Introduction

• The divergence of objectives between shareholders and creditors can result in a conflict of interest that affects the total value of the firm.
• Shareholder-creditor conflict of interest reduces agency costs and leads to wealth transfer from creditors to shareholders and vice versa.
• The measurement of shareholder-creditor conflict of interest remains empirically difficult - but we can use the existence of dual-holders - investors who hold equity and debt claims of the same firm - as a measure of shareholder-creditor conflict of interest (Jiang et al., 2010; Bodnaruk and Ross, 2016; Chi, 2018; Anton and Liu, 2020).
• Institutional investors hold 2/3 of equity traded on the U.S. stock market and large fraction of corporate bonds - holdings of U.S. mutual funds can be an indicator of institutional shareholder-creditor conflict.
• Mutual funds have diverse portfolios with corporate stakes rarely exceeding 10% per portfolio.
• The paper answers how the presence of mutual fund dual-holdings and the increase in dual-shareholder stakes affects public companies, and whether dual-holdings can alleviate corporate financial difficulties.
• As an addition, the paper elaborates on dual-holders’ heterogeneity, e.g. (1) dual-holders with block equity stakes, (2) activist dual-holders, (3) passively managed dual-holders, and (4) dual-holders connected to the company they hold via business ties.

Hypotheses Development

1. Institutional dual-holders

• Dual-shareholder stands as a unique case of shareholder-creditor conflict of interest because they serve as ‘mutual friend’ that reduces costs of managerial misbehaviour for both shareholders and creditors.
• Dual-holders are better equipped to confront risk-shifting by non-dual-holding shareholders due to a combination of control power on equity and debt sides.
• Joint holdings of debt and equity result in the coordination of decisions between shareholders and creditors (Bodnaruk and Ross, 2016), and allow easier resolution of financial distress (Chi et al., 2019).
• Dual-shareholders could mitigate shareholder-creditor conflict affecting the company they hold.
• Presence of dual-holders should positively affect company value and performance; this effect should be increasing in the number of dual-holders and in the stakes they hold.
• Dual holders with Blocks:
  • Investor with a larger stake in the firm has stronger incentives to undertake monitoring activities, (Gillen and Starks, 2000), but such investor reduces the free-rider problem and has better incentives to monitor (Tintle, 2010).
  • Block-holders that will be able to confront shareholder-creditee conflict by influencing the features of a dual-holder without an equity block and a blockholder without a debt stake.
• Dual-shareholders reduces costs of wealth expropriation from other minority investors - if the firm is far from financial distress, then the presence of dual-holders can potentially result in conflict with non-dual-holders (Kwon et al., 2019).
• Block-shareholders will mitigate shareholder-creditor conflict around financial distress but can cause it for a distress situation.
• Presence of block-shareholders should be more sensitive reaction better compared to other investors and passively affect company value, but in a firm far from financial distress would exaggerate conflict with minority investors pushing the company value down.

2. Activist dual-holders

• Activists are successful in initiating and altering changes in the firm’s governance structure (Song and Szewczyk, 2003).
• Following market-wide liquidity shocks, firms with activist investors experience better performance relative to other firms (Clifford and Lindsay, 2016).
• The features of activist monitor leverage the capabilities of dual-holders to combat agency threats.
• Activists dual-holders would have a greater impact on the non-activist ones.
• Following market-wide liquidity shocks, firms with activist investors experience better performance relative to other firms (Clifford and Lindsay, 2016).
• The features of activist monitor leverage the capabilities of dual-holders to combat agency threats.

3. Passive dual-holders

• Passive funders are sensitive to firms’ corporate governance and they use their large blocks to exercise voice and exert influence (Appel et al., 2016).
• Passive funds can engage in widespread but low-cost monitoring of firms’ compliance with what they believe “the best governance practices” (Black, 1991 and 1998).
• Passive dual-holders would have a significant impact on company value and performance.

4. Connected dual-holders

• The voting of mutual funds is influenced by their business ties with portfolio firms - a demand-driven mechanism for biased proxy voting in which firm management use existing ties with mutual funds to influence voting on proposals for which they fear defeat (Czypionka et al., 2016).
• Business ties of dual-holders with company management harms their ability to be a ‘mutual friend’ that reduces agency conflicts for both shareholders and creditors.
• Connected dual-holders are going to be less efficient in shareholder-creditor conflict resolution.

Data and Research Design

• U.S. public companies listed on major American Exchanges from 2010 to 2019 available in Compustat.
• Companies CRSP merged database to get main firm’s identifiers, e.g. gosky, perm, CUSIP and ticker.
• CRSP mutual Funds Database to calculate the level of equity or bonds in a mutual fund’s portfolio and determine the ‘dual-holder’ status.
• Assign the security type either ‘equity’ or ‘bond’ based on last 2 digits of the holding security CUSIP number - if they include only numerical value ranging from 00 to 99, then the security is ‘equity’; if there are first numerical letter, security is ‘bond’.
• Sample consists of 713 listed firms that account for 174,688 firm-quarter observations and is matched with almost 12m fund-security-quarter observations.
• Dual-hold is classified in following ways:
  - ‘any dual-holder’ if a mutual fund holds any level of stakes in company equity and debt (DF0);
  - ‘significant dual-holder’ if a mutual fund holds at least 1% of firm’s shares outstanding and at least 1% of firm’s bonds outstanding (or 12m dollar market value of the corresponding index) (SigDF).
  - ‘check-block-hold’ is assigned based on mutual fund 3% threshold of firm’s equity ownership (PasDF):
    • ‘activist dual-holder’ is assigned based mutual fund’s SEC filings - Schedule 13D filings define an activist dual-holder (Aquilante et al., 2020) (ActDF):
    • ‘passive dual-holder’ is assigned if the dual-hold fund’s name includes a string that identifies it as an index fund if the CRSP Database classifies the fund as an index fund (Appel et al., 2016) (PasDF):
  - ‘connected dual-holder’ is assigned according to fund’s past business ties with the management of companies they hold using boden1x (Czypionka et al., 2016) (ConnDF).
• I measure the quarterly performance and value of every company in my sample using Tobin’s Q, in log value, return on equity (ROE) and return on capital (ROC), cost of equity (K), and a weighted average cost of capital (WAAC).
• Dual-shareholders are measured by (1) percent of outstanding shares, (2) number of mutual funds in each dual-holder, and (3) number of executive positions, the portion of the average dual-holder’s position’s value is derived from bond holdings.
• Distance to distress is measured by Altman’s Z-score and controls include size, age, profitability and cash holdings of companies.
• I estimate linear models by OLS with one-way (firm) and two-way (firm-quarter) stratification of errors:

\[ Y_{it} = \beta_0 + \beta_1 \text{DF0}_{it} + \beta_2 \text{SigDF}_{it} + \beta_3 \text{PasDF}_{it} + \beta_4 \text{ActDF}_{it} + \beta_5 \text{ConnDF}_{it} + \epsilon_{it} \]

• Depending on the stratification of dual-holders, the variable ‘DF0’ changes to (1) SigDF, (2) PasDF and nonConnDF, (3) ActDF, nonActDF, otherDF, (4) PasDF and nonPasDF, and (5) ConnDF and nonConnDF. These equations are shown in the main paper Section 4.

Preliminary Results

• Consistent with the argument that dual-holders can mitigate shareholder-creditor conflict, I find the positive correlation between company value and the existence of dual-holders for distressed companies.
• Presence of block-shareholders has a negative correlation with a company value showing higher negative impact for companies far from distress.
• level of equity and bond stakes of block-dual-holders is associated with a positive impact on a value of distressed company.
• presence of block-dual-holders across financially constrained companies is associated with a positive influence on company value - this impact decreases when I control for other determinants of other dual-holders without block equity stakes.
• The empirical part of the research regarding dual-holders activism, passively managed dual-holders and dual-holders with connected business ties is not yet conducted.

Endogeneity Analysis

To mitigate the potential endogeneity issues regarding dual-holders and their heterogeneity, I will attempt to use instrumental variables (IV) approach (Section 6.4 Working paper).
• 1. Merge between financial institutions as an instrument for dual-holder status (Section 6.2).
• 2. IV approach regarding the identification of block-dual-holders following the work of Hoekstra, 2010 (The detailed algorithm and explanation regarding exclusion restrictions are shown in Section 6.2.1).
• 3. IV approach regarding the identification of activist dual-holders is based on the level of investor’s dissatisfaction proposal by Frazzini, 2008 (The detailed algorithm and explanation regarding exclusion restrictions are shown in Section 6.3.).

Conclusions

• Preliminary results prominently support the highlighted hypothesis and my predictions.
• Proposed alternative approaches to address the endogeneity should bring additional credibility to the results of the work.
• This research will help to understand whether dual-holders can alleviate shareholder-creditor conflict of interest from many perspectives, e.g. size of investor stakes, monitoring activity, trading strategy and constraints.
• It will bring several useful insights for researchers, industry professionals, institutions and policymakers.

Acknowledgement

This outline of the working paper consists of the literature review, hypothesis development and research design. Some of preliminary results prove most predictions derived form hypotheses. I currently continue conducting the simulations of econometric models adding some extensions and robustness tests. Some parts of the research are still discussive in nature due to some challenges of working data.

In addition, I tend to confront each hypothesis addressing the endogeneity concerns. The details of suggested approaches and instruments I explained in the working paper available on the ASSA portal (or upon the request).

I will highly appreciate any suggestion and comments.

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How Institutional Dual-Holders Affect Companies: Evidence from U.S. Mutual Funds?

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