

Economic Environment

The Customized Economy, Technology & Housing by Al Schuler

According to many analysts, the U.S. and other parts of the world like Western Europe and Japan are moving from a standardized economy, one that focuses on making standardized products and services more affordable, to an economy that focuses on making customized/unique products and services affordable (see Figure 1). Demographic forces are driving the demand for upscale, customized housing; and new technology is making this economically feasible. Recent trends in the consolidation of the homebuilding industry should accelerate this process.

BABY BOOMERS & THE CUSTOMIZED ECONOMY

By now you know that I'm a firm believer in the ability of demographics to provide sound insight into the future, and I'm not the only one. Harry Dent, author of *The Great Boom Ahead* and *The Roaring 2000s* wrote, "Most key trends in our economy, from earnings and spending to savings and borrowing to inflation and innovation to productivity and business revolutions to our cradle-to-grave spending habits in every product and service industry is driven by the predictable aging of new generations of consumers and workers." Demographic studies tell us that the baby boomers remain the largest group in our population, and as they enter their peak spending years (see Figure 2), their spending and investment decisions will exert the major influence on our economy, including housing.

How the baby boom generation will spend their money may be found in a list of their traits. They are knowledgeable, informed buyers; are quality conscious; have high discretionary income; are convenience oriented and highly individualistic; value leisure time; are conscious of health and the environment; and they value the personal touch. However, until the past two decades, the standardized economy was incapable of satisfying many of their wants because the appropriate technology, products or services weren't economically available. However, today, with new technologies like microelectronics, computer software and hardware, telecommunications and fiber optics, the customized

CLICK ON IMAGES FOR LARGER VIEW

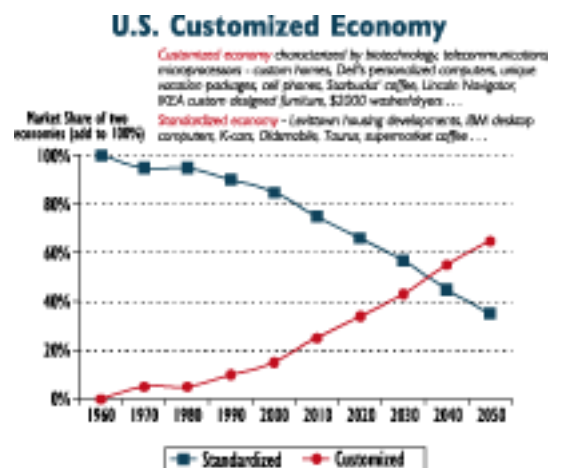
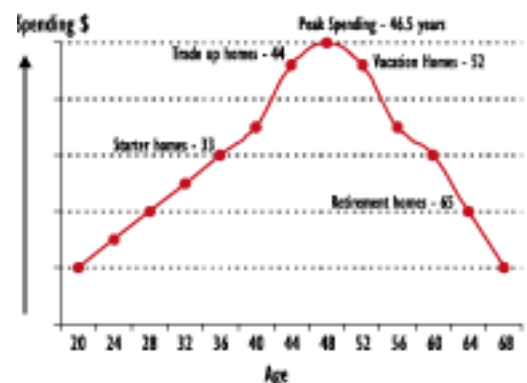


FIGURE 1: U.S. CUSTOMIZED ECONOMY

Housing Expenditures by Age



Source: H. Dent, *The Roaring 2000s*

FIGURE 2: HOUSING EXPENDITURES

economy is becoming a reality.

BY AGE

CUSTOMIZED ECONOMY & HOUSING

From the very beginning, baby boomers demanded high quality, customization in products and services, fast response and personalized service. Now that they are in their peak earning years, they can well afford these things. For housing, this translates into a demand for quality construction of large, custom-built homes. Today's baby boomer population of about 75 million is an average of 47.5 years old. This group should support peak demand for customized trade up homes and vacation housing over the next five to ten years (see Figure 2).

One highly visible trend at the International Builders Show in Atlanta in February 2002, was building sturdy homes for the "long haul," and filling those sturdy homes with the latest in high-end appliances, cabinetry, wiring and other accessories. People want homes that will last, and they can afford them. This could mean more componentized concrete walls, steel framing or integrated structural wall panels. In fact, according to a recent market study by the North American Steel Framing Alliance (North American Steel Framing Market Share, 1997 - 2000), light gauge steel framing market share grew to 2.26 percent in 2000, compared with 1.44 percent in 1999, with the majority of this gain in wall systems.

TECHNOLOGY & CUSTOMIZED HOUSING

The relationship between the adoption of new technology and the cost of the technology is shown in Figure 3. Technology adoption by the consumer/manufacturer usually follows an S curve (product growth S curves were discussed in [the June/July 2001 issue of WOODWORDS](#)). Every new product and technology goes through three stages of growth: innovation, growth and maturity. It takes about the same time for a new technology or product to go from zero to ten percent (innovation) of its potential market as it does from ten to 90 percent (growth phase) and as it does from 90 to 100 percent (maturity). Two forces drive the adoption of new technology, demand for the products and services the technology makes possible, and cost. As customized housing technology traverses down the cost curve, market share will grow.

Will the residential construction industry be able to deliver the volume of affordable, customized housing demanded by the aging baby boomers? They will because it is in their best economic interests to do so and they are getting lots of help on the technology side. For example, readily available, but expensive design software makes it possible for homebuyers to

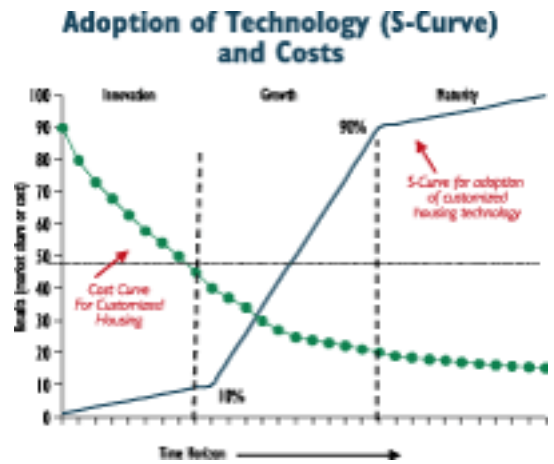


FIGURE 3: ADOPTION OF TECHNOLOGY (S-CURVE) AND COSTS

Consolidation in U.S. Homebuilding

will accelerate adoption of new technology in homebuilding

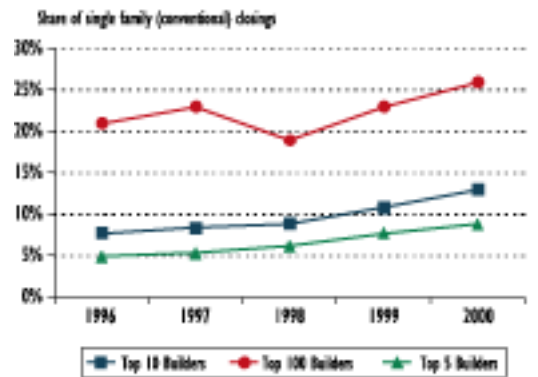


FIGURE 4: CONSOLIDATION IN U.S. HOMEBUILDING

custom design their own home in a simulated 3D environment. To fully realize the benefits of such technology, building materials that are “designer friendly” are needed. That means, high quality, predictable performance, and homogeneous structural properties at the least ([SBC Magazine, November 2000](#)). This will favor engineered wood products, steel framing, concrete walls and engineered building systems such as componentized and modular construction.

Another trend that will facilitate the ability of homebuilders to supply affordable, customized housing is consolidation (see Figure 4). According to a recent study by Anderson Corporate Finance (January 2002), by 2011, it is expected that the top 20 homebuilders nationally will complete 75 percent of U.S. home sales. Although most analysts feel consolidation won't be this rapid, one can't ignore the recent trends.

Why consolidation? Large national builders have significant advantages over smaller, regional competitors such as lower capital costs that are important because 65 to 70 percent of assets are tied up in inventory. In addition, larger builders have operating and overhead efficiencies; significant land control, which now exceeds 25 percent of home building costs; and the brand recognition that is important with today's highly mobile society. They will have the “deep pockets” needed to implement the new building systems and automation technology required to supply large volume, customized housing at affordable prices.

A related trend that will accompany consolidation is the inevitable changes in the distribution of building materials. For some clues about this trend, look at what happened when “big boxes” entered the do-it-yourself market. Lowes and Home Depot are now large enough to exert considerable control over their suppliers in the same way that the auto companies dictate many terms to their component suppliers. Large homebuilders will do the same with their suppliers! Make sure your view of the future coincides with theirs.

Al Schuler works for Forestry Sciences Lab in Princeton, WV. Please note that the economic information/opinions contained in this article are not necessarily those of the USDA Forest Service. Dr. Schuler can be reached at 304/431-2727.

[SBC HOME PAGE](#)

Copyright © 2002 by Truss Publications, Inc. All rights reserved. For permission to reprint materials from SBC Magazine, call 608/310-6706 or email editor@sbcmag.info.

The mission of Structural Building Components Magazine (SBC) is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing of structural building components to ensure growth and continuity, and to be the information conduit by staying abreast of leading-edge issues. SBC will take a leadership role on behalf of the component industry in disseminating technical and marketplace information, and will maintain advisory committees consisting of the most knowledgeable professionals in the industry. The opinions expressed in SBC are those of the authors and those quoted solely, and are not necessarily the opinions of any of the affiliated associations (SBCC, WTCA, SCDA & STCA).