ARTICLE IN PRESS
ADIAC-00333; No of Pages 15
Advances in Accounting, incorporating Advances in International Accounting xxx (2016) xxx–xxx
Contents lists available at ScienceDirect
Advances in Accounting, incorporating Advances in International Accounting
journal homepage: www.elsevier.com/locate/adiac

Target ownership plans and earnings management☆

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ARTICLE INFO

Article history:
Received 4 June 2015
Available online xxxx

Keywords:
Target ownership plans
Accruals management
Real earnings management

ABSTRACT

We examine the effect of target ownership plans (TOPs) on earnings management, after controlling for self-selection bias originating from firm characteristics underlying the determinants of TOPs. Our analyses show that firms engage in less accruals management for up to two years following plan adoption. Additionally, we find that the reduction in accruals management is concentrated in adopting firms whose CEOs' ownership levels are increasing because they have not yet met the ownership requirements. Interestingly, we find that TOPs are associated with less use of income-increasing accruals and less real earnings management, particularly through manipulation of discretionary expenditures. Finally, our results suggest that firms adopt TOPs not only in response to poor performance as documented by prior research, but also as a means to mitigate moral hazard concerns and in response to peer pressure. Our findings support the argument that TOPs align CEOs' incentives with shareholders' in that these plans result in reduced management short-termism.
Data availability: All data used in the study are available from the public sources identified in the text.

1. Introduction

Since the corporate accounting scandals that began in 2002 at companies such as WorldCom and Enron, stakeholders have raised concerns that managers are overly focused on satisfying investors' short-term expectations rather than on long-run value creation. For example, in his address to business leaders at a corporate governance forum, then U.S. Securities and Exchange Commission (SEC) Chairman, William Donaldson (2003), admonished business leaders to resist the "straight jacket" attitude that firms should be managed to "create earnings per share on a regular basis", and instead manage the business for "long term results". Consistent with this perception of short-term behavior by executives, a survey by Graham et al. (2005) reported CEOs and CFOs as stating that they would decrease discretionary spending in order to meet near-term corporate expectations, even if this decrease meant sacrificing long-term value creation. Analysts, CEOs and leaders from academia suggest that one solution for corporate short-termism is that executive compensation should be structured to achieve long-term strategic and value-creation goals (CFA Center for Financial Market Integrity, 2006).[1] We focus on the target stock ownership plan which is used by many firms to encourage a long-term focus in managers.[2] These plans require executives to attain and maintain a particular ownership stake in their firms. In this study, we explore reasons for adopting target executive stock ownership plans and examine whether these plans are effective in reducing accruals and real earnings management, which are widely believed to destroy shareholder value.[3]

A target ownership plan is considered by many shareholder advocacy groups (e.g. TIAA-CREF,[4] ISS,[5] CFA Institute, and the Business Roundtable) to be a corporate governance best practice, yet little is known about whether these plans have effectively mitigated corporate short-termism behaviors such as accrual and real earnings management. Using data from the first half of the 1990s, Core and Larcker (2002) find that poor performance and low executive stock ownership are determinants of the adoption of target ownership plans. They also report that executive ownership and return on assets increase two years after plan adoption. Since the early 2000s, however, the pressure placed

☆ We gratefully acknowledge helpful comments and suggestions from the Editor (Kathleen Rupley) and two anonymous reviewers. We also acknowledge the financial support provided by our respective universities. We thank the workshop participants of the University of Waterloo, Wilfrid Laurier University, and Zhongnan University of Economics and Law and the participants of the 2014 AAA and CAAA annual meetings, and discussants Lamia Chourou and Anup Srivastava for their insightful comments.
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[1] This suggestion was raised following a series of symposia by the Chartered Financial Analyst (CFA) Centre for Financial Market Integrity and the Business Roundtable Institute for Corporate Ethics in 2006.
[2] As of the end of fiscal year 2012, target ownership plans were in place at firms such as Dow Chemical, General Mills, 3M Company, Nabors Industries and Electronic Arts.
[3] Kothari et al. (2012), Balsam et al. (2002), Gunny (2005), and Kim and Sohn (2013) document the negative effect of accruals and real earnings management, including negative equity valuation and increased cost of capital.
[4] Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA–CREF).
[5] Institutional Shareholder Services (ISS).

http://dx.doi.org/10.1016/j.adiac.2016.12.002
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on firms by shareholder activist groups to adopt target ownership plans and/or impose stricter share ownership guidelines on executives has increased, as has the frequency of these plans (Cook, F. W. and Co., Inc., 2010). Brown and Li (2013) examine the effect of target ownership plans on corporate policies and find that firms that adopt TOPs report lower levels of repurchases, higher leverage, greater levels of R&D expenditure and cash holdings, and pay greater dividends. Quinn (2014) finds that managers reduce their tendency to manipulate discretionary expenditures and meet or just beat prior year earnings after the adoption of stock ownership plans. However, little has been known about the effectiveness of target ownership plans in curbing accrual and real earnings management. In addition, prior research has not extended the work of Core and Larcker (2002) to determine if there are additional factors explaining the increased adoption of target ownership plans. A thorough understanding of firm characteristics underlying the adoption of target ownership plans is important due to not only the increasing popularity of target ownership but also its impact on the literature's research design in controlling the self-selection issue originating from the correlation between the decision on target ownership plans and firm characteristics.

Using a sample of S&P 500 firms from 1992 − 2010, we identify 190 target ownership adopting firms with required data and 43 firms without target ownership plans. First, we examine the consequence of mandated ownership plans on accruals and real earnings management of adopting firms. We find that the level of adopting firms' ownership increases post-adoption both before and after the target has been met. We also find that accruals management has been reduced in post-adoption years before the target has been met. We find no reduction in accruals management for firms whose CEOs meet the target in the year of, or year following, plan adoption, although we find the predicted negative relationship one to two years after the adoption year. A possible reason for this finding is that there is little incentive in a target ownership plan with targets at, or below, the levels the CEO currently holds. We find that the reduction in accruals management is strongest for income-increasing accruals and in the post-SOX period. There is also some evidence that TOPs are effective in reducing real earnings management one or two years after the target is reached. Our evidence is consistent with the hypothesis that target ownership plans encourage executives to report high-quality earnings and focus on firms' long-run performance. These results hold after controlling for fixed-industry effects.

Next, we re-examine the determinants of firms' decisions to adopt target ownership plans. Our results confirm the findings of Core and Larcker (2002), indicating that poor prior performance and low executive ownership are significant determinants. More importantly, we find that target ownership plans are positively associated with peer-firms adopting a target ownership plan, thereby suggesting that herding shapes executive compensation policies. Corporate governance indicators, particularly board independence, are also positively related to firms' decisions to adopt target ownership plans. Finally, moral hazard concerns influence firms' decisions to adopt target ownership plans as evidenced by their positive association with firm age and size and negative association with CEO ownership, CEO tenure and firms' capital expenditures to sales ratio – an indicator of the need for external monitoring.

Our study makes several contributions to the literature. First, we add to the limited research on target ownership plans. While Core and Larcker (2002) find that target ownership plans are likely to increase managerial ownership, it is uncertain whether this relationship will hold in the more recent time period because CEO tenure and incentives have changed over time. Kaplan and Minton (2012) document average annual turnover of US CEOs of 16.8% between 2000 and 2007, a significant increase over the 1992–1999 period, implying an average tenure of less than six years. A related development has been increasing price pressure from the capital market which can induce suboptimal investment decisions (Polk & Sapienza, 2009). Both phenomena would significantly increase CEO employment risk and potentially reduce the effectiveness of target ownership plans. Our study identifies additional determinants of target ownership plans, such as moral hazard concerns and peer pressure (Del Guercio et al., 2008; Ertimur et al., 2011), beyond the characteristics identified by Core and Larcker (2002).

Second, we contribute to the literature that examines the influence of managerial ownership on corporate decisions and performance (e.g. Morck et al., 1988). Many of these studies treat ownership structure as being exogenously rather than endogenously determined (Demsetz & Lehn, 1985), making it difficult to establish causality. Similar to Core and Larcker (2002), we assume that boards of directors adopt target ownership plans when the level of managerial ownership is sub-optimal. This exogenous re-contracting scenario mitigates the effects of managerial ownership endogeneity, thus providing a strong setting to explore the association between managerial ownership and financial reporting and/or operating decisions.

Third, we contribute to the literature that examines the association between executive compensation and accounting and operating choice (e.g. Bergstresser & Philippon, 2006; Healy, 1985; Warfield et al., 1995). Specifically, we examine the association between target ownership plans and both accruals and real earnings management. Prior research has not examined these relationships. The boards of directors that view TOPs as a desirable corporate governance standard expect that shareholders will benefit from these plans because higher inside ownership signals a commitment to pursue high return projects (Tirole, 2001). However, mandating that CEOs increase stock holdings beyond the amount they would voluntarily hold might increase risk aversion for an already undiversified CEO and cause undesirable operating and reporting decisions. For this reason, the operating effect of adopting TOPs is an empirical question.

Our findings that mandatory ownership reduces accruals and, to some extent, real earnings management suggest that target ownership plans support the interest alignment argument. From a policy perspective, our paper supports widespread target ownership plans as advocated by Institutional Shareholder Services, Inc. (ISS). However, the relatively weaker results on real earnings management in comparison to accruals management indicate that while the plans provide some benefit to shareholders, they are not as effective in curbing the more opaque and costly form of real earnings management.

The remainder of the paper proceeds as follows: Section 2 provides background information on target ownership plans, develops hypotheses on the association between reporting and operation choice, and discusses determinants of these plans. Section 3 discusses the sample selection procedure, defines variables and models, and presents descriptive analyses of the data. Section 4 presents the test results and Section 5 presents the conclusions.

2. Background and hypotheses

2.1. Background on target ownership plans

Target ownership plans have become a common component of executive compensation over time, with the number of firms adopting TOPs increasing from approximately 20% in 1998 to over 80% in 2008 (Ayco, 2008; Bryant, 1998). Firm proxy statements outline details of plans, and specify for each executive position the amount of stock ownership required, target deadlines, and the types of stock option or other stock vehicles that do (or do not) count toward ownership. Qualified types of ownership vary by firm and include shares owned by the executive or immediate family members, stocks in 401(k) plans, executive stock ownership plans (ESOP), Employee Stock Purchase Plans (ESPP), company stock units under nonqualified Deferred Compensation Plans, and vested restricted stock units. Ownership targets are usually stated as a multiple of salary, as a specific number of shares, or as a percentage of stock grants that executives should retain. Some firms report executives' degree of compliance with the target ownership plan, or any penalties that will be imposed on the executive for non-compliance or

Please cite this article as: Brown, K., et al., Target ownership plans and earnings management, *Advances in Accounting, incorporating Advances in International Accounting* (2016), http://dx.doi.org/10.1016/j.adiac.2016.12.002