

An Analysis of the Accounting Methods Used by Builders Producing 25 or Fewer Homes per Year

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Accounting plays a crucial role in the success of any business, but it is particularly vital in the construction industry. Although small-volume home builders make up approximately 70 percent of the membership of the National Association of Home Builders (NAHB), little is known about the accounting practices of these builders. This research undertook to study the accounting practices of small-volume home builders who produced 25 or fewer homes in a given year. A questionnaire was sent to 750 randomly selected owners and/or managers of companies reportedly producing 25 or fewer homes per year who were members of the NAHB. Of these, 148 responded, representing almost a 20-percent response rate. Respondents answered questions regarding many of their companies' accounting practices. Most owners or managers did their own day-to-day accounting, and most employed an outside CPA. Most indicated they used QuickBooks accounting software for every accounting function, and most reviewed financial statements monthly. Most respondents indicated that they were satisfied with their accounting systems.

Key Words: Management Practices, Residential Construction, Accounting, Business Management

Introduction

“There is probably no type of firm that needs sound accounting practices more than the construction firm,” says certified public accountant and author James J. Adrian, in his book *Construction Accounting* (1986). “The success of the construction firm is closely aligned to its ability to forecast and control costs. Both of these functions have accounting at their base,” he says.

The construction industry is an important sector of the U.S. economy. According to the U.S. Census Bureau's 2002 Economic Census, it represents some 9 percent of the country's gross domestic product. The industry is made up of nearly 700,000 large and small companies, including subcontractors. These companies employ approximately 7,000,000 workers and generate total revenues of \$1.2 trillion (Paz, 2006). Of these 700,000 construction companies in the United States, more than 171,000 are residential homebuilding companies. The value of business done by residential home builders is \$264 billion (U.S. Census Bureau, 2005), and small-volume homebuilders make up the majority of residential construction companies. According to the National Association of Home Builders, 70 percent of its membership produces 25 homes or fewer per year (NAHB, 2006b).

Small residential construction companies face unique challenges. In many cases, the owner must function as president, marketing director, human resource director, accountant, and everything in between. These companies must compete with larger production home builders who often use their bulk buying power to negotiate lower prices for labor and material. Also, small-volume home builders may not have the financial reserves and resources to ride the cyclical tide of feast or famine common in the construction industry (Kale & Arditi, 1998).

The construction industry has the second highest failure rate of all industries, second only to business services (Paz, 2006). While the reasons for failure are myriad, poor accounting methods can certainly contribute to a company's demise. According to James Adrian, more than any other industry, construction requires solid accounting practices for success. Yet, disappointingly, "The construction industry has a history of neglecting to perform the accounting function properly" (Adrian, 1986).

In the *Journal of Construction Accounting and Taxation*, authors Robert A. Davidson and Martin G. Maguire identified poor accounting systems as one of the 10 most common causes of construction contractor failures (2003). Financial industry consultant Steve Maltzman notes that many builders use a seat-of-the pants approach to accounting throughout the year, with little or no idea of their financial status until it is far too late to change paths and correct their financial mistakes (O'Toole, 2002). Construction accounting relies on coordination of not only materials but also of multiple subcontractors. Changing tax codes, and also changing technology such as electronic funds transfers, only serve to complicate accounting matters for small construction firms (Davidson, 2006). Yet small builders are notoriously neglectful of accounting systems and procedures (Adrian, 1986).

Part of the problem is the numerous methods of accounting available to small-volume home builders. Some companies prefer to use the cash method of accounting, a system that accounts for revenues, costs and expenses in the calendar periods when they are disbursed or received. Others prefer the accrual method, "an accounting system that recognizes revenues when they are earned and incurred, regardless of when the cash transaction takes place" (E. Shinn, 1993). Still others may use a hybrid of the two. Also, in some cases a contractor must choose a method for day-to-day accounting and one for long-term contracts that span more than one calendar year (Wallace, 2001).

If haphazard accounting can contribute to financial ruin, it is possible that good accounting practices can contribute to a small construction company's success. Successful companies need an effective internal accounting system. They may also need the help of outside advisors, such as a certified public accountant who specializes in construction accounting (Davidson, 2006).

Certified public accountant and frequent NAHB contributor Emma Shinn notes that, "Through the accounting function, (contractors) can obtain timely financial information that will make the decision-making process less of a guessing game. . . . Accounting should be viewed as a tool that managers are responsibly for using effectively" (Shinn, 1993). This is a sentiment echoed by Robert Paz in the publication *Construction Accounting & Taxation*. He says that a key to a construction company's surviving and thriving long-term is strong financial management. This includes an accounting system that allows contractors to "have adequate capital to support work-on-hand and to withstand bad luck" (Paz, 2006).

Problem Statement

Numerous accounting methods are available for small-volume home builders; yet no research was discovered that identified which accounting methods were the most effective, user-friendly and profitable for small-volume home builders. As a preliminary step to studying these topics, this study was designed to determine which accounting methods small-volume home builders were using.

Research Questions

1. What types of accounting methods are used by small-volume home builders producing 25 or fewer homes per year?
2. What software systems or programs are used in the accounting process by these home builders?
3. Do outside personnel assist in the accounting practices of small-volume home builders producing 25 or fewer homes per year?

Assumptions

- Small residential construction companies have an identifiable method of accounting.
- Owners of construction companies are sufficiently knowledgeable about their company's accounting practices to provide survey information.

Delimitations

This research was limited to small-volume home builders, members of the NAHB, that produced 25 or fewer homes per year at the time of this study. Furthermore, only the owners or chief executive officers of the companies in the sample were asked to respond to the survey. In this study, participants were not asked to rate the efficacy, profitability or productivity of the specific accounting methods used in their businesses; rather, they were requested to identify and describe their companies' accounting methods.

Methodology

For the purpose of the research, small-volume home builders were defined as those building 25 or fewer homes per year. This population is a particularly important one with regard to accounting because the Internal Revenue Service affords the vast majority of these companies a number of accounting methods from which to choose (Shinn, 1993; Palmer, Coombs & Smith, 1995).

At the time of this study, there were 19,696 builders reportedly producing 25 or fewer homes per year in the NAHB's membership list. A sample of 3,000 names from this population was

provided by the NAHB for this research. Nearly all of the contacts on the mailing list represented either chief executive officers or owners of the individual companies (Thomas, 2006). This list was stratified and then narrowed to 750 names by choosing every fourth name on the list. To achieve a 95-percent confidence level and a margin of error of 10 percent (+/-), it was necessary to obtain data from 100 respondents in the sample. Assuming a response rate of 15 percent, 750 surveys would produce enough responses for the desired margin of error. Similar studies using the NAHB mailing list produced response rates that varied between 10 and 40 percent (Hutchings & Christofferson, 2004).

Research Design

The research design for this study was to create and mail a 20-question survey instrument to the sample via the United States Postal Service. In order to create the questionnaire, a list of accounting topics frequently mentioned in industry literature was compiled. From this list of topics, the questionnaire was designed to yield enough information to accurately assess different facets of construction accounting – everything from the use of certified public accountants to methods of estimating job costs – while still being short enough to be completed in roughly 10 minutes.

Following a thorough review of the literature, it became apparent that the survey must address several key areas. A preliminary list of 50 questions was reduced to the 20 most important. Final questions were chosen based on their relevance to home builders producing 25 or fewer homes per year. This final list was completed with the help of a number of industry experts and university professors of construction management. The questionnaire included a mix of yes-or-no and multiple-choice questions so that the method of response would most effectively match the individual question. Because of the complexity and the diversity of accounting methods used in construction, many questions included a selection designated as “other,” where an individual respondent could fill in the blank with his or her own answer. Also, two open-ended questions were asked to allow respondents to discuss benefits and drawbacks to their accounting systems in detail. These open-ended questions yielded information and perspectives that could not be gained from yes-or-no questions. The survey guaranteed participants’ anonymity, as well as access to the findings of the study should participants make the request.

Response Rate

Seven hundred and fifty questionnaires were mailed via the U.S. Postal Service at the end of July, 2006. Most of the responses came in the first several weeks, but some continued to trickle in through the beginning of October. Of the 750 questionnaires that were mailed, 17 were undeliverable. Of the 733 surveys that were actually delivered, 148 were completed and returned. Of these, seven reported closing more than 25 homes during the year, disqualifying them from the study. This resulted in a response rate of almost 20 percent. Similar studies using the NAHB mailing list have produced response rates that have varied between approximately 10 and 40 percent (Hutchings & Christofferson, 2004). According to the Oklahoma State University Bureau for Social Research, “Even an attractive, well-designed mailed survey is likely to be returned by no more than 30 percent of a sample unless extra steps are taken to improve the

response rate,” (OSU BSR, 2006). Because the NAHB does not allow follow-up mailings to members on its lists, a response rate of more than 30 percent was not expected.

Data Analysis

Profile of the respondents

The majority of respondents closed only a handful of homes (mean = 6) during the previous fiscal year (see Figure 1). Fifty-three percent of respondents closed between one and four homes; 21 percent closed between five and nine homes; 20 percent closed between 10 and 19 homes; and 7 percent closed 20 or more homes.

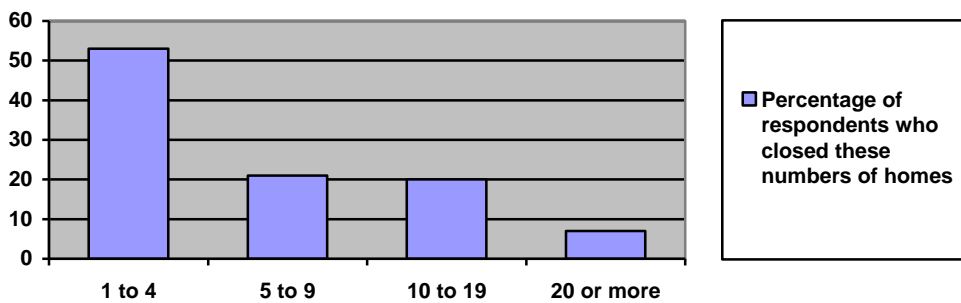


Figure 1: Number of homes closed in previous year.

Sixty-four percent of the respondents conducted their businesses as S-corporations or C-corporations. Nineteen percent said their businesses were limited liability companies, while 14 percent said that their companies were operated as sole proprietorships. One percent of the respondents said that their companies were general partnerships, and another 1 percent designated their organizational structure as “other.” The majority of respondents (62 percent) reported that they built custom homes (see Figure 2). Subcontractors did 84 percent of the work on homes built by respondents (see Figure 3).

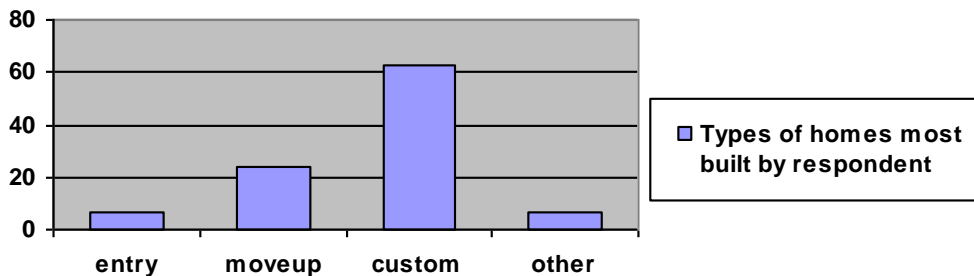


Figure 2: Category of homes most frequently built (by percent).

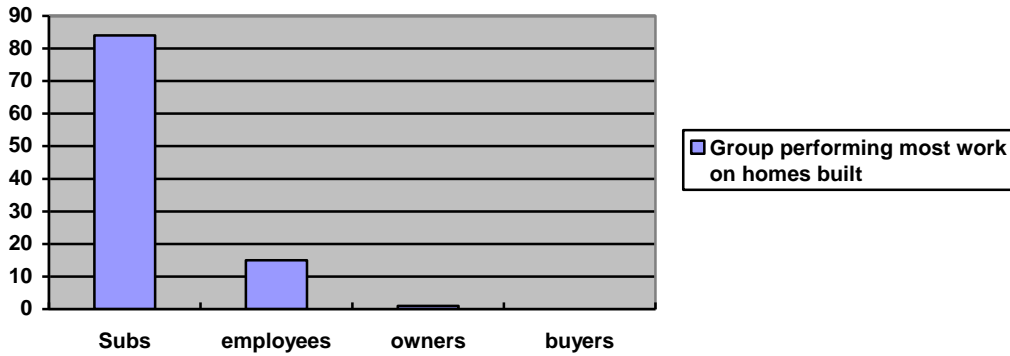


Figure 3: Group performing most work on homes built (by percent).

As reported above, company owners were not physically building the homes they produced, but the majority (53 percent) reported performing their own day-to-day accounting. Twenty-two percent of small volume home-builders used an office manager to manage the accounting; 14 percent used a bookkeeper. Only 6 percent used a CPA to handle all their day-to-day accounting responsibilities, although 94 percent said they employed an outside CPA for some tasks.

Software

QuickBooks by Intuit was by far the most popular accounting software program in every category reported (job costing, accounts payable, accounts receivable, purchase orders, and general ledger) used by small-volume home builders (see Figure 4). Other programs noted include *Peachtree* by Sage, *Timberline* by Sage, *Microsoft Excel*, and *Master Builder*.

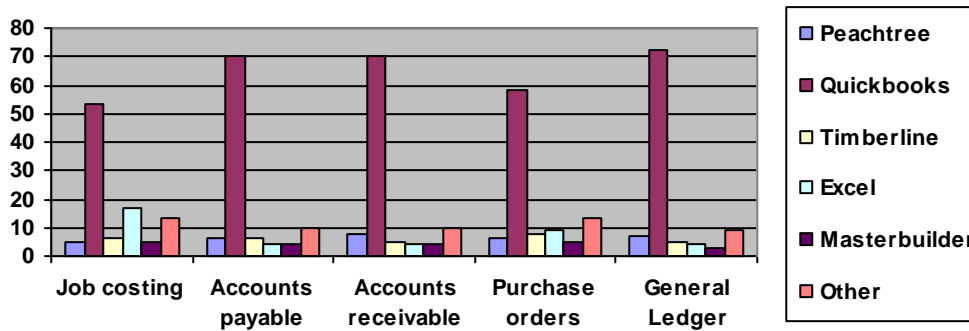
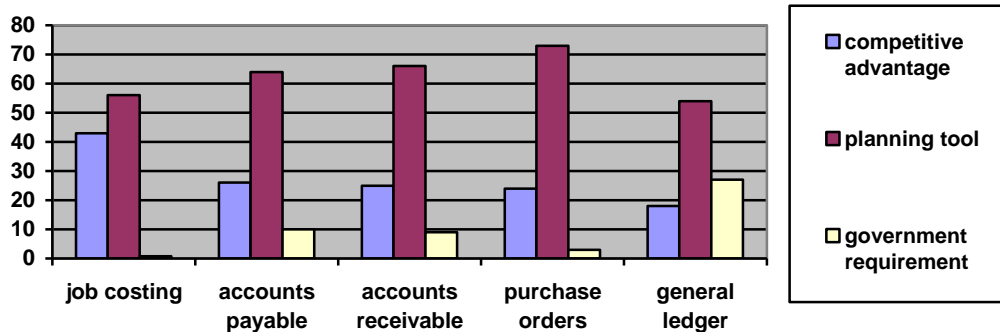


Figure 4: Use of software for each accounting function (by percent).

Planning Tool, Competitive Advantage, or Government Requirement?

The majority of respondents considered their accounting programs (job costing, accounts payable, accounts receivable, purchase orders and general ledgers) as planning tools rather than as a competitive advantage or as a government requirement (see Figure 5).



Figure

5: How accounting categories are perceived.

Types of accounting systems

Forty-three percent of the respondents said their accounting system was recommended by an accountant. Twelve percent of the respondents said their accounting system was recommended by a professional organization; 11 percent said the system was recommended by a friend or an associate; 12 percent had used the accounting system previously at another company; 9 percent purchased the accounting system because of advertising; and 12 percent designated “other” without further explanation.

Forty-three percent of the respondents said they used a cash-accounting method, while 20 percent said they used a percentage-of-completion method and 27 percent used a completed-contract method (see Figure 6). Although most respondents used a system recommended by their accountants, 65 percent relied on their own experience over professional advice when creating a chart of accounts. Seventeen percent relied on a template; 9 percent used a chart of accounts customized by an outside source; and 9 percent designated “other/none of the above”.

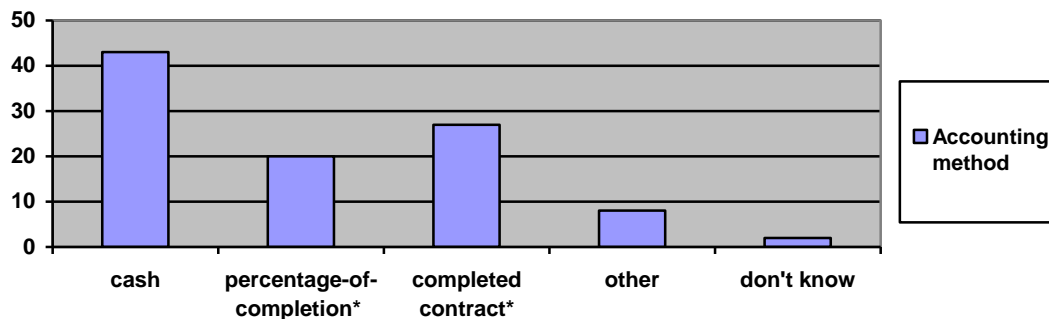


Figure 6: Type of accounting method used by respondents (by percent). *Denotes accrual methods.

Reviewing reports

A small minority of the respondents never viewed financial statements, with a majority viewing the statements monthly. Forty-three percent of the respondents viewed the income statement monthly, 32 percent quarterly, 23 percent yearly with the rest never viewing their income

statement. The same pattern was true for balance sheets and statements of cash flows with 43 percent viewing balance sheets monthly, 31 percent quarterly, and 24 percent yearly. The statement of cash flows had the most respondents who said they never reviewed the report, with 19 percent answering as such, 41 percent viewing monthly, 21 percent quarterly, and 13 percent yearly (see Figure 7).

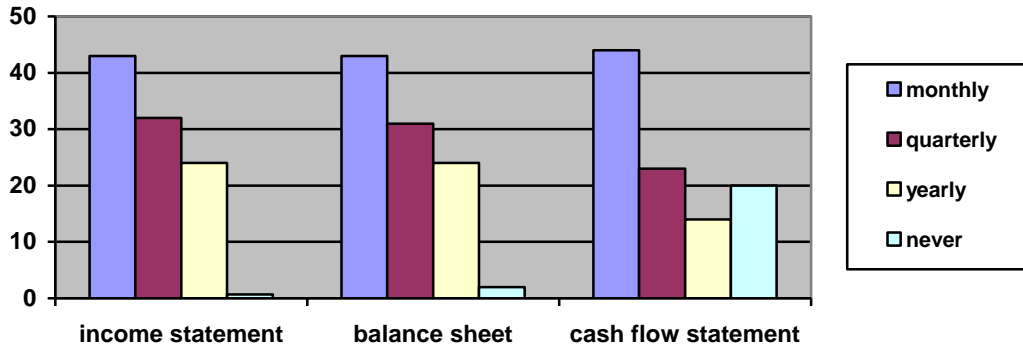


Figure 7: Percentage of respondents who reviewed financial statements (by percent).

Satisfaction

Most respondents seemed satisfied with their current accounting system. Eighty-six percent “agreed” or “strongly agreed” that their accounting system gave a clear picture of the company’s financial situation at any time. Eighty-eight percent “agreed” or “strongly agreed” that their accounting system gave a clear picture of the financial situation of individual jobs at any time. Eighty-nine percent “agreed” or “strongly agreed” that their accounting system was easy to understand and operate. Also, as noted earlier, of those who used a CPA, 90 percent were satisfied with the work of their CPA’s.

Conclusions

Small-volume home builders are doing most of their companies’ accounting themselves. Most assumed day-to-day accounting responsibilities. Most relied on their own experience or knowledge to create their companies’ chart of accounts. Although the majority of respondents used outside CPA’s, the CPA’s were primarily employed only to prepare tax returns. Because these companies are only producing an average of six homes per year, it makes sense that most of the owners feel like they can’t afford to employ a full-time accountant or don’t want to spend the money on one.

Company owners or managers were generally satisfied with their accounting systems. One reason for this satisfaction is probably because they are doing the accounting themselves and have designed their systems based on their own experience. Most felt their accounting systems provided a clear picture of their companies’ financial situation at any given time, as well as the financial situation of individual jobs.

Because owners and managers are doing most of the accounting work, simplicity in an accounting system is crucial. The software program most frequently used was QuickBooks, a software program that is touted on its Web site as easy to learn and use. Most owners used one software program for all of their accounting functions instead of choosing task-specific software. Finally, the majority of the respondents said they were using the cash method of accounting, but they were most likely using the percentage-of-completion method or a hybrid of methods.

Recommendations for the industry

Because most of the companies' owners or managers were doing the business' day-to-day accounting, it is crucial that these persons have training in basic financial and accounting principles. Trade organizations should consider increasing the accounting resources they offer builders. Schools that teach construction management should be sure accounting classes are required for their students. Also, both schools and trade organizations might consider offering continuing education classes in accounting principles for seasoned professionals.

Nearly all of the people who used an outside CPA were satisfied with that person's work. This suggests that the money spent on CPA's is money well spent. However, CPA's are primarily being used for tax preparation purposes. Small-volume home builders might also consider using CPA's as resources for business decisions.

Accuracy, ease of use and simplicity were frequently mentioned as important benefits to an accounting system. Professionals starting out and choosing an accounting system should look for one that is user-friendly and uncomplicated. Because job costing was so frequently mentioned as an important benefit to an accounting system, it is crucial that builders select a system or method that performs this function well. They should avoid anything that is overly complicated or hard to understand, and they should also understand that a system may require numerous upgrades and may be expensive.

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