

Timber Tides:

Navigating Texas's Wood Industry Amid Housing Market Swells



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Key Takeaways:

- Texas's wood industry demonstrates resilience amid housing market fluctuations, with wood imports surging during the COVID-19 pandemic but stabilizing afterward.
- The forest sector contributes billions to Texas's economy, while also offering ecosystem benefits.
- Solid wood and wood furniture sectors serve as the cornerstone of Texas's wood imports, reflecting the industry's significance within the state.
- Trade policies wield significant influence over Texas's wood product trade, shaping its trajectory and influencing future prospects for the industry.

pandemic, costs surged dramatically, reaching almost \$35,000 by mid-2021 (Zhang and Stottlemeyer, 2021). Consequently, a thorough examination of the upstream market dynamics within Texas's forest products industry becomes imperative. Texas boasts ample natural resources, encompassing nearly 60 million acres of forestland, with 12 million acres concentrated in East Texas and the

remaining 48 million acres spread across the state. Within this expanse, approximately 13 million acres are designated as timberland, the majority of which - 91 percent - is privately owned. Notably, around 90 percent of this timberland is situated in East Texas (USDA Forest Service, 2024). The industrial roundwood harvest in Texas, representing the portion utilized in wood product manufacturing, amounted to 566.2



Figure 1. US annual housing starts and price of lumber composite since 2008

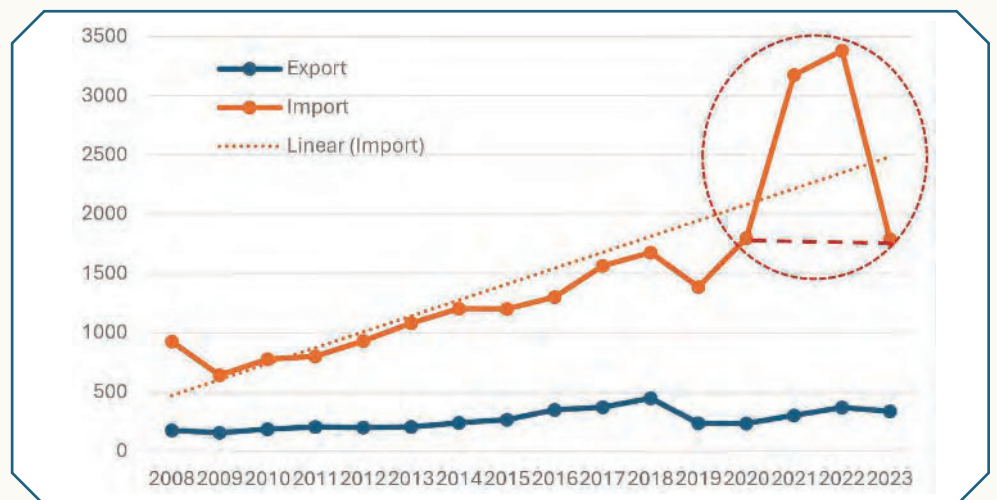


Figure 2. Texas trade value of solid wood products from 2008-2023 (\$US million)

As an integral component of the housing sector, the forest product industry maintains a symbiotic relationship with housing market fluctuations, a connection that became especially pronounced during the COVID-19 pandemic (Figure 1). Lumber, alongside other materials, is indispensable for construction endeavors, whether for residential homes or furniture and as such, the industry's trajectory closely mirrors the demands of these sectors. Typically, a 2,000-square-foot house requires approximately 16,000 board feet of lumber and 6,000 square feet of structural panels. Under normal circumstances, the average lumber cost for such a house is around \$10,000. However, amidst the COVID-19

million cubic feet in 2021. Texas mills were productive, yielding 1.5 billion board feet of lumber, while the production of paperboard, fiberboard, and market pulp reached 2.4 million tons (Stottlemeyer et al. 2021).

Texas's forest sector made a significant impact, generating \$21.4 billion in industry output and employing over 68,917 individuals, with a combined payroll reaching \$4.3 billion in 2021. Directly contributing to the state's coffers, the forest sector injected approximately \$6.2 billion through payroll, employee compensation, and property taxes. Wood-based industries maintained their position among the top ten manufacturing sectors in the state (Texas A&M Forest Service, 2021). Beyond its direct economic contributions, Texas's forests provide a plethora of ecosystem benefits valued at an impressive \$92.9 billion annually (Texas A&M Forest Service, 2013). These benefits encompass watershed preservation, climate and air quality regulation, biodiversity conservation, and cultural services. To ensure a healthy state economy, many sustainable programs have been created to protect forests and the viability of the forest sector, including forest best management practices, Texas climate-smart initiative, forest health programs, etc.

Figure 1 illustrates the correlation between US housing starts and lumber prices, indicating that lumber price trends generally align with annual housing start trends. The housing market has shown a gradual increase over time, with the exception of the economic crisis in 2008 and the COVID-19 pandemic in 2021. During the COVID-19 pandemic, historically low interest rates fueled a surge in homebuilding, remodeling projects, and the manufacturing of home furnishings, major drivers of lumber demand. Consequently, lumber prices soared nearly threefold in 2021. Subsequently, as interest rates rose and housing demand tapered off starting in 2022, lumber prices experienced a sharp decline. However, when considering the overall trend, lumber prices remain slightly elevated and consistent with 2019 levels. The current lumber market has returned to pre-COVID levels, aligning with trends in the downstream housing market.

In addition to domestic production, Texas engages significantly in international trade in forest products. The forest products industry, as classified by the Harmonized Tariff Schedule (HTS), comprises five sectors:

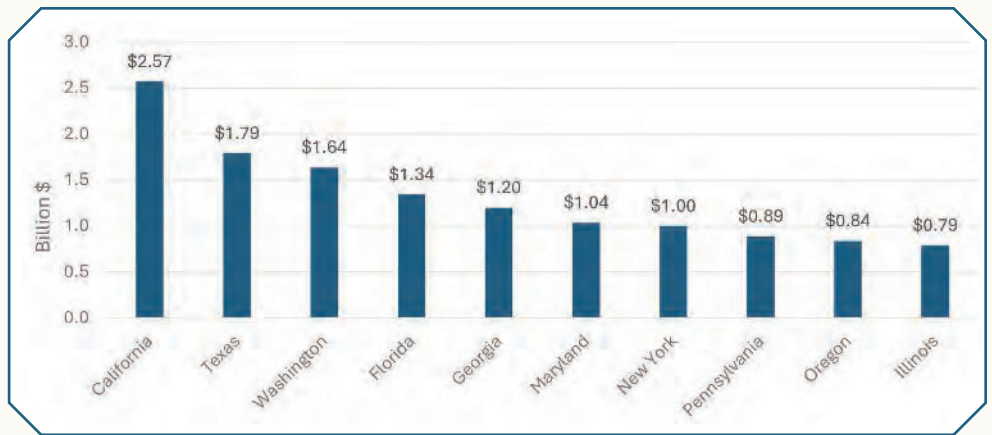


Figure 3. Top ten solid wood import states in 2023



Figure 4. Texas top solid wood import economies in 2023

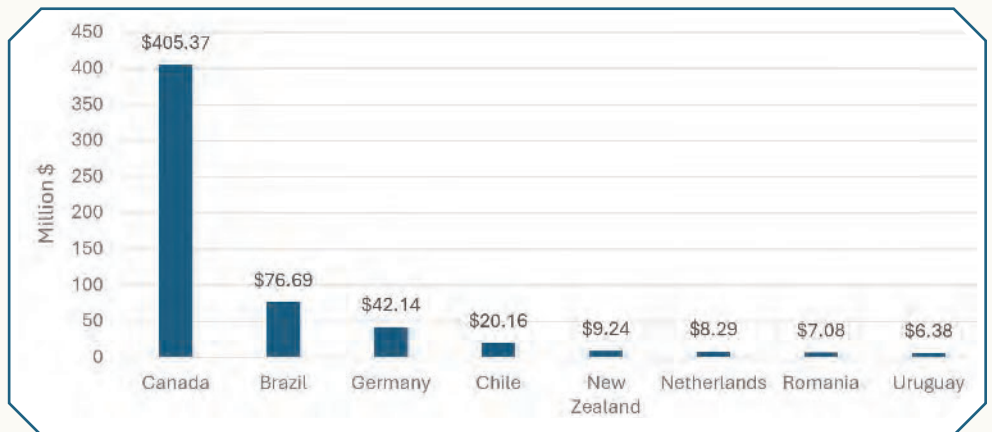


Figure 5. Texas top sawn wood furniture importers in 2023

wood chemicals, solid wood products, wood pulp, paper and paperboard products, and wood furniture. Of these categories, solid wood and wood furniture are closely tied to the housing market. Interestingly, only the solid wood and wood furniture sectors exhibit net imports in Texas, while others, particularly the wood pulp and paper sectors, demonstrate substantial net exports. Given this dynamic, it becomes imperative to delve deeper into the solid wood and wood furniture sectors.

Texas Solid Wood Trade. With Texas's housing market experiencing significant

growth in recent years, the local production of solid wood is not sufficient to meet the demands of construction projects and furnishing. In 2023 alone, the total value of forest product imports into Texas soared to \$4.7 billion. Notably, solid wood imports accounted for the largest share, reaching \$1.8 billion, constituting 38 percent of the total. Figure 2 illustrates the trajectory of Texas's solid wood imports and exports since 2008. Overall, import values have steadily risen, particularly during the COVID-19 pandemic. By 2022, solid wood imports peaked at \$3.4 billion, a staggering 144 percent increase over pre-COVID levels

in 2019. Texas now stands as the second-largest importer of solid wood products in the US, trailing only California (Figure 3), and accounting for five percent of the nation's total exports. Impressively, states like Washington, Florida, Georgia, and New York trail behind Texas in solid wood imports.

Among the sources of solid wood, Canada emerges as the primary contributor, comprising 34 percent of Texas imports, valued at \$616.9 million in 2023 (Figure 4). Brazil and China follow closely, with imports valued at \$269.4 million and \$158.8 million, respectively. Mexico and Vietnam also feature prominently, with import values of \$152.4 million and \$97.2 million,

respectively. Within the realm of solid wood, sawn wood stands out as the largest subsector, accounting for 34 percent of Texas's solid wood imports, valued at \$607.9 million. Canada emerges as the foremost supplier, contributing \$405.4 million, or 67 percent, followed by Brazil (\$76.7 million, thirteen percent) and Germany (\$42.1 million, seven percent) (Figure 5).

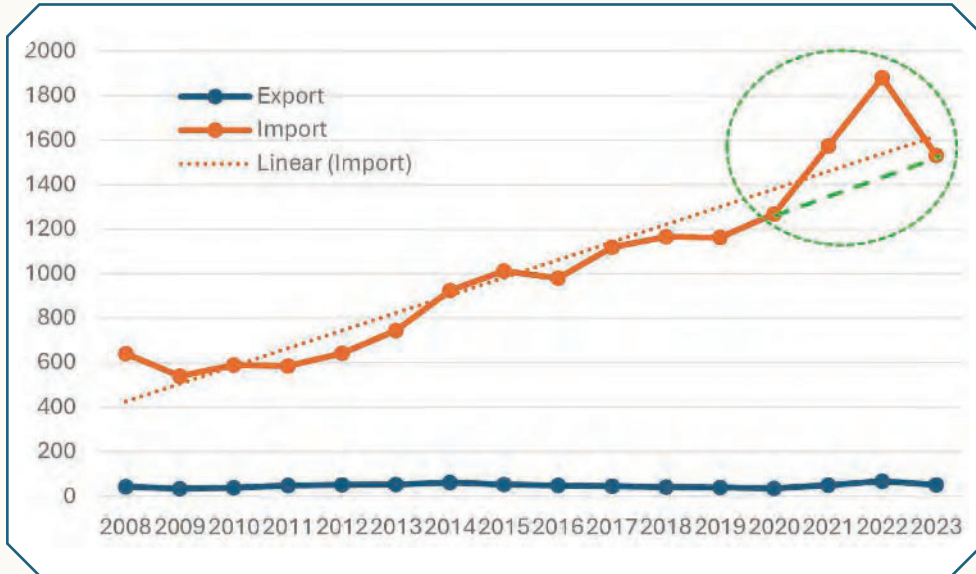


Figure 6. Texas trade value of wooden furniture from 2008-2023 (\$US million)

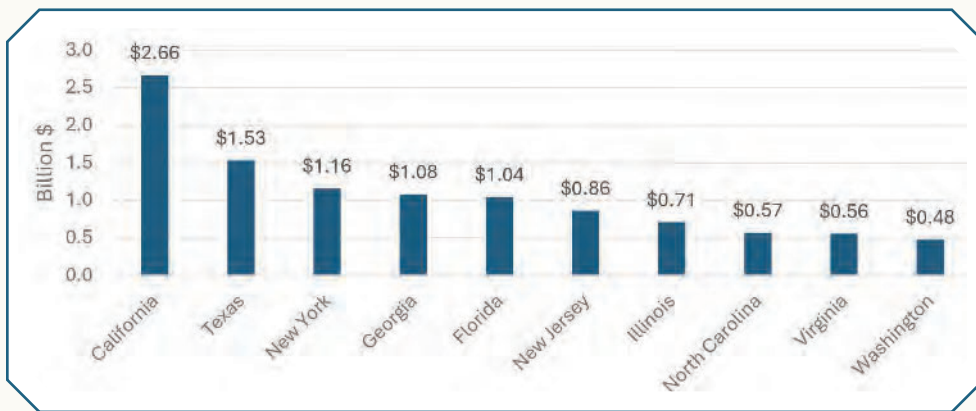


Figure 7. Top ten wood furniture import states in 2023

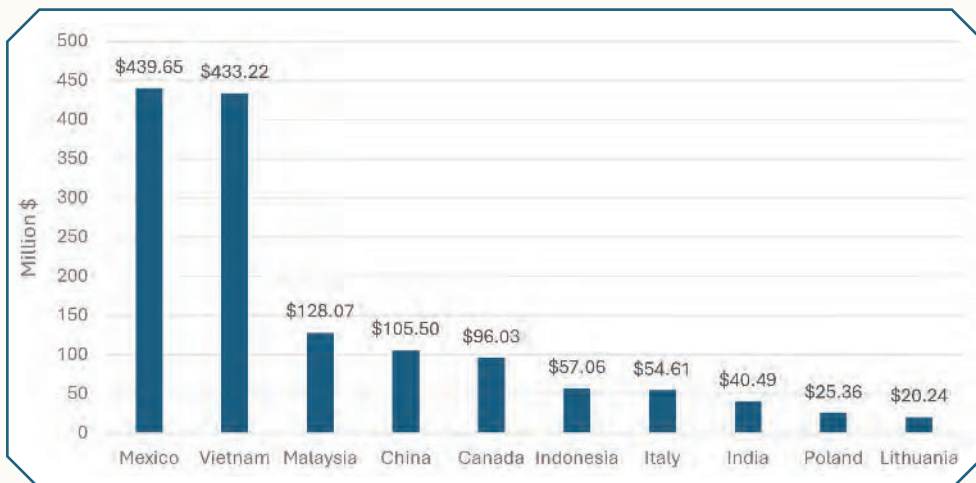


Figure 8. Texas top wood furniture importers in 2023

Given the substantial trade in wood products, particularly softwood lumber, trade policies between the U.S. and Canada significantly impact Texas. Special tariffs are often employed to safeguard domestic industries from unfair international trade practices. The enduring softwood lumber dispute between the U.S. and Canada, dating back to 1982, has led to various rounds of tariffs and countermeasures. The most recent development is the States-Mexico-Canada Agreement (USMCA), which aims to facilitate trade between these nations. Undoubtedly, these ongoing trade disputes and policies will shape Texas's future import levels.

Texas Wood Furniture Trade. In 2023, Texas imported wood furniture valued at \$1.5 billion (Figure 6), representing 32 percent of all forest product imports. Despite fluctuations during events like the 2008 economic crisis and the COVID-19 pandemic, the overall trend in wood furniture imports has been upward. The pandemic, in particular, saw a surge in imports, reaching \$1.9 billion in 2022 - a 193 percent increase compared to a decade prior. However, by 2023, import values had decreased by 19 percent, returning to pre-pandemic levels. In addition, Texas remains the largest importer of wood furniture in the southern U.S. and the second largest nationally, trailing only California (Figure 7), accounting for eleven percent of national imports.

Mexico dominates as the largest source of wood furniture imports in Texas, contributing \$439.7 million, or 29 percent of the total (Figure 8). The proximity between Texas and Mexico affords logistical advantages, including lower transportation and labor costs, fostering robust trade. Additionally, the USMCA has bolstered trade between Texas and its North American neighbors since 2020. Vietnam follows closely, with imports valued at \$433.2 million, comprising 28 percent of the total. Malaysia, China, and Canada also feature prominently, with import values of \$128.1

million, \$105.5 million, and \$96.0 million, respectively. Notably, over 50 percent of Texas's wood furniture imports are sourced from Asian countries.

Among all wood furniture subsectors, wood bedroom furniture represents a significant subsector, accounting for 23 percent of Texas's wood furniture imports, valued at \$347.9 million (Figure 9). Vietnam emerges as the largest supplier, contributing \$146.7 million, or 42 percent, followed by Malaysia (\$79.7 million, 23 percent), Mexico (\$35.1 million, 10 percent), and Indonesia (\$14.6 million, four percent) (Figure 10). Collectively, Asian countries contribute over 74 percent of Texas's wood bedroom furniture imports. Similar trends are observed in the wood kitchen furniture sector, with Texas importing products valued at \$218.7 million in 2023 (Figure 9). Vietnam remains the primary sourcing country, accounting for 34 percent with \$74.1 million. Following Vietnam are North American neighbors Mexico (\$52.5 million, 24 percent) and Canada (\$20.6 million, nine percent). In total, Asian countries contribute over 54 percent of Texas's wood kitchen furniture imports.

The impact of trade regulations and policies on US wood product imports cannot be overstated. A prime example is the trade dispute between the U.S. and China over wood bedroom furniture since 2005. Antidumping duties imposed on Chinese firms reshaped trade patterns, leading to a decline in Chinese imports and a surge in imports from Vietnam, Malaysia, and Indonesia. Before 2008, China dominated as the largest supplier of wood bedroom furniture to the U.S., accounting for over half of total imports. However, with the imposition of antidumping duties to safeguard domestic wood furniture industries, imports from China dwindled to a mere two percent by 2023. Conversely, Vietnam has experienced exponential growth in its exports to the U.S., capturing over 50 percent of the market share since 2016 (Zhang and Sun, 2018). This trend is echoed by other Asian countries such as Malaysia and Indonesia, which have also expanded their exports.

In conclusion, the dynamics of the Texas wood market exemplify its pivotal role within the broader housing sector. As evidenced by the surge in solid wood and wood furniture imports during the COVID-19 pandemic and the subsequent

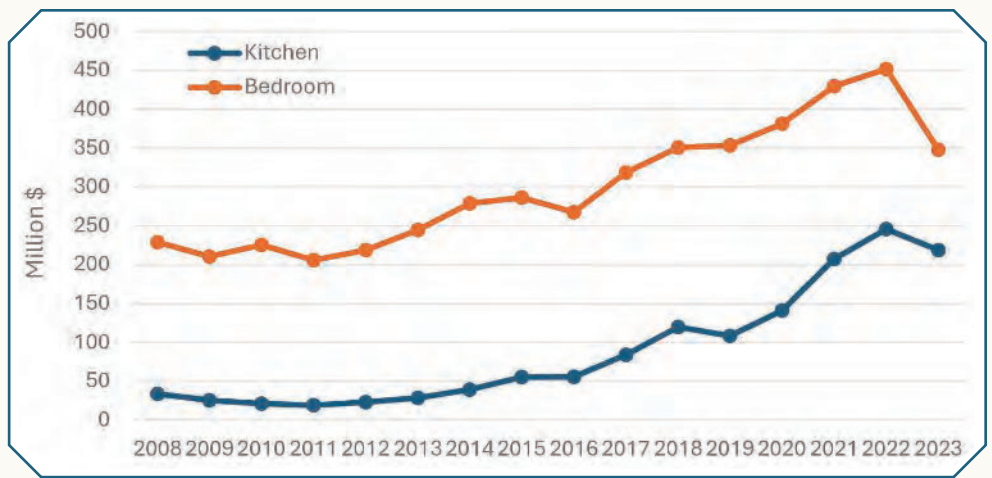


Figure 9. Texas imports value of wood kitchen furniture and bedroom furniture



Figure 10. Texas top wood bedroom furniture importers in 2023

return to pre-pandemic levels, the market's resilience is apparent. The sustained reliance on imports underscores the insufficiency of local production to meet the region's robust demand. Looking ahead, the trajectory of future import levels will be shaped not only by market forces but also by evolving trade policies and global dynamics. Adapting to these changes while leveraging logistical advantages and fostering trade relationships will be critical for sustaining the Texas wood market's growth and resilience in the years to come.

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