J. Int. Financ. Markets Inst. Money xxx (2017) xxx–xxx

Contents lists available at ScienceDirect

Journal of International Financial Markets, Institutions & Money

journal homepage: www.elsevier.com/locate/intfin

Index membership vs. loss of voting power: The unification of dual-class shares

André Betzer [a,*], Inga van den Bongard [b,1], Marc Goergen [c,d,2]

[a] BUW – Schumpeter School of Business and Economics, Germany
[b] University of Mannheim, Germany
[c] Cardiff University, UK
[d] European Corporate Governance Institute (ECGI), Belgium

ARTICLE INFO

Article history:
Received 22 August 2016
Accepted 26 March 2017
Available online xxxx

JEL classification:
G30
G32

Keywords:
Private benefits of control
Dual-class stock
Ownership structure
Corporate governance

ABSTRACT

A change in the index selection rules of Deutsche Börse provides a unique opportunity to investigate the drivers behind the decision to abolish dual-class shares. As of June 2002, selection is based on the market capitalization of the free-float of the more liquid share class rather than the overall market capitalization. Hence, firms have had to reassess the benefits from their dual-class shares by weighing them against the cost from foregone index weight associated with having two share classes. Our findings suggest that index membership significantly affects the controlling shareholder's motivation to unify preferred and common stock.

1. Introduction

This paper links the literature on dual-class stock unifications with that on index membership. The literature on why firms issue dual-class shares and why firms abolish them once they have been issued is as yet relatively sparse (Adams and Ferreira, 2008). Although the former decision seems to be driven by the controlling shareholder's desire to retain voting power while reducing cash-flow risk (see e.g., DeAngelo and DeAngelo, 1985), little is known as to why firms make the latter decision. The few studies that investigate dual-class unifications (Maury and Pajuste, 2011; Dittmann and Ulbricht, 2008; Hauser and Lauterbach, 2004; Lauterbach and Pajuste, 2015, 2017) suggest that improving access to external financing is an important motive whereas the existence of private benefits of control is a deterrent.

This paper extends this literature by studying a major reform of how German firms are selected for membership of the various stock market indices. In August 2000, Deutsche Börse announced new index weighting rules for its major stock indices. Under the old rules index membership was based on the firm's *aggregate* market capitalization. The changes caused by the reform, which became effective in June 2002, were twofold. First, only the most liquid or largest class now forms the

* Corresponding author at: BUW – Schumpeter School of Business and Economics, Gaußstr. 20, 42119 Wuppertal, Germany.
E-mail addresses: betzer@wiwi.uni-wuppertal.de (A. Betzer), ivdb@uni-mannheim.de (I. van den Bongard), goergenm@cardiff.ac.uk (M. Goergen).
[1] Address: Universität Mannheim, L 9, 1-2 am Schloss, 68161 Mannheim, Germany.
[2] Address: Cardiff Business School – Cardiff University, Aberconway Building, Colum Drive Cardiff, CF10 3EU, United Kingdom.

http://dx.doi.org/10.1016/j.intfin.2017.03.003
1042-4431/

Please cite this article in press as: Betzer, A., et al. Index membership vs. loss of voting power: The unification of dual-class shares. J. Int. Financ. Markets Inst. Money (2017), http://dx.doi.org/10.1016/j.intfin.2017.03.003

basis for selection into an index. Second, only the free float of that class is taken into account when determining index membership.

As a consequence, firms with more than one class of shares outstanding included in a selection index faced the danger of losing their current index position or, worse even, faced the danger of dropping out of the index. For example, DAX index member SAP was set to lose massively. At the announcement of the new rules in August 2000 and assuming the new rules had been effective immediately, SAP's weight in the DAX would have fallen by almost 40% from 9.51% to 5.64%. More generally, companies whose equity was split fairly equally between the two classes, i.e. the non-voting shares and the voting shares, and with little free float were adversely affected. Conversely, those with their equity in mainly one class and a large free float ranked among the winners.

Why should firms care about index membership and weight? As the mere gain or loss of membership does not provide any additional information on the firm's fundamental value, any such change in membership should therefore be valuation neutral. However, several studies document that index inclusions cause positive whereas deletions cause negative abnormal returns.[3] As to index weight, Kaul et al. (2000) find that a change in the index weighting rules of the Toronto Stock Exchange (TSE), that redefined the weighting-relevant free float, caused valuation increases for those firms that experienced an increase in their index weight in the TSE 300 index. One important reason for these market reactions is changes in investor demand for the firm's stock, in particular demand by index fund managers (see e.g., Shleifer, 1986; Barberis et al., 2005; Claessens and Yafeh, 2013). Several other reasons, all of which have empirical support, have been advanced to explain these market reactions, including investor awareness (Merton, 1987), price pressure (Harris and Gurel, 1986), improved liquidity (Amihud and Mendelson, 1986) and information signals about the firm's prospects (Denis et al., 2003).

We hypothesize that the regulatory changes that became effective in 2002 forced the large shareholders of firms with dual-class shares to reassess the benefits from index membership by weighing them against the foregone private benefits of control caused by the unification. Anecdotal evidence suggests that some firms conducted this reassessment well before the implementation of the new rules. For example, SAP unified its stock in 2001, i.e. one year before the implementation of the rules, justifying the move by its endeavor to keep its index weight.[4]

The paper's main contribution is to study the trade-off faced by large controlling shareholders between the benefits from a dual-class stock unification and the costs from losing voting power. We estimate the probability of conversion – conditional on different levels of reduction in index weight – for various levels of the hypothetical voting loss the controlling shareholder would experience upon conversion. We find that the large shareholder is more likely to accept a reduction in index weight, and hence less likely to unify the dual-class shares, the higher his hypothetical voting loss due to the conversion. This suggests that beyond a certain threshold of voting power the private benefits of control foregone by the large shareholder exceed his share of the benefits from unification. Similar to the wealth effects accruing to the holders of the non-voting stock that have been documented for German stock unifications before the reform (see e.g. Dittmann and Ulbricht, 2008), we observe such wealth effects at the announcement of the regulatory change. Finally, and in line with anecdotal evidence, we find that the danger of dropping out of the index is an important reason for conversion. However, the opportunity to move up an index seems unrelated to unification decisions.

Our study is related to Dittmann and Ulbricht (2008), who study the timing and the announcement effects of German stock unifications for 1990 to 2001, a period during which the index rules remained the same. In contrast, we focus on an exogenous shock which forced the controlling shareholder to reconsider the benefits from maintaining dual-class shares in the light of the potential costs caused by a reduction in index weight.

The rest of the paper is structured as follows. The next section reviews the literature on dual-class stock unifications. This is followed by a discussion of the institutional background before and after the regulatory change in Section 3. Section 4 describes the dataset and provides descriptive statistics. Section 5 explores the stock market's reaction to the regulatory change and to the actual unifications. Section 6 reviews the motives behind the decision to unify a firm's shares and develops several testable hypotheses. Section 7 presents the empirical analysis. Section 8 concludes.

2. Literature review

Adams and Ferreira (2008) survey the empirical literature on disproportional ownership. They conclude that "few papers directly tackle the issue of the determinants of dual-class structures ... Consequently, we still know very little about this issue" (Adams and Ferreira, 2008, p.62). Papers on the determinants of the decision to separate cash flow rights from voting rights include Lehn et al. (1990), Amoako-Adu and Smith (2001) and Gompers et al. (2010). Lehn et al. (1990) investigate the choice between dual-class recapitalizations and going private transactions as means to consolidate corporate control. Both transactions mainly differ in the allocation of cash flow rights to the controlling shareholder. They find that firms with better

[3] Studies that examine the effect of index inclusions or deletions include Denis et al. (2003), Hrazdil and Scott (2009), Goetzmann and Garry (1986), Jain (1987), Lynch and Mendenhall (1997) and Chen et al. (2004). While there is a large body of literature on the US stock markets, there are only few empirical studies on the effects of index inclusion and deletion in the German market (see e.g., Gerke et al., 2001; Deininger et al., 2002).

[4] During summer 2000, the CEO (i.e., the chairman of the management board), Hasso Plattner, denied that SAP was to convert its preference shares into ordinary shares: "We will keep the preference shares" ("Es wird weiter Vorzugsaktien geben"). A year later, Henning Kagermann (member of the management board of SAP) justified the decision to convert in the magazine Focus (June 7, 2001) as follows: "Thereby we avoid the risk of seeing SAP lose its position in the DAX index" ("Damit wird das Risiko einer Rückgewichtung der SAP-Aktie im Dax-Index vermieden").