Dual v. Single Class Firms: An Acquisition Perspective

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We examine the effects of dual-class structure on corporate acquisition activities. By analyzing a large sample of corporate takeovers between 1996 and 2009, we find that single-class companies experience higher abnormal returns around acquisition announcements. We also report that dual-class firms primarily undertake value-destroying acquisitions. Using industry and matched-firm adjusted portfolios, we find that the long-term post-acquisition operating performances for the single-class firms are significantly higher. Overall, our results indicate that there is an agency issue inherent within a dual-class share structure.

INTRODUCTION

"It sounds too good to be true: own a small portion of a company's total stock, but get most of the voting power. That's the truth behind dual-class shares. They allow shareholders of non-traded stock to control terms of the company in excess of the financial stake. While many investors would like to eliminate dual-class shares, there are several hundred companies in the United States with dual "A" and "B" listed shares, or even multiple class listed shares." Ben McClure, January 8, 2012.

Extant literature has showed the importance of shareholder rights. When firms go public, the founders decide on the voting structure. It is quite common in the United States to have a single class of shares with 'one-share-one-vote'; as a matter of fact a vast majority of the firms (more than 90%) choose this option. But it is not uncommon to observe a dual-class share in some of these firms. For example, Google, and Ford are two of the most successful companies with dual-class shares. The original entrepreneurs and family are still involved with the operations of Google and Ford respectively. While this practice is quite common in Europe and Asia, it is rarely observed in the United States. Though the advocates of dual-class shares say that it allows the management to undertake a long-term goal, the opponents point out the agency problems inherent within the structure. In this paper, we will undertake a comparison between the dual and single class firms from an acquisition perspective.

Shareholder voting right activists have been against the dual-class share structure all along. In the fall of 2012, the California Public Employees' Retirement System (CalPERS) threatened not to invest in the initial public offerings (IPOs) of dual-class companies. In the financial economic literature, this kind of voting structure has been criticized as well (Grossman and Hart, 1988). The proponents suggest that these firms actually outperform their single-class counterparts during IPOs (Dimitrov and Jain, 2006). We have favorable examples for dual-class shares in the form of Google, Berkshire Hathaway, and Ford etc. This type of share structure could be dominated by founding entrepreneurs or founding families. It has been documented that family owned firms with dual-class shares do better than their single-class counterparts (Anderson and Reeb, 2003). Most of the research papers in the literature focus on the performance of

dual-class firms following their IPOs. There have been a few studies that nominally look into the acquisition activities made by this type of firms (Masulis et. al. 2009 for example), but a comprehensive comparison between dual and single class firms' acquisition activities is missing. Our paper tries to fill that gap in the literature.

Merger and acquisition is one of the most important decisions that a company makes. It is one of the most analyzed areas of finance literature. Acquisitions are among the most expensive investments that a firm makes and it has long term consequences. It has been well established that management often times use acquisitions for their own benefits rather than the benefits of the shareholders (Jensen and Ruback, 1983; Malatesta, 1983). Morck, Shleifer, and Vishny (1990) find that managerial objective might be a contributing factor in reducing bidding firm values. Masulis et. al. (2009) report that dual-class firms are more likely to undertake value-destroying acquisitions. It is also well-documented that acquiring firm performs poorly after the transaction is completed (Agrawal et al., 1992; Loughran and Vijh, 1997). We, therefore, compare the post-acquisition performances of dual and single class acquirers using both industry and match-firm adjusted portfolios.

Agency hypothesis could be interpreted two different ways: first, if we consider the fact that founding family or entrepreneur has more at stake with the firm, and they are less diversified than the other shareholders, we could assume that they will work for the best interest of the long-term well-being of the company and, therefore, it makes perfect sense for them to hold a higher than fair voting power inherent in dual-class structure. On the other hand, there is management entrenchment argument—as mentioned earlier these founders lack diversification, and hence, they might use their firms as their diversification tool by engaging into value-destroying acquisitions. In this paper, we try solve this puzzle by analyzing a large sample of corporate acquisitions between 1996 and 2009. We make three main contributions by finding the following: (a) Dual-class firms underperform their single class counterparts around announcement of corporate acquisitions; this provides evidence that single-class firms make better acquisition decisions. These results hold even controlling for different firm and deal characteristics. (b) Presence of synergy or value-maximizing acquisitions are stronger within the single class sample. This reinforces our finding in (a). Finally, (c) single-class firms perform better after the acquisitions than their dual-class counterparts. This proves that dual-class acquirers destroy shareholder value in the long run as well. These results are true for both industry and match-firm adjusted portfolios.

The remainder of the paper is organized as follows: next section provides a survey of existing work on dual-class share structures, and mergers and acquisitions; the section after that describes the data; the subsequent section discusses the sample and the empirical results; and the final section concludes the study.

LITERATURE REVIEW

Dual-Class Firms

Our paper mainly encompasses the dual-class firms and their performance during and after an acquisition. A great focus of the literature is to analyze why firms choose to go for a dual-class structure during IPO. Extant literature investigates performance of these firms immediately after the IPO (Smart and Zutter, 2003; Smart et. al. 2008). On the other hand, Gompers et al (2010) construct a comprehensive list of dual-class firms in the United States and report that firm value is positively related to insiders' cash flow rights and negatively related to insiders' voting rights.

Pros and Cons

In this paper we are trying to find if the dual class firm perform better during and after acquisitions or not. In summary, our results will indicate if the pros outweigh the cons or not; at least from an acquisition perspective. Smart and Zutter (2003) report that dual-class structure protects private control benefits. Some authors report that separation of ownership and control in harmful to firm value (Mikkelson and Partch, 1994; Claessens et al, 2002). On the contrary, Fama and Jensen (1983), DeAngelo and DeAngelo

(1985), Denis and Denis (1994), Dimitrov and Jain (2006) report that dual-class share structure is not harmful to their shareholders.

Agency Hypothesis

There are two different ways of looking at the agency hypothesis. The core of agency issue is to find the answer to how we can make the management work in the best interests of the shareholders. The common suggestion is to incentivise the management with equity options. In the case of a dual-class structure, it is the founding family or entrepreneur who owns these shares. These shares with superior voting rights are typically more illiquid, and therefore the holders of these shares cannot exit that easily. So they are forced to work for the best interests of the shareholders as there is a lot at stake for them. Bohmer et al (1996) argue that this situation should reduce the conflict between these superior voting right shareholders with the common shareholders. On the other hand, there has been plenty of research that shows that superior voting rights create entrenchment problems. In the corporate governance side of finance literature, there have been seminal papers by GIM (2003), BCF (2009) etc. that find that firms with weaker shareholder rights perform poorly, and firms with dual-class structure has been identified as the ones with weak shareholder rights (GIM 2010).

Corporate Acquisitions

Corporate acquisition is one of the largest investments that a typical corporation makes. It has both short and long term implications. A bad acquisition can create financial distress for the acquiring firm in the long run. Mergers and acquisitions are one of the most investigated areas of financial economics. Our objective in this paper is to compare the performance during and after the acquisitions of dual-class share structure firms with their single-class counterparts.

In their influential paper, Morck, Shleifer, and Vishny (1990) find that managerial objective is a contributing factor in reducing bidding firm values. Malatesta (1983) reports that mergers are mainly motivated by agency and target firm benefits outweigh that of the bidders. It is also well documented that acquiring firm show a poor performance over a long period after the acquisition (Agrawal et al, 1992; Loughran and Vijh, 1997). In this study, we will investigate the motivation of acquisition for both dual and single-class firms using Berkovitch and Narayanan (1993) methodology. It has been reported that dual-class firms mainly undertake value-destroying acquisition transactions (Masulis et al, 2009). We will analyze a comprehensive sample of dual and single firm acquisition to find out not only the motive but also the long term performances, and also run a comparison between the two types of firms.

DATA AND SAMPLE DESCRIPTION

Our final sample includes 12,404 transactions from 1996 to 2009.We adapt Masulis et al. (2007) filtering criteria as follows:

1. The acquisition is completed.
2. The acquirer controls less than 50% of the target's share prior to the announcement and owns 100% afterwards.
3. The deal value disclosed in SDC is at least $1 million and is at least 1% of the acquirer's market value of equity measured on the 11th trading day prior to the announcement date.
4. Financials and return data have to be available from COMPUSTAT and CRSP respectively.
5. Both the target and acquirer are publicly traded U.S. firms.

Table 1 presents detailed breakdown of the number of completed transactions for each of the 14 years. It is to be noted that only 5.82% of the transactions were undertaken by the dual-class firms during this period. The number is natural as only about 6% of firms in the United States are listed as dual-class firms. It is also to be noted that there was a merger waive during the late 1990's which is also recognized in financial literature (Rhodes-Kropf and Viswanathan, 2004).

TABLE 1
SAMPLE DESCRIPTION BY YEAR

	Dual-Class		Single-Class		
Year	No.	%	No.	%	Total
1996	81	6.99%	1,078	93.01%	1,159
1997	87	6.00%	1,364	94.00%	1,451
1998	75	5.29%	1,342	94.71%	1,417
1999	53	4.57%	1,107	95.43%	1,160
2000	59	5.40%	1,034	94.60%	1,093
2001	55	7.35%	693	92.65%	748
2002	38	5.18%	695	94.82%	733
2003	37	5.41%	647	94.59%	684
2004	37	4.94%	712	95.06%	749
2005	47	6.26%	704	93.74%	751
2006	50	6.67%	700	93.33%	750
2007	44	5.76%	720	94.24%	764
2008	36	6.72%	500	93.28%	536
2009	23	5.62%	386	94.38%	409
TOTAL	722	5.82%	11,682	94.18%	12,404

Table 2 provides a detailed Fama-French industry breakdown for the entire sample as well as the dual and single-class subsamples. We excluded regulated industries (financials and utility) from our sample. It is to be noted that a significant percentage of telecom mergers were undertaken by dual-class firms (30.44%) considering the fact that only about 10% of the telecom firms are listed as dual-class. Finally, Table 3 reports the breakdown by transaction type and mode. The numbers on this table are very steady considering dual-class acquirers represent about 6% of the entire sample.

Table 4 provides some summary statistics about the acquiring firms—both dual and single class subsamples. Variable definitions are provided in the Appendix. Several points are worth mentioning. It appears that single-class acquirers are relatively larger in size, have lower leverage, are more value oriented, and have higher free cash flow available to the management.

TABLE 2
SAMPLE DESCRIPTION BY INDUSTRY

	Dual-Class		Single-Class		
Fama-French Industry	No.	%	No.	%	Total
FF 1 : Consumer Non-durables	59	10.61%	497	89.39%	556
FF 2 : Consumer Durables	16	6.61%	226	93.39%	242
FF 3 : Manufacturing	55	4.49%	1,169	95.51%	1,224
FF 4 : Energy	10	1.32%	750	98.68%	760
FF 5 : Chemicals	4	1.81%	217	98.19%	221
FF 6 : Bus. Equipment	166	3.86%	4,134	96.14%	4,300
FF 7 : Telecom.	221	30.44%	505	69.56%	726
FF 9 : Shops	55	5.41%	962	94.59%	1,017
FF 10 : Healthcare	35	2.47%	1,384	97.53%	1,419
FF 12 :Other	101	5.21%	1,838	94.79%	1,939
TOTAL	722	5.82%	11,682	94.18%	12,404

TABLE 3
SAMPLE DESCRIPTION BY TYPE AND MODE OF ACQUISITION

	Dual-Class		Single-Class		
Type / Mode	No.	%	No.	%	Total
Tender	17	4.62%	351	95.38%	368
Merger	705	5.86%	11,331	94.14%	12,036
Hostile	0	0.00%	18	100.00%	18
Cash	260	7.30%	3,302	92.70%	3,562
Stock	319	5.31%	5,690	94.69%	6,009
Hybrid	143	5.05%	2,690	94.95%	2,833

TABLE 4
SUMMARY STATISTICS

	Dual-Class [N = 722]		Single Class [N = 11,682]		Difference [Single - Dual]			
	MEAN	MEDIAN	MEAN	MEDIAN	MEAN		MEDIAN	
Total Assets ($ million)	2,824.42	757.55	3,287.50	322.18	463.08	***	-435.37	***
Total Sales ($ million)	2,321.55	433.54	2,645.22	287.33	323.67	***	-146.21	***
Leverage	0.56	0.54	0.45	0.45	-0.11	***	-0.09	***
Tobin's q	2.27	1.73	2.13	1.83	-0.14	***	0.10	***
Return on Assets	0.10	0.12	0.09	0.13	-0.01		0.01	
Return on Sales	0.19	0.18	0.14	0.13	-0.05	*	-0.05	**
Free Cash Flow ($ million)	303.76	91.45	507.30	35.43	203.54	***	-56.02	***

EMPIRICAL RESULTS

Analyzing Announcement Effects

If the entrenchment hypothesis is not true for dual class firms and if there are no agency issues with them, then we should expect a higher announcement returns for dual firms around acquisition announcements. We calculate the cumulative abnormal returns (CAR) for day t=-60 to day t=+30 where t=0 is the announcement date. The returns are market adjusted and CRSP equally weighted portfolio has been used to make the adjustments. We have also used CRSP value weighted portfolio as adjustment factor for robustness purpose. The results did not change qualitatively and therefore, was not reported here for brevity. We compare the CARs of dual and single class firms around merger announcement dates. We use standard event study methodology found in Patell (1976). We use different event windows within the aforementioned period around announcement to get a comprehensive picture.

Table 5 reports the results for the different event windows around the announcement date. The CARs around the announcement date are larger for the single class subsample. For example, the five day announcement returns ($CAR_{-2,+2}$) are 1.24% higher for single class sample with statistical significance. Single class firms experience about 5% larger CAR for the entire period around announcement ($CAR_{-60,+30}$). This test provides evidence in favor of the entrenchment hypothesis. The results indicate that dual-class firms are most likely getting involved in value-destroying acquisitions.

In order to further ensure that our findings in the event study are not influenced by other factors, we run some cross sectionals tests. We use the five day announcement return ($CAR_{-2,+2}$) as the dependent variable. We control for some firm and deal specific characteristics. As our sample span a 14 year period which included some major regulatory changes, we control the regression with year dummies. We also control for industry dummies to take out any industry specific effects that we might have observed in Table 5. The model we use is as follows [*All the variable definitions are provided in the appendix*]:

TABLE 5
CUMULATIVE ABNORMAL RETURN (CARs) FOR ACQUIRERS AROUND THE ANNOUNCEMENT DATE

Event Window	Dual-Class		Single-Class		Difference	
[-60, -10]	2.87%	***	4.87%	***	2.00%	***
[-10, -5]	0.13%	*	0.52%	***	0.39%	**
[-5, -2]	0.02%	*	0.52%	***	0.50%	**
[-2, +2]	0.58%	**	1.82%	***	1.24%	***
[+2, +5]	-0.08%	*	0.07%	*	0.15%	*
[+5, +30]	-0.13%	*	0.09%	***	0.22%	**
Observations	722		11,682			

$$CAR_{-2,+2} = \beta_0 + \beta_1 * DUAL + \beta_2 * Management\ quality + \beta_3 * Firm\ size + \beta_4 * Leverage +$$
$$\beta_5 * Operating\ performance + \beta_6 * Tobin's\ q + \beta_7 * Relative\ deal\ size + \beta_8 * Hostile +$$
$$\beta_9 * Cash + \beta_{10} * Diversification + \varepsilon \qquad (1)$$

Table 6 provides the regression analysis of acquirer announcement returns on different control variables. The main point to be noted that dual-class dummy has a negative and significant coefficient for all four of the models. This substantiates our findings in the event study results. Dual-class acquirers earn negative returns around acquisition announcement even when we control for different firm and deal specific characteristics. It is also to be noted that smaller high growth acquirers fair well during this same period.

TABLE 6
REGRESSION ANALYSIS OF ACQUIRER ANNOUNCEMENT RETURNS

	MODEL I	MODEL II	MODEL III	MODEL IV
DUAL (dummy)	-0.012**	-0.009*	-0.011**	-0.009*
	(-2.14)	(-1.81)	(-2.21)	(-1.93)
Management quality		-0.001		-0.000
		(-0.87)		(-0.89)
Firm Size		-0.009*		-0.008*
		(-1.89)		(-1.65)
Leverage		0.151		0.126
		(1.41)		(0.87)
Operating performance		0.066		0.062
		(1.61)		(1.52)
Tobin's q		0.189***		0.146***
		(2.41)		(2.86)
Relative deal size			-0.089	-0.062
			(-0.51)	(-0.97)
Hostile (dummy)			-0.231	-0.197
			(-0.78)	(-0.89)
Cash (dummy)			0.403	0.391
			(1.07)	(0.81)
Diversification (dummy)			-0.009	-0.008
			(-1.39)	(-0.99)
Year Fixed	YES	YES	YES	YES
Industry Fixed	YES	YES	YES	YES
Sample Size	12,404	12,404	12,404	12,404
Adjusted R^2	0.016	0.029	0.017	0.030

Motivation for Acquisitions

We adapt the Berkovitch and Narayanan (1993) methodology to identify the motives for acquisitions. According to their definition, if target, acquirer, and total gains are all positive and have positive correlation between each other then it is synergy driven transaction; for agency driven acquisitions target and total gain and target and acquirer gain are all negatively correlated. They insist that agency motive is more prevalent in acquisitions with negative total gain whereas synergy is more common for positive total gain transactions. Following their methodology, we analyze the correlation between target and total gains, and target and acquirer gains, for both single- and dual-class subsamples.

$$Target\ Gain = \alpha + \beta\ (Total\ Gain) \tag{2}$$
$$Target\ Gain = \alpha + \beta\ (Acquirer\ Gain) \tag{3}$$

Here β is the correlation coefficient for each equation. The higher the magnitude of β, the stronger the presence of synergy or agency motive depending on the sample. For example, if we are analyzing a positive total gain subsample then higher value of β for equation [2] would mean a stronger presence of synergy and vice versa.

TABLE 7
MOTIVATION FOR ACQUISITIONS

Target Gain	MODEL I		MODEL II	
	DUAL-CLASS	SINGLE-CLASS	DUAL-CLASS	SINGLE-CLASS
INTERCEPT	147.263***	201.860***	147.110***	192.041***
	(8.27)	(7.20)	(8.28)	(6.60)
TOTAL GAIN	-0.004*	0.039**		
	(-1.71)	(2.07)		
ACQUIRER GAIN			-0.006*	-0.011
			(-1.70)	(-0.57)
Year Fixed	YES	YES	YES	YES
Industry Fixed	YES	YES	YES	YES
R-SQUARE	0.002	0.030	0.004	0.002
Sample Size	722	11,682	722	11,682

Table 7 reports the correlations between target and total gains, and target and acquirer gains, for both the subsamples. While for model I, the negative and significant coefficient for the dual-class subsample signifies presence of agency (value-destroying transactions), the positive coefficient for single-class firms indicates presence of synergy (value-maximizing transactions). The results found in model II signify agency motive for dual-class acquirers; but it is inconclusive for the single-class subsample.

In summary, we can conclude from this section that agency is prevalent in transactions made by dual-class acquirers, whereas, synergy is the main motive among transactions undertaken by single-class firms; however, we cannot rule out the presence of hubris from the single-class subsample.

Post-Acquisition Operating Performance

It has been well-documented in the literature that acquiring firms underperform in the post-acquisition period (Agrawal et al, 1992; Loughran and Vijh, 1997 etc.). Following Barber and Lyon (1996) we use Return on Assets (ROA) and Return on Sales (ROS) as operating performance measures. We use both industry and matched firm adjustments for our analysis. For industry adjustment we use Fama-French industry median performance measures. We have matched each of the bidders with a matched firm based on size, book-to-market, and Fama-French industry. We use both ROA and ROS measures but report only the ROA measures as the results are qualitatively similar.

Table 8 presents the post-acquisition long term operating performance analysis for the dual and single class firms. Panel A presents the industry adjusted returns while panel B presents the matched firm adjusted returns. It is to be noted that single-class acquirers outperform their dual-class counterparts in the long run—for both industry and matched-firm adjusted basis. For example, over a five year period after the transaction single-class firms outperform their dual-class counterparts by 0.54% when industry adjustment is used. As noted in the literature, industry median might not be the best adjustment tool available. Matched firm comparison is more equitable. When we use the match firm comparison, single-class acquirers' post-acquisition long term operating performance stands out. For example, over the five year period after acquisition they outperform their dual-class counterparts by about 8% and with statistical significance.

These findings further substantiate our findings in the previous sections. It is quite clear that there are some inherence problems with the dual-class structure. It definitely creates some agency issues which was clear through their performances during and after corporate acquisition events.

TABLE 8
LONG TERM POST ACQUISITION OPERATING PERFORMANCE

Panel A: Industry adjusted ROA

	Dual-Class		Single-Class		Difference [Single - Dual]	
Average 3-year	3.42%	***	3.68%	***	0.26%	
Average 5-year	3.45%	***	3.99%	***	0.54%	**
No. of Observations	722		11,682			

Panel B: Match firm adjusted ROA

	Dual-Class		Single-Class		Difference [Single - Dual]	
Average 3-year	-0.96%	*	4.44%	***	5.40%	***
Average 5-year	-5.15%	***	2.87%	***	8.02%	***
No. of Observations	722		11,682			

CONCLUSION

'One-share-one-vote' has long been the established way of doing fair business. It is the democratic way of doing business. Our findings support this view as well. We analyze a large sample of corporate acquisitions between 1996 and 2009, and find that singe-class acquirers outperform their dual-class counterparts—for both short and long terms. Our evidence supports the entrenchment hypothesis—we provide evidence that there is some inherent problem with the dual-class structure as apparent in the presence of agency motive within the acquisition transactions undertaken by them. The literature thus far mainly focused on the performance of dual-class firms immediately after IPOs. Masulis et al (2009) is the first study to look into a broader sample than just the IPOs. But the literature lacks a comprehensive study that analyzes from start to finish that provides seamless evidence. We fill in that gap. We not only examine the short term performances but also follow each acquirer for five years after the transaction is completed, and thus provide a comprehensive study. Ours is also the largest sample with the longest time span covering two different decades with different economic and regulatory regimes. This really validates the findings in this paper as this is not influenced by any particular time period. Finally, our study finds that dual class firms do worse during acquisition announcement, motivated by agency, and perform worse

over a long period of time after the merger is done. Therefore, we can conclude that dual-class share structure is not doing the common shareholders any service and most likely suffers from agency issues.

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APPENDIX

VARIABLE DEFINITIONS

Variable	Definitions
Acquirer gain	Following Berkovitch and Narayanan (1993), the acquirer gain is calculated by multiplying the cumulative abnormal return by the market value of acquiring firm as of the end of six trading days prior to the first announcement made by the acquiring firm.
Cash	Dummy variable: 1 for totally cash financed deals, 0 otherwise.
Diversification	Dummy variable: 1 if target and acquirer do not share Fama-French industry, 0 otherwise.
DUAL	Dummy variable: 1 if the firm has dual-class shares.
Firm Size	Log of book value of total assets (item6).
Hostile	Dummy variable: 1 if reported as 'hostile' in SDC, 0 otherwise.
Leverage	Book value of debts (item 34 + item9) over market value of total assets (item6 - item60 + item25 * item199)
Management quality	As in Morck, Shleifer and Vishny (1990), industry adjusted operating income growth rate is defined as $(EBITDA_{t-1} - EBITDA_{t-4})/EBITDA_{t-4}$
Operating performance	Operating income before depreciation (item13) - interest expense (item15) - income taxes (item16) - capital expenditure (item 128), scaled by book value of total assets (item6)
Relative deal size	Deal value (SDC) scaled by market capitalization.
Target gain	Following Berkovitch and Narayanan (1993), target gain is calculated by multiplying the cumulative abnormal return around announcement by the market value of target's equity as of the end of six trading days prior to first announcement for the target minus the value of target shares held by the acquirer before the announcement.
Tobin's q	Market value of assets over book value of assets: (item6 - item60 + item25*item199) / item6
Total gain	The total gain is the sum of the target and acquirer gains.