MANAGING THE DOWNTURN

As the housing construction market faces tough times, successful woodworking companies find new opportunities for profits and growth. What are woodworking firms doing to remain profitable? An exclusive study by Virginia Tech, the U.S. Forest Service and *Modern Woodworking* looks into the situation.

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After years of seemingly unrestricted growth, the housing market has turned and is deteriorating fast. Housing construction and sales have slowed dramatically, foreclosures have skyrocketed and mortgage rates have increased modestly despite the Federal Reserve's easing of monetary policy. Given the increasingly high dependency of the wood products industry on housing markets, one can only wonder how the industry is doing. How bad is the housing slowdown? What impact does the housing slowdown have on the industry? How do companies adapt? Are there any quick fixes to weather the storm? What are the expectations for the future? Do the current challenges help lower-cost offshore producers? Is a more customer-oriented approach part of the solution? Or is improved productivity the way to go? As each company has to make its own accommodations to the challenging situation, this study is intended to offer some insights into the way companies are coping.*

Current housing market problems

What looks like the perfect storm to many may in reality be a necessary market correction after years of readily available credit and speculative bubbles in the housing market. As often is the case with bubbles, the correction is painful but cleans the excess from the system and allows the market to gain traction again. Historically, housing prices are at highs never before seen, and as incomes have not kept pace, housing has become unaffordable for many. As shown in Figure 1, median family income and home prices trended well until about the year 2000. Since then home prices have increased much faster than income, resulting in unsustainable rates of price increases for new and existing homes.

With single-family housing starts at 0.74 million annualized and permits at 0.67 million in January 2008, the

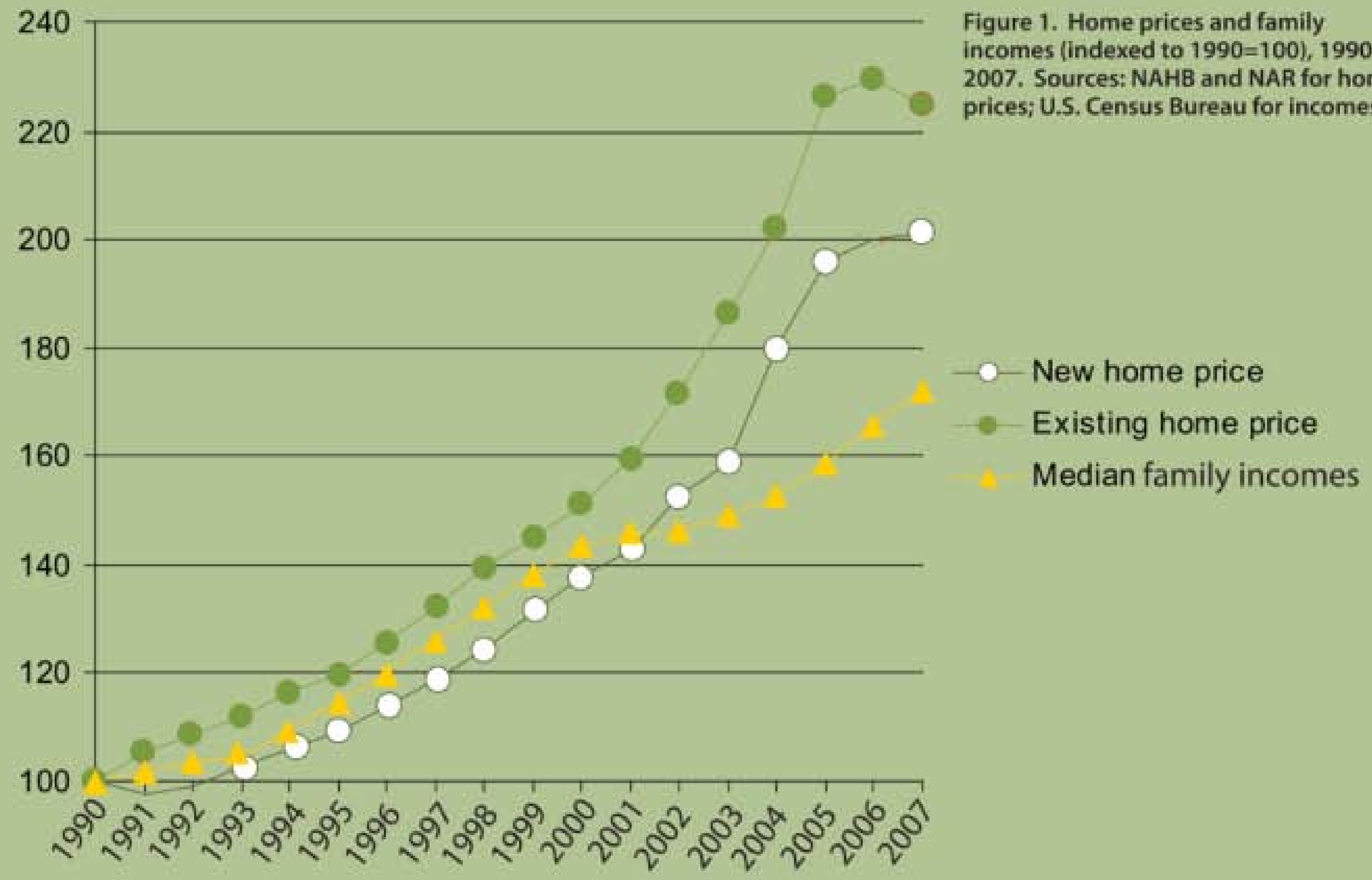


Figure 1. Home prices and family incomes (indexed to 1990=100), 1990-2007. Sources: NAHB and NAR for home prices; U.S. Census Bureau for incomes.

industry has now reached its slowest pace since 1993. As of January 2008, single-family resale inventories were at 10.1 months and new housing inventories were at 9.9 months. There were a total of 4.13 million single-family homes on the market.[1]

Foreclosure rates have recently hit 7.9 percent (This rate has never exceeded 7.0 percent since tracking started in 1979.),[2] leading to record losses by investors and financial institutions. While many initiatives are underway or being considered to lessen the problem, the market ultimately will stabilize when prices come down to a point where a greater share of potential buyers can afford the payments. Until this point is reached and a recovery is underway, the situation will remain challenging for secondary wood products manufacturers who will have to carefully consider their options. Regional housing situations vary greatly and not all wood products manufacturers will see the same challenges, especially when they serve markets with more favorable current supply and demand balances (e.g., Seattle/Tacoma, Wash; Portland, Ore; Charlotte, N.C.).

Housing is so important to most sectors of the wood products industry that almost three-quarters of softwood lumber and structural panels consumed in the U.S. go into housing (new construction plus remodeling). Further, nearly two-thirds of the U.S. hardwood lumber not used in transportation (pallets, rail ties) goes into housing construction and remodeling in the form of cabinets, flooring, millwork, etc.[3] Even with furniture – while not directly tied to housing construction – sales are indirectly tied to housing markets. People moving into a newly purchased home are likely to spend on new furniture as well. Thus, it is no surprise that the wood products industries are hard hit by the slowdown in the housing markets.

How hard hit by the housing market?

Given the grim numbers from the residential housing market, the respondents to this survey seem to have escaped too much trouble for the time being. When asked how their sales volumes for 2007 compared to 2006, 37 percent said that the volume was worse while 45 percent said it was better. Eighteen percent said it was unchanged. Table 1 shows how the sales volume for the respondents has changed in 2007 compared to 2006. Possibly, the impact from the housing market decline has not yet fully reached all segments of the secondary hardwood industry. Or the industry has done an admirable job diversifying their businesses to other markets. Another factor to consider is relative stability of remodeling markets (compared to new residential construction) and the importance of remodeling to hardwood companies in particular.

Among the respondents indicating that their sales volume declined in 2007, 37 percent cited the downturn in the housing market as a major reason (rating of "7" on a seven-point scale anchored by 1=not a factor to 7=major reason), and only 12 percent indicated the downturn in remodeling expenditures as the major reason. Overall, 67 percent of the respondents with a lower sales volume indicated that the housing market had at least some influence

[1] Source for new home inventory: U.S. Bureau of Census – www.census.gov/const/newresales.pdf; Source for existing home inventory: National Association of Realtors - http://www.realtor.org/research/index.html
[2] New York Times. Shares tumble as credit worries worsen. March 7, 2008.
[3] Luppold, W. and M. Bumgardner. 2008. Hardwood lumber demand: 1963 to 2002. 2007 SOFEW Proceedings. pp.49-55.

Table 1. Change in sales volume for responding companies, 2007 vs. 2006.

Much worse (off by 20% or more)	15.8%	Worse	37.4%
Somewhat worse (off by 10%)	11.1%		
Slightly worse (off by 5%)	10.5%		
Unchanged		17.8	
Slightly better (up by 5%)	12.8%	Better	44.6%
Somewhat better (up by 10%)	18.0%		
Much better (up by 20% or more)	13.8%		

on this unfavorable outcome (rating of "5" or higher), while 46 percent cited the downturn in remodeling as having some influence. Other reasons for the decline in sales volume included offshore competition (24 percent indicating a rating of "5" or higher), downturn in nonresidential construction (25 percent), competition from non-wood substitute products (19 percent) and more domestic competition (24 percent). Overall, housing, and to a lesser extent, remodeling, were clearly having the single largest impacts. The most frequently added write-in reason to this question was that customers are not in a spending mood in the current economic environment. Several comments also were made that energy costs were impacting profits.

Among the respondents experiencing sales growth in 2007, several factors seemed to influence the positive result, including: Productivity improvements (40 percent indicating a rating of "5" or higher); Market share gains for the individual company (38 percent); Market share gains for the company's overall product category (26 percent); Growth with the overall economy and the introduction of new product lines (33 percent each, respectively); and Entry into new markets (20 percent). From the respon-

Table 2. Questions asked concerning marketing actions undertaken in 2007 or planned for 2008 and their average level of agreement among respondents.

Marketing actions undertaken in 2007 or planned for 2008	Average rating[a]	Percent of respondents rating "5" or higher
We enhanced our product's value by adding features, benefits or services.	4.0	40.4%
We reminded our customers through advertising and personal selling of the basic benefits of our products and services.	3.9	39.5%
We developed differentiated product lines with features targeted to the unique needs of small potential customer groups or regional segments.	3.8	37.4%
We designed advertising or personal selling campaigns that addressed the specific needs of potential new customers.	3.5	32.1%
We developed and promoted new application for our existing products.	3.4	28.2%
We enhanced our product's value by including it in the design of integrated systems.	3.3	25.6%
We built unique distribution channels to more effectively reach potential new customers.	3.1	24.8%
We encouraged larger volume purchases (e.g., quantity discounts, frequent customer discounts).	3.1	22.6%
We designed service programs to reduce the perceived risks of new customers trying our products (e.g., installation, extended warranties).	2.9	18.0%
We improved our product's availability in existing markets by developing innovative distribution systems.	2.9	18.1%
We entered global markets where our products are in an earlier stage of their life cycles.	2.1	8.8%

[a] Scale anchored by *1=strongly disagree* to *7=strongly agree.*

dents' write-in comments, it appears that increased efforts in marketing, such as increasing the number of sales representatives, spending more on advertising or the addition of more employees to bid on more projects had a positive impact on those companies' performances.

Marketing actions undertaken or planned for 2008

When all respondents were asked about the marketing actions their company undertook in 2007 or planned to undertake for 2008 to maintain or grow their sales volume, most write-in comments focused on increasing advertising, building or enhancing Web sites or increasing sales staff. Another theme mentioned widely was that companies continued to provide quality products to customers and stressed this point in their advertisements. When presented with a list of predetermined marketing actions that might be implemented,[4] no clear trends were visible from the responses. The highest agreement

[4] H. Boyd, O. Walker, J. Larreche. 1995. Marketing Management. 2nd ed.

Table 3. Among responding companies, proportion of production volume directly associated with the single-family residential construction market (used in the building or trimming of new homes, excluding furniture).

Proportion of production volume directly associated with new single-family home construction	Number of companies reporting (%)
0%	19.8%
1-20%	16.3%
21-40%	10.5%
41-60%	12.7%
61-80%	16.1%
81-100%	24.6%

among respondents was obtained from the question, "We enhance our product's value by adding features, benefits, or services," with an average rating of 4.0 (on a seven-point scale anchored by 1=strongly disagree to 7=strongly agree). Table 2 lists the 11 questions asked and their average level of agreement among respondents.

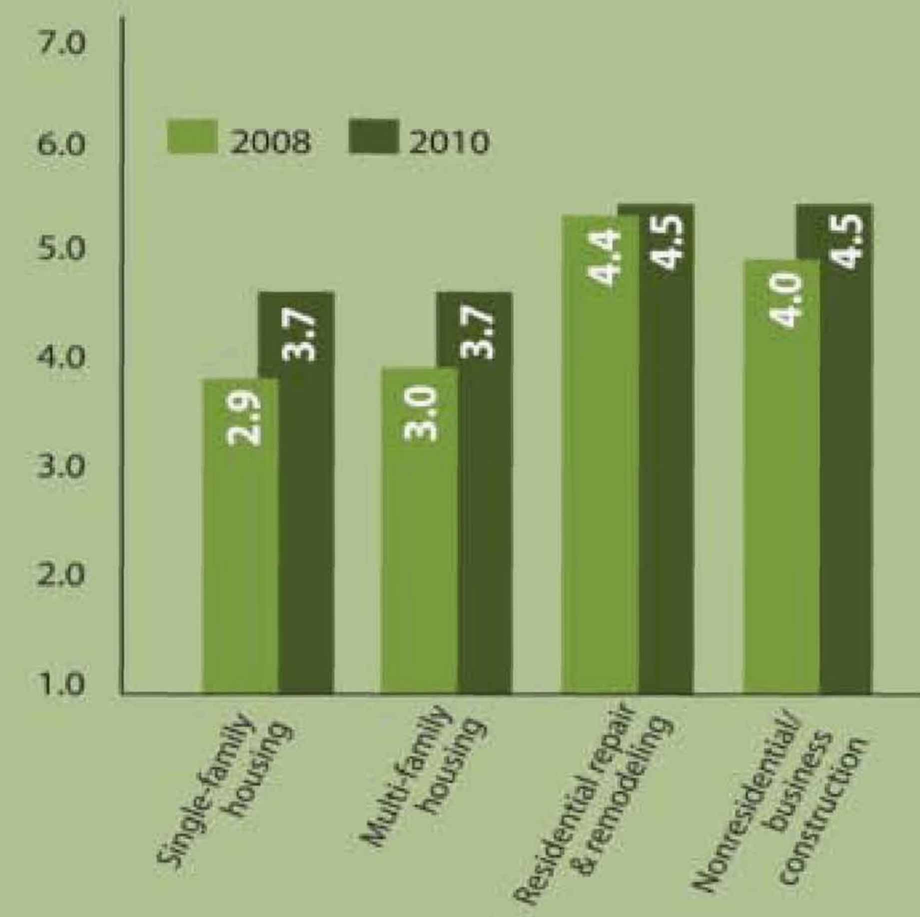
Respondents' companies, 71 percent having less than 20 employees, seem to focus more on the realistically achievable. Entering global markets, as suggested by the low average rating, might not be an attractive option for smaller companies. Similar arguments can be made for developing innovative distribution systems or encouraging larger volume purchases. However, it was a little surprising that more effort was not geared toward designing service programs – this seemingly would be a means to gaining customer satisfaction and perhaps loyalty in a difficult business environment. However, some of the respondents' companies are pursuing more aggressive initiatives. The most agreement came with the action, "We enhanced our product's value by adding features, benefits, or services," with 40 percent of respondents indicating a score of "5" or higher on the scale. Other actions with relatively high agreement were, "We reminded our customers through advertising and personal selling of the basic benefits of our products and services," (39.5 percent), and "We developed differentiated product lines with features targeted to the unique needs of small potential customer groups or regional segments," (37.6 percent).

The evolving relationship of housing and wood products manufacturers

In 2007, 80 percent of respondents were serving markets directly associated with constructing new single-family homes. Furthermore, about four in 10 respondents had at least 60 percent of their production volume committed to the new single-family construction market. And most firms do not have plans to reduce their reliance on new housing — nearly 69 percent of respondents indicated that the proportion of their production volume associated with new single-family housing will be the same in 2010 as it was in 2007. Only 14 percent indicated that the proportion would be smaller, and a nearly equal proportion (17 percent) indicated that it would be higher.

One way to become less directly dependent on the broader

Figure 2. Assessment of construction markets for 2008 and 2010.



housing market is to move toward more customized production, especially for smaller firms. When asked about semi-custom products (defined as products that, for a given design, customers have a choice of species, finish, and hardware), nearly 56 percent of respondents indicated that at least 60 percent of their production involved such products. More importantly, one in four indicated that this proportion had increased in the past three years and only 6 percent indicated a reduction. Similarly for products defined as completely made-to-order, 62 percent indicated that at least 60 percent of their total production involved such products, and 23 percent of respondents indicated that this had increased in the past three years. This move toward customization may be one factor that has enabled these respondents to remain competitive (Eighty-four percent indicated that at least 60 percent of sales will result from domestically produced and/or sourced products in 2008.), and the plurality (45 percent) to have increased sales volume in 2007.

Outlook – When will the housing market recover?

Respondents were asked how they assessed the nationwide construction climate for 2008 and 2010 in four different sectors: single-family housing, multi-family housing, residential repair and remodeling and nonresidential/business construction. Results for 2008 were fairly bleak for the single- and multi-family housing markets, where only 13 percent and 11 percent of respondents, respectively, said the market was at least slightly good (rating of "5" or higher on a scale anchored by 1=very poor to 7=very good). The average response for single- and multi-family housing was quite negative, with single-family housing scoring 2.9 and multi-family 3.0. Residential repair and remodeling was rated much more positive, averaging 4.4, as was nonresidential/business construction at 4.0. Almost half (48 percent) of respondents rated the residential repair and remodeling market as at least slightly good, and 36 percent did so for the nonresidential/business construction market. These proportions were much smaller for single-family housing (13 percent) and multi-family housing (11 percent). These perspectives seem consistent with the broader data used to track these segments: nonresidential and remodeling markets are faring better than new residential construction, and that is where successful companies are moving more of their business activity.

For 2010, better market conditions are expected than in 2008, but perhaps not as much as would be hoped. Comparisons of the mean ratings for each sector for 2008 and 2010 are shown in Figure 2. While almost half of the respondents still rated market conditions for 2010 as slightly poor or worse ("3" or lower on the scale) for single-family (42 percent) and for multi-family housing (43 percent), the positive responses more than doubled. Twenty-nine percent of respondents rated the single-family construction for 2010 as at least slightly good ("5" or higher on the scale), and 27 percent did so for the nonresidential/business construction market. Residential repair and remodeling and nonresidential/business construction were projected to remain fairly stable, with 49 percent and 42 percent of respondents rating these markets as at least slightly good for 2010, respectively.

Implications for the future

Clearly, these are challenging times for businesses related to housing markets, although the picture may be somewhat brighter if you work in certain markets that are not as badly affected from the bursting housing bubble. As always, diversification is a key to success, whether it involves geographic markets for housing or moving into remodeling and nonresidential markets where trends are more favorable. Respondents to this survey seemed to be taking many actions to remain profitable. Customized and made-to-order products were a large and growing proportion of many firms' product mixes. When analyzing the responses and write-in comments received throughout this survey, the adaptations being made are striking and

About the study

The nationwide "Wood Industry - Housing Market Survey" conducted by Virginia Tech, the U.S. Forest Service and *Modern Woodworking* was Internet-based and sent via e-mail by *Modern Woodworking* to a random sample of its subscribers in February of 2008. The e-mail included a cover letter explaining the study and a link to the questionnaire posted on the Internet. A reminder notice also was sent via e-mail two weeks after the initial e-mailing. As an incentive for participation, respondents were entered in a sweepstakes to win an iPod Shuffle. A total of 496 usable responses were returned over a four-week period. Thirty-five percent of the respondents were cabinet manufacturers, 17 percent were household furniture manufacturers, 10 percent were molding/millwork companies, 7 percent were architectural fixtures specialists, 5 percent were contract furniture companies, 2 percent were countertop manufacturers and the remainder were classified suggest a continued viable manufacturing base in wood products in the U.S. One respondent explained that his company has joined online plan services to find more projects to bid. Another one pointed to hiring additional staff to prepare bids faster and more thoroughly. Others indicated that they had broadened their product lines or expanded geographic markets. Productivity improvements and lean implementations were mentioned several times as ways to cope with the difficult situation. The market for certified forest products and green building programs are other venues by which differentiation is increasingly being sought. Housing markets will rebound, but other issues such as globalization and offshore competition will continue to add pressure to the profitability of many in the domestic wood industry. Even in this survey, among mostly smaller, customized and growing companies, about one in three had increased the use of wood imports in their product lines over the past five years. But clearly, there are many players in the secondary hardwood industry who agree with Jim Collins, author of "Good to Great," that "Greatness is not a function of circumstance. Greatness is largely a matter of conscious choice." **MW**

as "other." Over 53 percent of respondents were corporate or operating managers, and another 14 percent classified themselves as production management. These respondents generally represented smaller firms (less than 20 employees), which comprised 71 percent of the sample, while 6 percent of respondents worked for companies with 500 employees or more. More than 36 percent of respondents indicated that their companies used mostly solid wood, and another 49 percent indicated that a combination of solid wood and wood composites was used. Correspondingly, most respondents operated at a medium to medium-to-high price point. Geographic coverage in terms of both facility location and markets served was broad and somewhat evenly distributed across all regions of the U.S. Sixty percent of the responding companies had sales of less than $1 million in 2007, and almost 85 percent were single facility operations. More than 66 percent of the responding companies had not increased use of wood imports in their product lines over the last five years.