Accounting for Income Taxes: Primer, Extant Research, and Future Directions
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Accounting for Income Taxes: Primer, Extant Research, and Future Directions

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Abstract

This monograph comprehensively reviews the Accounting for Income Taxes (AFIT) literature. We begin by identifying four distinctive aspects of AFIT. We cover the rules surrounding AFIT and provide a discussion of the descriptive studies related to AFIT. We then review the existing research studies in detail and offer suggestions for future research. We focus on the two research questions that have been most widely studied (the extent to which managers use the tax accounts to manipulate earnings and whether equity market participants price the tax accounts). We discuss econometric issues that apply to AFIT and more broadly apply to much accounting and economics research. We also highlight areas that have not received much research attention and that warrant future analysis.
This review includes material that was originally published in Graham, J., Raedy, J., Shackelford, D., 2012, “Research in the Accounting for Income Taxes,” Journal of Accounting and Economics. That publication and this one have benefited from outstanding research assistance by Justin Hopkins, Margot Howard, Hyunseob Kim, Kevin Markle, Jenna Meints, Jake Thornock, and Kelly Wentland and helpful comments from Jeff Abarbanell, Scott Dyreng, Jonathan Forman, Mary Margaret Frank, Ed Maydew, Lillian Mills, Richard Sansing, Casey Schwab, Jeri Seidman, Stephanie Sikes, Dan Taylor, Ross Watts, the Texas Tax Readings Group, and participants at the UNC Tax Symposium and the National Tax Association annual conference.
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This monograph reviews one of the more complex areas of financial reporting: accounting for income taxes (AFIT). AFIT is the process by which (1) future cash tax payments and refunds arising from current and past transactions are recorded as deferred tax assets and liabilities in an attempt to accurately portray the financial position of the firm, and (2) the income tax expense is reported in an attempt to accurately portray the current financial performance of the firm. Before this millennium, AFIT and its implications for financial reporting and effective tax planning attracted limited attention in scholarly circles. However, in recent years, both financial accounting and tax researchers have begun to focus on AFIT, so much so that AFIT has become the most active area of accounting research in taxation. Almost all

1 Throughout the monograph, we use the term “effective tax planning” to mean tax plans that consider all parties to a transaction, all taxes (explicit and implicit), and all costs (tax and non-tax). See Scholes et al. (2009) for elaboration.

2 To calibrate the growing interest in AFIT research, we searched the titles of papers published during the last decade in the Journal of Accounting and Economics, the Journal of Accounting Research, and The Accounting Review for the word “tax” or any variant. We find that 48 percent of the “tax” papers from 2009 to 2011 address AFIT issues, up from 35 percent for 2004–2008 and 22 percent for 1999–2003. One possible reason for this growth in AFIT studies is that, beginning in the 1990s, anecdotal information indicates that the
of the studies have been empirical, primarily testing the incremental information content of the tax accounts and their role in earnings management. To provide structure for understanding this growing literature, we discuss why AFIT is distinct from other financial reporting topics, explain the essential principles that govern AFIT reporting, review extant studies, highlight key contributions, identify specific remaining questions of interest, and discuss weaknesses and opportunities of a more general nature.

This is the most comprehensive review of AFIT research. It is designed both to introduce new scholars to this field and to encourage active researchers to expand frontiers related to accounting for income taxes. Financial economists are one group that may benefit from better understanding AFIT research. Many financial empiricists are users of financial statements at a “high level” but do not fully appreciate some subtleties and nuances. For example, many are aware that a deferred tax adjustment is made to bring financial statement income closer to actual taxable income but are unaware that even with this adjustment using financial statements to infer information about tax returns can be fraught with error. Many economists are also unaware that the geographic coverage of financial statements is global, while tax filings are typically domestic only. In this monograph, we address these and many related issues to aid a broad spectrum of scholars as they use AFIT data, and we also expose them to important unanswered research questions.

It is challenging to reach such a broad audience. Some readers have little or no understanding of the process by which firms account for income taxes in their financial statements (the income statement, balance sheet, statement of cash flows, and the statement of equity).
For these readers, we start the monograph with a primer about the rules governing AFIT to facilitate an appreciation of the questions and findings that follow. The primer uses accessible examples and clear language to express essential AFIT rules and institutional features. Other readers thoroughly understand the accounting and are looking for structure and guidance in the research domain. These readers may wish to skip to Section 5, where we begin our analysis of the extant work and detail our suggestions for future research. (However, Sections 3 and 4 provide descriptive information about book–tax differences and the tax information in accounting statements that might be of interest to all readers.)

To narrow the scope of our analysis, we define AFIT research as work that evaluates the implications of financial reporting choices involving the income tax accounts. Examples include tests of AFIT’s role in earnings management and its information content. We exclude from our analysis those studies that use the tax accounts to analyze other phenomena. For example, Mills (1998) tests whether differences in book and tax accounting affect Internal Revenue Service (IRS) audit decisions. Another example is the ongoing work examining the association between differences in book and tax accounting and the cost of capital (e.g., Ayers et al., 2009; Dhaliwal et al., 2008; Crabtree and Maher, 2009). While these papers are interesting and important, we exclude them from our analysis because they evaluate the impact of AFIT, rather than studying AFIT itself. We recognize that this delineation is somewhat arbitrary, but as with all literature reviews, we are forced to set boundaries for our analysis. In addition, we do not discuss the sizeable literature that addresses trade-offs between financial reporting and tax considerations. Although AFIT may involve tax planning considerations, we ignore issues related to the coordination of book and tax choices and refer readers to the Hanlon and Heitzman (2010) and Shackelford and Shevlin (2001) reviews.

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4 Introduction

Although related to traditional corporate income tax research, recent AFIT work resembles mainstream financial accounting research far more than it resembles the “Scholes-Wolfson” tax research, which draws heavily from economics and finance.\(^5\) For example, most empirical AFIT research has focused on two major questions that are familiar to financial accountants: (1) Do firms use the tax accounts to manage earnings? (2) Do the capital markets efficiently price the tax accounts? Neither question is unique to tax accounting.\(^6\) Scholars have addressed both questions for numerous other components of the financial statements. Indeed, the tax accounts are among the last accounts to be studied.

The fact that scholars have been somewhat slow to examine the tax accounts in addressing these questions of broad interest (i.e., earnings management and pricing) should not be construed as evidence that AFIT studies are somehow less important — because notable differences exist between AFIT and other financial reporting areas. While Section 2 details the distinctions, we briefly discuss them here. First, all for-profit companies are subject to taxation, making it one of the most pervasive financial reporting topics. Second, the taxing authority is one of the users of the tax information in the footnotes. Thus, the tax accounts provide information to an adversarial party. Third, the tax accounts provide an alternative measure of income. Finally, income tax expense is not included as a component of operating income. In fact, portions of the tax expense are reported below net income in items such as discontinued operations and other comprehensive income. These distinctive features of accounting for income taxes enable scholars to expand our understanding of financial reporting in directions that might not be possible using other accounts.

Nonetheless, because accounting scholars have imported research questions and designs mostly from the financial accounting field, and provided much of the technical tax expertise, one of the challenges

\(^5\) See Shackelford and Shevlin (2001), Graham (2003), and Hanlon and Heitzman (2010) for reviews of this literature.

\(^6\) The latter question may be of particular interest to financial economists, who have studied market efficiency extensively. The traditional paradigm is that market prices reflect all available public information. Thus, it is of particular interest to understand how and the extent to which AFIT information is priced.
facing the emerging field is developing producers and consumers of AFIT scholarship outside of the accounting community. We are encouraged that some economists and lawyers have already begun to focus on the implications of differences in book and tax accounting for manipulating financial statements and/or tax filings (e.g., Desai and Dharmapala 2006; Schöni 2005; Whitaker 2005). We hope that our monograph will expose even more non-accounting scholars to current AFIT research and guide them toward issues of interest in their fields, including implications about tax evasion by corporations.

In addition, we hope to contribute to ongoing policy discussions among accounting regulators and tax policymakers. In particular, there is a growing debate about increasing the alignment between book and tax accounting. While many accountants oppose book–tax conformity and tend to dismiss its possibility, there is support among some economists and lawyers, and it has spilled into Congressional testimony (e.g., Desai 2006; Shackelford 2006). We hope that this review will sharpen the focus for these ongoing policy discussions.

As mentioned above, we dichotomize the monograph into a primer, which discusses the principles that govern AFIT (Section 3–4), and a review of the scholarly studies in the field (Sections 5–8). Figure 1.1 depicts the organization of the monograph. Appendix A categorizes the research studies that are examined in each section. Such grouping helps the reader quickly see the papers that apply to a given AFIT topic. The “blank spots” in Appendix A highlight the areas in which little or no work has been undertaken to date, which we hope spurs research in these areas. Appendix B provides a glossary of accounting and tax terms. Appendix C lists examples of the book–tax differences that result when tax rules differ from Generally Accepted Accounting Principles (GAAP) financial statement rules. Appendix D details the rules that govern the reporting of deferred tax accounts.

In our attempt to expose a broad audience to interesting tax questions, we first cover the basic rules and institutional details governing AFIT (see Section 3), beginning with a brief discussion of accrual accounting (see Section 3.1), which undergirds the entire financial accounting system. Section 3.2 shows that when the tax law accounts for transactions the same way that financial accounting does, AFIT
Introduction

Fig. 1.1 Organization of the monograph.
is straightforward, intuitive, and relatively simple. Complexities arise when book and tax treatments differ, e.g., measuring the rate of depreciation for property. Section 3.3 details the two types of differences between book and tax income: permanent and temporary. These book–tax differences can be complex and have been proposed as measures of both earnings manipulation and tax avoidance. Studies show that the tax accounts can materially affect both income statements and balance sheets.

We also expose scholars to variables and sources of information little known outside of accounting. For example, Section 3.4 describes the income tax contingency account on the balance sheet, an estimate of the additional tax liability that will arise if the tax returns are audited. Recently enhanced disclosures of this estimate have spurred tests of the extent to which firms exploit the uncertainty in this estimate to manage earnings. Section 3.5 discusses permanently reinvested foreign earnings, an area of increasing interest as multinationals expand around the world. Those foreign earnings that firms deem permanently reinvested do not have to accrue income tax expense for the residual U.S. tax (if any) that will be paid when the funds are repatriated. As a result, this provision provides companies with opportunities to shift earnings across reporting periods.

Section 4 closes the first part of the monograph by discussing two questions of primary interest to many users of the tax information in the financial statements: (1) How well does the tax information in the financial statements approximate actual tax return information? (2) How well does the tax information in the financial statements aid in assessing the effectiveness of a firm’s tax planning? The short answer to both questions is, “in many cases, poorly.” As with all information in the financial statements, the tax accounts are designed to provide information about the financial condition of the firm. They are not intended to provide information about the firm’s tax returns or the effectiveness of its tax planning. Consequently, attempts to infer confidential tax return

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7 Words that are defined in the glossary at the end of the monograph (Appendix B) appear in bold the first time they appear in the text.
8 Appendix B of Scholes et al. (2009) also provides a detailed discussion of accounting for income taxes.
information from the tax accounts in the financial statements can lead to erroneous and misleading conclusions. Nonetheless, we recognize that the financial statements often provide the only publicly available tax information. Thus, we discuss ways that researchers, policymakers, and other interested parties can use the tax information in financial statements to better approximate information in the tax return.

The second half of the monograph reviews the extant scholarly studies and identifies unresolved questions. We begin by splitting the research literature into four topics: earnings management, the association between book–tax differences and earnings characteristics, the equity market pricing of information in the tax accounts, and book–tax conformity. Table 1.1 summarizes the main findings from these papers and positions them in the literature, organizing them by tax accounts and research questions. It highlights the primary topics of study and identifies those areas in which little research has been undertaken. Briefly speaking, we reach four broad generalizations. First, managers use the tax accounts to manage earnings to meet or beat analysts’ forecasts, but not for other objectives, such as to smooth earnings, increase a big bath, avoid losses, or meet/beat prior earnings. Second, a small literature documents associations between book–tax differences and earnings characteristics, such as growth and persistence. Third, the evidence is inconsistent about the market’s use of the information provided in the tax accounts. Fourth, by eliminating a second source of income information, conforming book and tax accounting would result in a loss of information to the market.

Section 5 focuses on the use of the tax accounts to manage earnings through the valuation allowance, the income tax contingency, and permanently reinvested foreign earnings. Extant empirical research indicates that managers appear to use the valuation allowance and the tax contingency to meet or beat analysts’ forecasts. Similarly, they appear to classify a portion of their foreign earnings as “permanently reinvested” to meet or beat analysts’ forecasts. However, the literature finds only weak support for the hypothesis that firms use these accounts to meet or beat other earnings targets or to smooth earnings.

Section 6 discusses the association between book–tax differences and earnings characteristics, namely earnings growth and earnings
Table 1.1. Summary of extant literature.

<table>
<thead>
<tr>
<th></th>
<th>Studies of the association between BTDs and earnings characteristics</th>
<th>Pricing studies</th>
<th>Conformity studies</th>
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<tbody>
<tr>
<td><strong>Book-tax differences</strong></td>
<td>• Extreme book-tax differences are associated with less persistent book earnings.</td>
<td>• Earnings growth is positively associated with the ratio of taxable income to book income.</td>
<td>• Companies defer book income to lower their taxes when book–tax conformity is imposed.</td>
</tr>
<tr>
<td><strong>(BTDs)</strong></td>
<td>• On average, VA balances are approximately half of the DTA balances.</td>
<td>• Foreign and state taxes are the largest items, in terms of magnitude, in the rate reconciliation.</td>
<td>• High conformity countries experience reduced international capital mobility, less value relevance for earnings and cash flows, and higher correlation between book and taxable income.</td>
</tr>
<tr>
<td></td>
<td>• The majority of companies have net DTL balances (as opposed to net DTA balances).</td>
<td>• Determinants of BTDs include tax planning, change in sales, level of PPE, earnings management behavior, general business conditions, and changes in financial accounting rules.</td>
<td>• Higher levels of book-tax conformity are associated with lower value relevance of earnings and cash flows.</td>
</tr>
<tr>
<td></td>
<td>• BTDs are concentrated in the largest firms.</td>
<td>• Higher levels of book-tax conformity are associated with a lower level correlation between current earnings and both future earnings and future cash flows.</td>
<td></td>
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<tr>
<td></td>
<td>• BTDs are concentrated in the financial and information industries.</td>
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<td>• Foreign and state taxes are the largest items, in terms of magnitude, in the rate reconciliation.</td>
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Table 1.1. (Continued)

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<th></th>
<th>Descriptive studies</th>
<th>Earnings management studies</th>
<th>Studies of the association between BTDs and earnings characteristics</th>
<th>Pricing studies</th>
<th>Conformity studies</th>
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<tbody>
<tr>
<td>Deferred tax accounts</td>
<td>• Managers in the U.K. use their discretion in reporting deferred tax accounts to manage their leverage, but not to smooth earnings.</td>
<td></td>
<td>• The market prices the deferred tax liability and asset accounts. It does so in a way that is consistent with the likelihood of and length of time until settlement. However, these results are largely derived from value relevance studies, and so should be interpreted with caution.</td>
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<td>• Theoretical studies indicate that under certain circumstances, DTLs should be valued, even though they are not discounted and they may never reverse. In addition, the models show that the valuation of a DTL may not depend on the time until reversal, if the BTD does not involve cash flows.</td>
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Table 1.1. (Continued)

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<thead>
<tr>
<th>Description</th>
<th>Earnings management studies</th>
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<th>Pricing studies</th>
<th>Conformity studies</th>
</tr>
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<tbody>
<tr>
<td>Valuation allowance</td>
<td>• Determinants of the VA balance include the four sources of income listed in SFAS No. 109 as well as the magnitude of carryforwards.</td>
<td>• Managers use the VA account to meet analysts' forecasts. • Firms do not use the VA account to engage in earnings smoothing behavior. • Managers do not use the VA to take (or increase) big baths. • There is mixed evidence as to whether managers use the VA to meet prior and zero earnings targets. The bulk of the evidence indicates that the VA is not used for these purposes.</td>
<td>• Evidence is mixed as to whether the market prices the VA account.</td>
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<tr>
<td>Tax contingency</td>
<td>• According to FIN 48 disclosures, the contingency balance averages between 1.5% and 1.8% of assets. • The quality of the FIN 48 disclosures is inversely related to the tax aggressiveness of the firm.</td>
<td>• Before FIN 48, the tax contingency is used primarily to meet analysts' forecasts but is not used as much to meet other earnings targets. • After FIN 48, there is no consensus as to whether managers use the contingency account to meet or beat analysts' forecasts.</td>
<td>• The market views the tax contingency account in a positive fashion, consistent with the market rewarding tax aggressive firms. • Tax aggressive firms generally did not experience negative abnormal returns around events related to the passage of FIN 48.</td>
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Table 1.1. (Continued)

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<tr>
<th>Foreign earnings/ Taxable income/tax expense</th>
<th>Descriptive studies</th>
<th>Earnings management studies</th>
<th>Studies of the association between BTDs and earnings characteristics</th>
<th>Pricing studies</th>
<th>Conformity studies</th>
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<tr>
<td>• Permanently reinvested earnings can be very large for some companies, and their magnitude has grown rapidly in recent years.</td>
<td>• Managers use their discretion in reporting permanently reinvested foreign earnings to meet analysts' forecasts.</td>
<td>• The market values permanently reinvested foreign earnings net of the U.S. taxes that will be paid at repatriation.</td>
<td>• Estimated taxable income provides information to the market that is incremental to book income. This effect is lower for firms that engage in greater tax planning.</td>
<td>• The ratio of taxable income to book income is positively associated with earnings growth, current P/E, and future returns.</td>
<td>• Unexpected taxable income is associated with future returns.</td>
</tr>
<tr>
<td>• Some book information appears to be useful for assessing tax information, such as book NOLs and simulated book MTRs.</td>
<td>• Some book information appears to be less useful for assessing tax information. In particular, there is little correlation between discretionary tax accruals and discretionary book accruals.</td>
<td>• Managers manipulate tax expense to meet/beat analysts' forecasts. In addition, the market (at least partially) sees through this behavior.</td>
<td>• Analysts' forecast errors are positively associated with the ratio of taxable income to book income, implying that potential market inefficiencies identified in the literature are partially due to analysts' inefficiency.</td>
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Full text available at: http://dx.doi.org/10.1561/0500000042
persistence. Research in this area finds that book–tax differences are associated with both growth and persistence.

Section 7 explores how tax information is reflected in share prices, a topic of interest to a broad range of academics and practitioners. Here, the evidence is more compelling. With the possible exception of the valuation allowance, the extant literature consistently shows that the capital markets impound information from the deferred tax accounts into prices in predictable ways. In addition, estimated taxable income has information content incremental to book income, but the market does not appear to fully and immediately impound the information into prices.

Section 8 then turns to a topic of increasing interest to a broad range of policymakers and economists: increased alignment of accounting for book purposes and tax purposes. Proponents of book–tax conformity assert that it would mitigate overstatement of book earnings and understatement of taxable income. However, extant research identifies a potential cost — the markets appear to glean information from the tax accounts. Conformity would eliminate such information.

The remainder of the monograph focuses on topics of general interest in the economics and econometrics literatures. Although we identify specific research questions and topics that deserve further study throughout the paper, Section 9 highlights five issues of general importance. Specifically, we discuss: (1) the need for a theoretical framework to interpret and guide empirical AFIT studies; (2) the inconsistencies between empirical findings implying that the tax information in the financial statements is useful and anecdotes of its poor quality and limited usefulness to practitioners; (3) the need to study the disaggregated components of book–tax differences; (4) the need to better understand whether some findings imply market inefficiency or whether they are driven by market imperfections; and (5) the research opportunities that may present themselves as the U.S. moves toward International Financial Reporting Standards (IFRS). Finally, Section 10 discusses econometric weaknesses that are common in AFIT (and other accounting and economics) research and proposes ways to mitigate their deleterious effects. This discussion should be of general interest to all economists. Section 11 concludes.


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