individual buyers and (2) commercial and institutional buyers. Individual buyers purchase for personal consumption. Commercial and institutional buyers include a range of private companies, organizations, and government entities. The most notable buyers in this category are hotels, office buildings, universities, municipal procurement offices, and commercial outlets.

“Customized interior solutions”

Offering customized wood furniture and paneling, installation services and maintenance solutions for commercial interiors

The “customized interior solutions” strategic segment for commercial and institutional buyers is especially attractive for Croatia. In this emerging strategic segment, firms offer customized wood furniture and paneling and the sophisticated services necessary to install them in the interiors of commercial and institutional buildings.

Commercial buyers are increasingly looking to firms that can design their interior spaces, manufacture custom wood paneling and furniture for them, and then outfit their spaces with the bespoke products. The hospitality industry and luxury retail stores, especially, are demanding interior solutions to differentiate their brands.

Commercial buyers are increasingly looking to firms that can design their interior spaces, manufacture custom wood paneling and furniture for them, and then outfit their spaces with the bespoke products.
The “customized interior solutions” strategic segment is a just-in-time market. Because interior solutions are not the core businesses of these commercial buyers, they need to minimize management of multiple furniture suppliers and contractors. Moreover, opening dates of stores and hotels often place significant pressure on commercial buyers. The just-in-time nature of this linkage creates bargaining power for competent contractors who conduct the installation.

Many high-end commercial buyers want hardwood. Commercial and institutional buyers focus on the durability of the solution because the products sustain heavy use. Moreover, many fashion-conscious buyers want to build a luxury brand identity such as “rich,” “rustic,” “masculine,” “cozy,” “natural,” or “traditional.” Hardwoods are both more durable and less common than other woods, contributing to their perception as exclusive. As such, the interior design segments consider them to be more desirable.
Several crucial activities in the value chain for the “customized interior solutions” strategic segment are missing in Croatia:

- **Customized Processing and Finishing.** Firms in Croatia are focused on traditional furniture manufacturing. They lack the knowledge, capital, machinery, staff, and flexibility necessary to offer design customization and installation.

- **Research, Development, and Innovation.** Croatia has no institutionalized mechanism to facilitate research, development, and innovation. These activities are needed to develop the capacities needed to make production systems more responsive to needs of commercial and institutional customers.

- **Skills for Installation and Repair.** Workers trained in carpentry, woodworking, interior design, architecture, or engineering are hard to find. The few firms that perform installation train their staff in-house. In-house training is costly, and project management is a knowledge and coordination intensive activity. Croatia needs to develop a broader cohort of skilled labor.

- **Certification.** Upstream skills in drying and primary processing are lacking in Croatia. Introduction, adoption, and application of quality grading to address the needs of the interior design sector would reduce imperfect market information and enhance value chain efficiency.

In-house training is costly, and project management is a knowledge and coordination intensive activity. Croatia needs to develop a broader cohort of skilled labor.
Areas for Reform

Certain aspects of the industry ecosystem limit Croatia’s competitiveness in the emerging “customized interior solutions” strategic segment.

Demand Conditions

Domestic demand for customized services is weak. However, foreign demand in this segment is expected to increase in the next decade in tandem with global wealth. The world’s leading retail and hospitality brands are investing enormous amounts of money in store/facility renovation in order to create a unique interior experience that differentiates themselves from the competition. Whereas typical office furniture in traditional segments may last for 10–20 years, furniture in this segment generally turns over every 7 years or less. Croatian companies should primarily focus on export opportunities in markets where luxury retail brands are prominent, where purchasing power is high and where wood materials are more scarce.

Vocational education and training could better match wood industry needs. Secondary schools inadequately prepare graduates for the jobs in the real sectors. Some technical secondary schools and vocational training institutes relevant for the wood production and processing industry do exist in Croatia. However, the curriculum is not advanced enough. The graduates lack professional practice and experience.

Accessing finance is difficult. Entry into the “customized interior solutions” strategic segment requires capital investment. The biggest financing problems in wood industries relate to long-term financing for machinery modernization.

Strategy, Structure, and Rivalry

Participation is limited and rivalry is low. A few successful Croatian companies have begun to participate in the “customized interior solutions” strategic segment. However, they cannot meet market demand and often must refuse business offers because of limited production capacity and lack of technical capacities and expertise by other local firms.

Cooperation is rare. There are few formal cooperation mechanisms to bring together companies in the “customized interior solutions” strategic segment. Capacities and coordination are dispersed, and successful companies are competing in isolated pockets.

Participation is not clustered. Clustering around this particular strategic opportunity would be extremely useful for the nation’s competitiveness in the “customized interior solutions” segment. It puts pressure on local firms to innovate and improve. It also creates an environment where firms can more easily share skills. Additionally, cooperation and partnership can help Croatian companies to jointly access the more demanding international markets.

Factor Conditions

Croatia’s supply of high-quality natural resources is fragmented and inefficient. Approximately 2.6 million hectares of land in Croatia are forested. Of this amount 500,000 hectares are privately owned by a fragmented set of nearly 600,000 proprietors. These privately-owned forests produce 12.5% of the growing stock. The state-owned enterprise Hrvatske šume owns the remaining 2 million hectares.
**Related and Supporting Industries**

**Firms are using outdated equipment.** Croatia has insufficient infrastructure and expertise in cutting-edge mechanization. For activities that involve finished or semi-finished products, it is increasingly important to have the latest industrial machinery. State of the art machinery includes 5-axis computerized cutting tools and 3D printing machines. These tools require expert industrial engineering to integrate machinery, software, and control systems into production lines. Additionally, workers using the machinery must be trained.

**Firms don’t know what machines to buy, how to operate them, or for what purpose.** There are many public tenders and programs to help Croatian companies buy advanced machinery. However, firms first need to reorient toward a better business model (such as selling to institutional customers). Only then can they invest wisely in machinery to make better products.

**Croatian companies competing in the “customized interior solutions” segment have difficulties finding domestic supplies of metal, plastics, and other inputs.** The efficient supply of high-quality non-wood materials is important for the development of Croatian companies.

**Government**

**Hidden government subsidies are preventing the sector from innovating.** The main underlying issue is that the timber sales system in Croatia—led by Hrvatske šume (the state-owned forestry company)—does not operate a market-based contracting system for its wood, which has discouraged innovation, new investment and efficient production. Introducing a transition to a market-oriented timber sales system, to replace the quota system is necessary to strengthen competition in and competitiveness of the local industry.

**Croatia is wasting valuable hardwood.** Some 85% of Croatia’s roundwood is hardwood. However, much of the hardwood is improperly processed. Hrvatske šume imposes de facto restrictions on the sale and procurement of raw wood. Among other effects, this market distortion forces sawmills to operate at a scale too small to observe proper drying processes. As a result, much of the sector’s raw output is damaged. Thus, most Croatian hardwood is burned, turned into low-value composite woods, or sold as lumber in low-end construction markets.

---

Some 85% of Croatia’s roundwood is hardwood. However, much of the hardwood is improperly processed.
Recommendations

Croatia could improve its position in the emerging “customized interior solutions” strategic segment by:

1. Organizing a competition to give traditional wood processing firms an opportunity to practice designing and outfitting interior spaces. Advanced demand for customized interior services is low in Croatia and so many firms have never had the opportunity to test their capabilities in the new segment. Coupling government procurement mechanisms to request such services with prize financing for the best solution, could provide the incentive for entry to more of Croatia’s firms.

   Estimated timeframe: 2 years.

2. Using a firm-level technology adoption fund to modernize production lines for precise cuts and customizable production. Provision of firm level support could be made to help firms procure expensive CNC machinery, which is needed for customized interior production.

   Estimated timeframe: 7–10 years.

3. Creating a technical center to help training and dissemination. The most important training need is in advanced manufacturing technology. MoEEC, the Ministry of Science and Education, the Ministry of Labor and Pension Systems, and other line ministries could invest in the establishment of a technical center which would service the skill, training and R&D needs of the targeted segment.

   Estimated timeframe: 10 years.

4. Building certification capacity. MoEEC could launch a technical assistance program—through a matching grant mechanism—to help firms meet standards and obtain certifications for installation.

   Estimated timeframe: 6 years.

5. Liberalizing the forestry tendering policy. Reform of the country’s tendering policy is needed to improve the incentive for investment and innovation in the wood industry. Wood prices must be raised to international norms and contracts with Hrvatske Sume must be made on a competitive basis.

   Estimated timeframe: 1 year.

6. Helping firms become competitive in foreign tenders. The costs associated with intensive, risky pre-sale design dialogs in the “customized interior solutions” strategic segment are large. A carefully structured guarantee conditioned on costs invested and contracts not won could help motivate firms to enter this segment. MoEEC could coordinate guarantees to cover the cost of bidding for foreign tenders.

   Estimated timeframe: 5 years.

NOTE
This report is a product of the staff of the World Bank Group. The findings, interpretations, and conclusions expressed in the report do not necessarily reflect the views of The World Bank Group, its Board of Executive Directors, or the governments they represent. The World Bank Group does not guarantee the accuracy of the data included in this work, which is drawn from multiple external sources. Nothing herein shall constitute, or be considered to be, a limitation upon or waiver of the privileges and immunities of The World Bank Group, all of which are specifically reserved.