Re-Engineering the Home Building Industry: The Past and Future of Residential Construction

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Abstract

The U.S homebuilding industry has seen tremendous consolidation in recent years. The top ten homebuilding companies now account for almost a quarter of all new home sales, up from under 10% in the early 1990s. Early research by Prof. Michael Porter of the Harvard Business School, among others, concluded that consolidation would provide larger builders with competitive advantages in terms of lower costs of inputs (labor, materials, financing), lower overhead rates, greater ability to control favorable land parcels, and ultimately higher gross margins and net income relative to their smaller competitors. These advantages were expected to increase in the years ahead, leading to greater levels of innovation by these builders, and ultimately to even further industry consolidation.

Our research, based on a major survey of the practices and performance of U.S. homebuilders between 1999 and 2004, finds very limited evidence that larger builders had adopted significantly more innovative practices than their smaller competitors. In fact, in spite of the findings of previous research, we find limited evidence that larger builders translated their scale into any of the following enhanced building practices:

- ⇒ Improved buying power to reduce prices charged by suppliers, or improve the service they provide builders at the job site;
- ⇒ Greater investment in the new generation of information technology that became available in the 1990s that would allow better builder coordination, and management of operations internally and externally;

- ⇒ Changes in how homebuilders deal with subcontractors in terms of bidding of work, management of construction at the job site, purchase of materials by subcontractors or overall construction coordination;
- ⇒ Removing supply chain redundancies or streamlining the processes of planning, acquiring, and transporting building supplies to the job site.

What we did discover was the importance of local housing market characteristics to business practice and performance. The period from 1999-2004 was an era of enormous home price appreciation, but that appreciation was geographically varied with some metropolitan areas experiencing unprecedented increases in housing prices and others only modest gains. We find that builders were more efficient and innovative in low appreciation markets where they faced far greater pressure to hold down costs. In contrast, builders in higher appreciation markets had better financial performance even with lower efficiencies and far less attention placed on innovations and efficiency improvements. This finding is related to a fundamental constant of the homebuilding sector: although major builders became national organizations as they grew, acquired, and often went public, their day-to-day operational features remained very local and decentralized.

As the U.S. currently faces a housing market in steep decline and with prospects for only a long term and gradual recovery, we believe that the time has never been more important to fully understand what happened and did not happen during the past boom. Accordingly, the final portion of the book discusses the prospects for the industry and what homebuilders can learn from other industries that have successfully adopted many of the information technology, supply chain, production, and management practices that have been slow to arrive to this industry.