

NOTEBOOK

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EDITED BY MARTIN HOLLADAY & JON VARA

Getting Ready for the Downturn

Business has been so good for so long that the current building boom is beginning to seem permanent. But according to some analysts, a gradual slowdown may already be underway. After reaching a peak in February of this year, housing starts declined through most of the spring and summer, as the Federal Reserve raised interest rates to cool off what it saw as an overheated economy.

According to NAHB economist Stanley Duobinis, that downward trend is likely to continue for at least another year. He expects the 1.68 million housing starts recorded in 1999 to fall to about 1.59 million for the year 2000. The figure for 2001 is predicted to be lower still, at about 1.48 million starts.

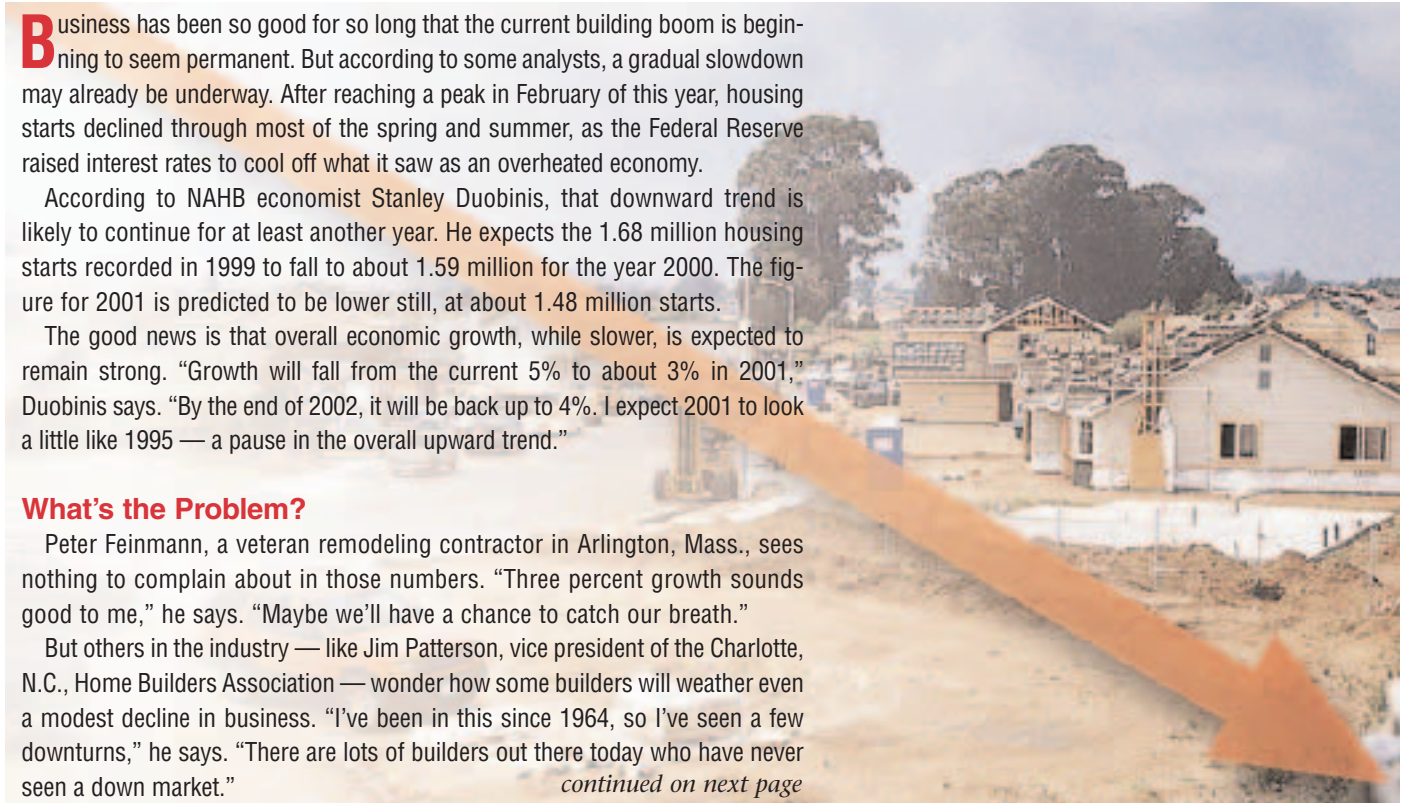
The good news is that overall economic growth, while slower, is expected to remain strong. "Growth will fall from the current 5% to about 3% in 2001," Duobinis says. "By the end of 2002, it will be back up to 4%. I expect 2001 to look a little like 1995 — a pause in the overall upward trend."

What's the Problem?

Peter Feinmann, a veteran remodeling contractor in Arlington, Mass., sees nothing to complain about in those numbers. "Three percent growth sounds good to me," he says. "Maybe we'll have a chance to catch our breath."

But others in the industry — like Jim Patterson, vice president of the Charlotte, N.C., Home Builders Association — wonder how some builders will weather even a modest decline in business. "I've been in this since 1964, so I've seen a few downturns," he says. "There are lots of builders out there today who have never seen a down market."

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Collapsing Houses in Philadelphia

Philadelphia has thousands of abandoned houses, and about 20 of them collapse each year. Yet even by Philadelphia standards, the last week of August was unusual this year. Within a few days, 27 houses suddenly tumbled down, alerting the city to a safety emergency. Although the collapses injured two people, no one was killed.

Mike Taylor, executive director of the National Association of Demolition Contractors, grew up in Philadelphia, and has watched the city decline. "The houses lost market value and were abandoned," says Taylor. "The rent wouldn't pay for the mortgage, and the owners walked away." Neglected maintenance quickly leads to decay. "The roof drains clog, the water freezes, the roof collapses,

and you have rot," says Taylor.

Helicopter inspections. Even before the latest emergency, the city had a list of 3,100 buildings which are so deteriorated that they are in imminent danger of collapse. Since deterioration begins with neglected roofing, most problems are hard to spot from the street. "We have started daily helicopter flights," says Barbara Grant, communications director for the city. "We have inspectors up in a helicopter every day."

In light of the crisis, the city hopes to increase the pace of demolition from 30 to 60 buildings a week. Once city inspectors identify a building as unstable, they cite the owner and issue a demolition order.

City inspectors invite demolition
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Proceed with Caution

Although truly hard times may be years away, some builders have begun quietly making adjustments.

"We're being very, very cautious," says Ted Futrelle, president of Mulvaney Homes in Charlotte, N.C. "We will close on 680 houses this year, relying mostly on advance sales. We try not to keep more than 30 homes in inventory at one time." He notes that slightly higher mortgage interest rates have caused some first-time homebuyers — his company's target market — to draw back slightly. "To ease them back in, we've purchased forward commitments from our lenders to let us bring rates down by half or three-quarters of a point. I don't see things tailing off, but we're budgeting for a flat year in 2001."

Remodelers, meanwhile, are keeping a close eye on new-home construction. Uncertain economic times may cause customers to lean toward remodeling, rather than building a new home — but as Newington, Conn., remodeler Alan Hanbury points out, that has its down side as well.

"Remodeling is easy to get into and out of, so the number of contractors varies all over the place," he says. "When the last recession hit, the market only shrank by five percent or so, but a lot of remodelers lost thirty or forty percent of their volume. That's because homebuilders flood into remodeling once their jobs start to dry up."

Greg Graham, of Graham Contracting in Wayland, Mass., is taking a generally conservative approach. "We're trying to keep debt down," he says. "We bought six new trucks a few years ago, but we earned more interest than we paid last year." Graham has also worked to increase productivity. "Downtime for us is when one of our lead carpenters isn't fully deployed. We did a few hundred thousand more in business this year without adding any employees."

Alan Hanbury also stresses the importance of avoiding unnecessary new hires. "Extra people are expensive to lay off or fire," he says. "They take business with them when they leave, because they set up future work

with your clients. Your unemployment insurance goes up, and sometimes an ex-employee will develop a phantom injury that can cost a bundle."

Marketing, marketing, marketing. Another common mistake, experienced builders say, is to neglect marketing and customer service when times are good. "We're concentrating on low-key marketing efforts to build brand recognition, even though we're turning away work," says Greg Graham. Michael Menn, an architect and remodeling contractor in Northbrook, Ill., agrees. "You should market more when times are good, not less," says Menn. "That's been a major emphasis for us over the past three years."

Make Hay While the Sun Shines

But the single most important step in preparing for an eventual downturn is also one of the most obvious: Sock away a healthy share of the profits while you can.

Alan Hanbury withstood the tough economic weather of the early 1990s by drawing on a \$300,000 war chest accumulated earlier. "That amounted to a year's worth of company overhead," he says. "It let us get through two years without taking a cut in pay, even though business was way down." A good rule of thumb for building such a fund, Peter Feinmann suggests, would be to plan on banking 10% of gross profits each year.

Good economic times are also the time to get a firm grip on what your profits really are. According to Bristol, Maine, business consultant Melanie Hodgdon, the long-running boom has forced many small builders to confront the fact that their accounting methods — which worked well enough in the past — aren't equal to the higher volume of business they're doing today. "When we get things straightened out, some of them find that they're not in nearly as good shape as they thought they were," she says.

Quack, quack, quack. No one enjoys learning that they're slowly going broke. But according to Patty McDaniel, a homebuilder and remodeler in Rohoboth Beach, Del., there's no time like the present. "Get all your ducks in a row now," she says. "If you're not making money in this economy, you probably shouldn't be in business."

Collapsing Houses in Philadelphia

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contractors to view a condemned building from the street, and then ask for curbside bids. The low bid-



RUSTY KENNEDY, AP

Demolition workers have been kept busy in Philadelphia recently, as the city copes with thousands of dangerously unstable abandoned houses.

der is expected to begin demolition within two hours. "There isn't a day that goes by in this city without some demolition going on," says Grant.

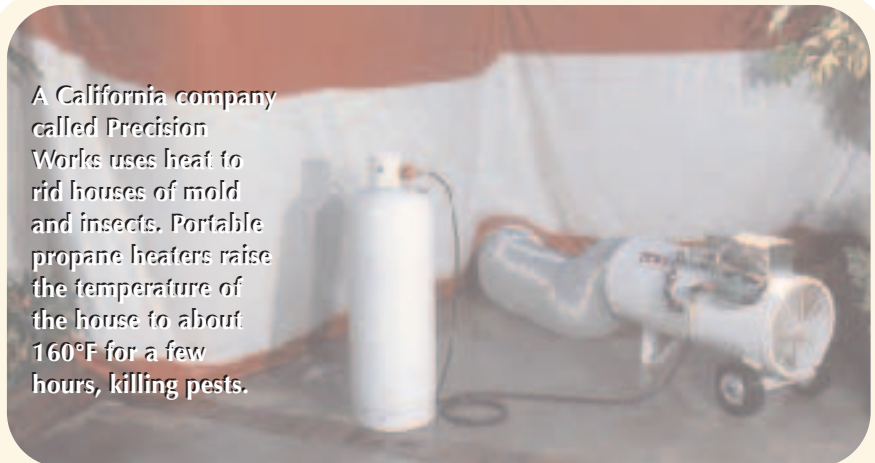
Since each demolition costs the city between \$6,500 and \$14,000 — even city officials admit that this year's \$10 million demolition budget will be exhausted well before the year is out. "There are a lot of bad houses out there," says demolition contractor Charles Petroff, vice president of East Coast Wrecking. "It'll cost about 25 million a year for five years to catch up."

OFFCUTS

The U.S. Census Bureau has revised its tabulation procedures for calculating the value of residential remodeling, reports NAHB's newsletter, *Nation's Building News*. The total expenditures for residential remodeling in 1999 were \$149.9 billion, up from \$133.7 billion in 1998, according to the changed formula. Earlier calculations had tended to underestimate the actual level of remodeling activity.

A pocket guidebook summarizing OSHA regulations is available in Spanish and English. *The Guide to Safe Work Practices for Home Builders* was developed by the Home Builders Association of Metropolitan Denver, working in partnership with OSHA. The booklet, which is illustrated with cartoons, is available in either English or Spanish for \$5 each from the HBA of Metropolitan Denver (303/778-1400).

Let us now praise famous trees. If you have a client who wants something unusual in the way of landscaping, consider a selection from the "Famous and Historic Trees" catalog of the conservation group American Forests. The catalog offers a variety of one- and two-year-old trees — ranging from eight inches to three feet tall — produced from seeds or cuttings of about 100 historic trees, including weeping willows, sweetgums, and pin oaks from Elvis Presley's mansion, a sugar maple from Amelia Earhart's childhood home, and a sycamore on the campus of Mississippi State University raised from a seed carried to the moon and back by the Apollo 14 mission. For more information, check out the organization's online catalog at www.older-trees.org or call 202/955-4500.



A California company called Precision Works uses heat to rid houses of mold and insects. Portable propane heaters raise the temperature of the house to about 160°F for a few hours, killing pests.

Bake the House at Medium Heat for Two Hours

Ever wonder why saunas don't have cockroaches? It turns out that sauna-like temperatures kill roaches and ants, as well as most fungi, mold, and bacteria. Armed with this knowledge, a Camarillo, Calif., company called Precision Works is offering "thermal pest eradication" services. For about \$2,000, homeowners plagued with toxic mold or carpenter ants can have their houses baked clean.

For moldy houses, the first step is to correct the moisture problem that caused the mold. Precision Works employees then inspect the house to be sure that heat-sensitive possessions — including oil paintings, candles, chocolates, computers, and videocassettes — have been protected, either by removing them, storing them in the refrigerator, or covering them with insulating blankets. The list of vulnerable items was generated through experience. "After melting some lipstick, we realized that cosmetics have to be put in the refrigerator," says David Hedman, president of Precision Works.

Workers then install about 20 or 30 temperature probes throughout the rooms being treated. Some of the probes are inserted into the center of exposed lumber, like joists. Wires from the probes are attached to a portable computer outdoors, so that the baking progress can be monitored. After tarps are hung from the fascia and rake boards, workers fire portable propane heaters connected to fans, and bring the temperature of the house up to 150°F or 160°F for two hours or so.

Heat treatment is cost-effective in houses with severe mold. "Heat technology allows us to kill mold in place rather than tear the structure down," says Hedman. There are environmental advantages as well. "This technology replaces highly toxic chemicals that are often pumped into residences around the country," he says.

The procedure has its limitations, though. Although heat treatment can eliminate drywood termites, it is useless against subterranean termites. "Subterranean termites just go into the ground when things get warm," says Dr. Vernard Lewis at the Department of Insect Biology at the University of California, Berkeley.

Certified Lumber Trusses

Until recently, green builders have been frustrated that no U.S. manufacturer sold roof trusses made from certified lumber. Now Hayward Lumber of Monterey, Calif., (831/646-8184; www.haywardlumber.com) has filled the market void, offering certified Douglas fir trusses fabricated at their Santa Maria, Calif., truss plant.

So far, sales of the certified trusses — which cost about 10% more than uncertified trusses — have been slow. “Because people didn’t know the product was available, it really wasn’t being specced,” says Michelle Randall, Hayward Lumber’s director of sustainability.



Hayward Lumber in California now offers green builders the option of buying certified-lumber roof trusses. The Douglas fir truss lumber is harvested from forests where environmentally responsible management is practiced.

Interest in certified lumber is growing, however, with Hayward Lumber projecting that 21½% of their lumber sales this year will consist of lumber certified by the Forest Stewardship Council. Certified lumber comes from managed forests that follow responsible environmental practices, including sustainable-yield management, protection of streams, and reduced use of fertilizers and pesticides.

In most areas of the country, certified lumber is a special-order item, but at Hayward Lumber’s Salinas yard, it’s kept in inventory. “We recognize that if you need a framing package, you want it to show up in two days, not six weeks,” says Randall.

Nose Job for Snout Houses

The prominent, street-facing garage door is a favorite whipping boy of architectural critics (*Notebook*, 11/99). But an enterprising Illinois company (Cybiag Garage Door Systems, 2250 E. Devon, Suite 239, Des Plaines, IL 60018; 877/429-2424; www.garagescape.com) thinks it has found a way to make garage doors truly beautiful — by making them invisible. The one-piece doors of the



GarageScape garage door system can be finished with virtually any siding material — from vinyl to logs to brick veneer — and enhanced with non-functional entry doors, windows, and trim. A well-thought-out paving plan is required, since a narrow driveway that comes to an apparent dead end at an exterior wall will fool no one. And as you



might guess, invisibility doesn’t come cheap: According to the company, a single-width door typically costs from \$5,000 to \$6,000, depending on the exterior finish.

Aspen's Energy Hogs Subsidize Solar Power

Aspen, Colo., is famous for its ski slopes and multi-million dollar homes. Recently, it also has developed a reputation for its stringent energy code, which may be the most restrictive in the country. Aspen's three-year-old energy code was designed to encourage energy-efficient building, specifically targeting exterior snowmelt systems and heated outdoor pools.

"A few years ago, we got concerned about the wanton waste of energy for extravagant snowmelt systems," says Randy Udall, director of the Community Office for Resource Efficiency (CORE), a nonprofit energy office which helped develop Aspen's code. "Our energy code looks not just at the shell of the home, but at everything that happens on the lot."

The original code made the installation of large snowmelt systems almost impossible. To address complaints that the code was too restrictive, new provisions, dubbed the Renewable Energy Mitigation Program (REMP), were introduced a year ago.

As reported in the July 2000 issue of *Energy Design Update*, the REMP provisions give two choices to owners of new homes that are large (over 5,000 square feet) or equipped with "noncomplying exterior snowmelt, pool, and spa systems": Either the homes must include a renewable energy system — for example, photovoltaic or solar thermal panels — or the owner must pay a special mitigation fee. The REMP fees are earmarked to pay for the installation of renewable energy systems in local schools and affordable housing projects.

"It's no longer acceptable to us that a 5,000-square-foot home, costing more than 2 million dollars to construct, just sits on the site and guzzles energy," says Udall, who notes that the REMP requirements encourage new homes to produce some of their own energy. "We need to build much more efficient houses than we have."

The REMP program has already brought in over \$200,000 in mitigation fees. "We got a single check

for \$80,000 from a person who wanted to have a year-round heated outdoor swimming pool. This pool is going to use as much energy as three or four houses," says Udall. "We're going to take that money and use it to pay for renewable energy projects elsewhere in the valley."



In Aspen, owners of new homes with extravagant energy requirements must pay mitigation fees to a city fund earmarked for renewable energy projects. The program is administered by the nonprofit Community Office for Resource Efficiency, which recently oversaw the installation of these photovoltaic panels at an Aspen-area school.

Builders have generally been supportive of the REMP provisions. Steve Hansen, owner of Hansen Construction in Aspen, has built three homes that required the payment of REMP fees. "Everybody is for conserving energy," says Hansen. "This seems to be a win-win situation." According to Udall, one reason that the energy code hasn't been controversial is that the owners of most new homes are not residents. "Those people aren't in the room, because they're not in the community yet," says Udall.

OFFCUTS

Are contractors sex symbols?

Maybe so, according to Harvard professor Marjorie Garber. Garber's book, *Sex and Real Estate: Why We Love Houses* (2000; Pantheon Books; available through local bookstores; \$23), examines Americans' relationships with their homes — including, apparently, that special thrill that can only come from finding just the right contractor: "Once upon a time, 'the earth moved' was the perfect sexual compliment," Garber writes. "Now it's likely to be the announcement — delivered with equal sensual satisfaction — that the contractor has shown up and is on the job."

Marvin windows may continue to press its lawsuit against PPG Industries, based on a recent federal court ruling. The court concluded that there is a factual dispute as to whether PPG made and broke warranties concerning the future performance of wood preservatives supplied to Marvin (see "Marvin Court Case Against PPG Dismissed," *Notebook*, 6/99). However, the court dismissed Marvin's other claims against PPG, including breach of contract, negligence, and unfair and deceptive trade practices.

Canadian softwood lumber prices fell to the lowest point in more than five years this past summer. One expert quoted in the *Toronto Globe and Mail* noted that "the market is in a freefall, and there is no recovery in sight." Experts pointed to a decline in U.S. housing starts as the cause of the price drop.

Utilities in a Can

A Canadian company has produced a self-contained portable module that includes most of the utilities required for off-grid living. Packed into a single 8x8x16-foot steel shipping container are several components, including a water-supply tank, a wastewater-treatment system, a photovoltaic electrical system with batteries, and a diesel cogeneration system that produces both electricity and hot water. Solar hot water panels can be added as an optional accessory.



The Eco-Nomad is a shipping container that houses a water supply tank, a wastewater treatment system, a photovoltaic electrical system, and a diesel cogeneration system that produces electricity and hot water.

The mechanical utilities container, called the Eco-Nomad, was developed by Architectural & Community Planning of Kenora, Ontario (807/547-3304; www.economad.com). The first Eco-Nomad unit has been installed alongside a passive solar home in northern Ontario. Heat from the diesel cogeneration plant provides hot water for the home's in-floor radiant heating system.

"We're building our second unit right now," says Herb Hinz, the manufacturer's research and development associate. "It will include a bathroom with a toilet, sink, and shower." The predicted price for one of the Eco-Nomad units, once full production begins, is \$65,000.

One possible use for the invention is to provide services at large construction sites. "We foresee interest in the Eco-Nomad for remote dwellings and, potentially, for remote research facilities," says Hinz. "We have also submitted proposals to the U.N. to provide infrastructure for international emergency response teams."

Of course, the Eco-Nomad still requires maintenance. In the absence of a leach field, the septic tank requires occasional pumping. The water tank can be filled from a water truck, lake, or stream, while the cogeneration plant requires occasional deliveries of diesel fuel.

