

## M&A Defense Mechanisms

Internal Mechanisms:

- staggered board
- ✓ - poison pill
- super majority requirement to amend charter or bylaw
- dual class structures

External Mechanisms:

- Regulators
- Activist investors
- Market for corporate control

FINAL EXAM OFFICE HOUR:

Wednesday, 12/8/2021, 6:30-7:45pm CST

FINAL EXAM:

Tuesday, 12/7, 12:01 am - Saturday, 12/11, 11:59pm CST

Course Evaluation:

[eval.ou.edu](http://eval.ou.edu)

Thank you for taking the time to complete it!

## Discussion of Takeover Defenses & Poison Pills

shadow pill vs. <sup>visible</sup> poison pill

A visible poison pill = A discriminatory dividend rights plan!



Example:

Flip-Over Pill Example: (more common in Europe)

Before  
merger

Buyer

$51\%$  (sh)

Seller

$49\%$  (sh)

After merger  
w/ flip-over pill

$$\frac{51 + 0}{51}$$

51

$$\frac{51}{51 + 98} = 34.2\%$$

$49 + 49$  newly issued shares (as dividends)

98

→

$$\frac{98}{51 + 98} = 65.8\%$$

## Discussion of poison pills

Poison pill — a discriminatory dividend plan executed by the corporate board against an acquirer (unsolicited) who acquires  $X\%$  or more of the target stock.

- every one else among shareholders gets stock dividend @ discount price
- control-seeking acquirer does not get such dividend
- usually  $X$  is 10%

## Poison pills types:

- ✓ — flip-in —→ e.g. Conrail had it; it permits shareholders except acquirer, to purchase additional shares at a discount. It dilutes shares held by hostile acquirer while such acquirer is attempting to gain control.
- ✓ — flip-over



Enables shareholders (who do not seek control) to purchase acquirer's shares after merger @ a discount

## Poison Pill

Tactic utilized by companies to prevent or discourage hostile takeovers.

Types:

### 1. "Flip-in" ✓

Permits shareholders, except acquirer, to purchase additional shares at discount. It provides investors with instantaneous profits & dilutes shares held by the acquirer.

### 2. "Flip-over" ✓

Enables stockholders to purchase the acquirer's shares after merger @ discount. For example, shareholder has right to buy stock of acquirer in subsequent merger @ two-for-one rate.

## Standstill agreements

The target's final concern is that having divulged its trade secrets to the buyer, the buyer will short-circuit the merger negotiations and proceed to acquire the target through open market purchases or a tender offer directly to target shareholders. Some confidentiality agreements will prohibit the acquirer from purchasing, in the market or through private transactions, shares of the seller for a specified period of time—generally two to five years. This agreement of the buyer is sometimes more broadly drafted to preclude initiation or participation in unsolicited tender offers or proxy solicitations.

no proxy  
solicitation  
no tender  
offers  
that are  
unsolicited

The buyer will often request that the standstill should permit the right to purchase a toehold interest in the target, up to 4.99 percent of its shares outstanding—just below the five percent threshold for reporting the equity stake to the SEC as required by law.<sup>2</sup> This is both an expression of serious interest to the target, and a means of hedging against the loss of the target to another buyer willing to pay a higher price. Profits on toehold positions are sometimes justified as compensation for expenses incurred in due diligence and deal development.


Generally, the standstill is most relevant for public targets, whose shares are traded on an exchange. But the standstill could also be highly relevant for a privately owned target where the shareholders have divided into opposing groups with one group threatening to sell to the next available buyer.

The standstill agreement takes the form of a brief letter signed by the buyer and countersigned by the target. It is often signed early in the deal development process and often bundled with agreements about confidentiality, exclusivity, and termination.

## Additional Discussions:

Governance Mechanisms  
(in the context of alternative  
methods to transfer control over  
the corporation)

alternative  
to M&A



## Discussion of incentive compensation

### Incentive Pay Format

- Options no more
  - RSU — restrictive stock units
  - PSU — performance stock units
- ↓  
authorized, but not issued

## Discussion of classified boards

### Classified Board -

Board with multiple classes of directors

e.g. 9 board members

```
graph LR; A[9 board members] --- B[Class I (3) 2020 elec]; A --- C[Class II (3) 2021]; A --- D[Class III (3) 2022]
```

Class I (3) 2020 elec  
Class II (3) 2021  
Class III (3) 2022

Alternative: proxy fight → buy stock & then attempt to raid the board  
(shareholder meeting)



Board of Directors

# [ Unitary vs. Classified Board ]

↓  
1 class  
(elected annually)

↓ 3 classes  
(one class only elected each year)

use of  
Bloomberg  
for  
M & A  
data

{ MRGC → pro-forma valuation (for potential deal scenarios)  
BUYP → complete deal detail + timeline  
MA → for the entire market

HP/Compag  
Conrail A  
Seagate } mandatory  
reports  
for 3 case studies

## M & A CONTRACTS

# Deal Points Study (2015) (for private target acquisitions)

## slides

- Escrow Agr.

15, 94-96

- Earnout

17-19, 21

- MAE

23, 24, 26-28

- No shop

45

- MAC

55

- Appraisal Rights

60

- CAPS

84-85

- Sand bagging

63

- Basket

76-77, 79-80

- Dispute Resolution

103

## M&A Contract Clauses

- ✓ - Baskets
- ✓ - Sandbagging clause
- No-talk / No-shop
- ✓ - Caps
- ✓ - Escrows
- ✓ - Earnouts
- ✓ - Appraisal rights
- ✓ - MAE / MAC

## Earnouts

2% of all public targets

26% of all private targets

## Escrow agreement

0% in public target deals

52% in private target deals

18 months → J.P. Morgan

12% of transaction value

## Escrow Agreement

Ent. Value / EBITDA

$$\boxed{10} \times 10m = \text{EBITDA}$$

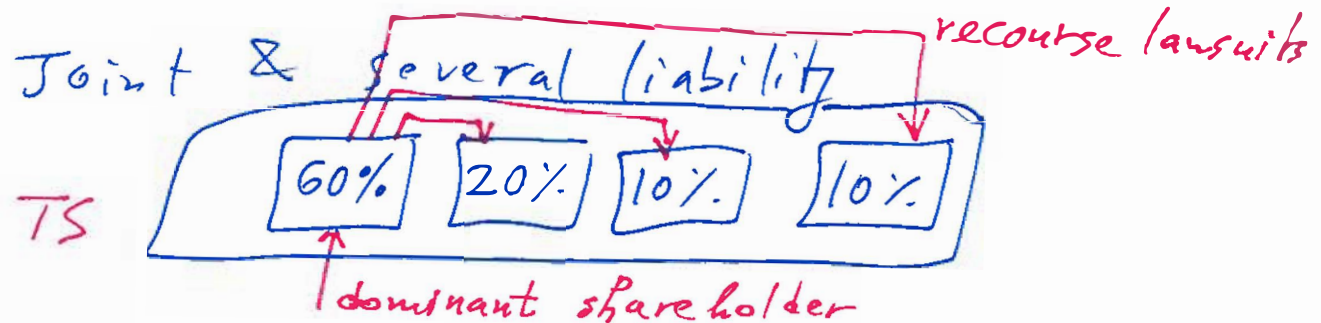
12% of sales price  $\$100m$  → deposited w/  
custodian bank  
for 18 months.

However, if  $8m = \text{EBITDA} \rightarrow \text{price} = 80m \$ \Rightarrow$  recourse against  
the escrow accounts

52% of all private target acq.  $\Rightarrow$  use  
escrow agreement  
0% of all public target acq.

✓ Target - side acquisition transaction risk.

Escrow allows  
target to



## Economic rationale behind use of escrow agreements in private target acquisitions

Escrow agreements are more frequently used in private target acquisitions if:

1. It is more important for the bidder to <sup>acquirer</sup> manage acquisition-related transaction risk. Use is more common in subsidiary versus private stand-alone firm acquisitions. In the case of subsidiary acquisitions, a bidder would have legal recourse post-deal closure against both the parent firm that sold the subsidiary and the principal shareholders of the parent firm, while for private firm acquisitions the bidder would only have recourse against the principal shareholders of the target. Escrow contracts are used in 65% of private firm acquisitions, but these contracts are used in only 32% of subsidiary acquisitions.
2. There is more information asymmetry about the target's value the bidder faces greater transaction risk, in these instances the benefits to using an escrow contract should be larger. Whether an escrow contract is used in the context of the acquisition of an unlisted target is positively associated with: (1) earnings volatility in the target's industry, (2) if there is a smaller number of analysts covering the target's industry, (3) if the target operates in a different industry than does the bidder, (4) the target's total accruals, and (5) if a target's interest coverage ratio is low.
3. When there is high target-side acquisition-related transaction risk. When a target has a dominant shareholder, defined as a shareholder who owns at least 20 percent of the target's shares but not all of its shares, an escrow contract can be particularly useful to manage this shareholder's transaction risk. If such a contract is in place all target shareholders would bear pro rata costs of bidder recourse actions subsequent to an acquisition. In contrast, if such a contract is not in place in most cases bidder recourse actions subsequent to an acquisition would result in the target's dominant shareholder being held liable and sued by the bidder.<sup>1</sup>
4. In acquisitions where due diligence costs are large relative to deal value due to significant information asymmetry about the target's value. The use of an escrow contract is expected to reduce a bidder's need to incur significant due diligence costs in these deals.

	Unlisted targets	Unlisted targets with escrow contract (52% of all)	Unlisted targets w/out escrow contract
Percent of deals that are stock purchase transactions	73.7%	80.0%	66.8%
Percent of deals that are asset purchase transactions	26.3%	20.0%	33.2%
Percent of deals for stand-alone private firm targets	60.3%	75.6%	43.8%
Percent of deals for subsidiary targets	39.7%	24.4%	56.2%
Percent of deals with a dominant target shareholder	36.8%	48.3%	24.1%
Percent of deals with a liability cap	73.7%	85.3%	61.1%

<sup>1</sup> In such cases, the dominant shareholder could then sue smaller shareholders to recover some of their share of the sale proceeds. However, given that these recourse lawsuits are costly, the use of an escrow contract would be a more efficient way for the dominant shareholder to manage acquisition-related transaction risk.

MAE / MAC clause

How is it  
defined?


- (1) Clause itself
- (2) Exceptions (carve-outs) of the MAE/MAC clause



## Rejected MAC/ MAE motions to cancel a merger

In 2000, Tyson Foods Inc. (TSN US Equity) sign merger contract with IBP Inc, but then argued about foiling the contract due to MAE.

1. Tyson Foods Inc. acquisition of Iowa Beef Producers Inc. (also known as Tyson Fresh Meats Inc.)

Target	1) Tyson Fresh Meats Inc 0932872D US Px USD 23.65 Food-Meat Products	Acquirer	2) Tyson Foods Inc TSN US Px USD 10.29 Poultry	Currency	USD
				Announcement	12/04/00
				Transaction Value	4,317.77M
Details	Description				
11) Summary	Tyson Foods Inc acquired Tyson Fresh Meats Inc for USD 4,317.77M. The transaction was announced on 12/04/2000 and completed on 10/01/2001.				
12) Timeline					
13) Parties					
14) Proration					
15) Structure					
16) Advisers					
17) Sources/News					
Comps	Dates				
18) Deal Comps	Announcement 12/04/00				
19) Arbitrage	Amendment 06/18/01				
	Completion 10/01/01				
	Status Completed				
	Duration (# Days) 301				
	Deal Terms				
	Nature of Bid Friendly				
	Percent Owned/Sought 0.00% / 100.00%				
	Payment Type Cash or Stock				
	Cash Terms (per Tgt Sh) USD 30.0000				
	Stock Terms (Acq Sh/Tgt Sh) 2.3810				
	Deal Attributes				
	Tender Offer, Company Takeover				
	Timeline				
					
	Deal Value			Amended	Final
	Tran Value (M)			4,317.77	4,317.77
	Equity Value (M)			3,199.68	3,199.68
	Deal Price			--	--
	Premium			+44.95%	+31.64%
	Net Debt (M)			1,118.09	1,118.09
	TTM Deal Multiples			Target	Comp Median
	TV/Revenue			0.26x	0.53x
	TV/EBIT			8.73x	13.11x
	TV/EBITDA			7.01x	8.40x
ID	6082780	Notes	CASH TENDER OFF EFF: 8/3 (50.1%). SECOND STEP: TGT SHRHLDRS TO REC 2.381 TSN		

- The Chancery Court in Delaware mandated that the merger be completed.
- Sets case law precedent for the MAE clause to rarely be successful applied to terminate a merger
- The only case where MAE clause was successfully applied to terminate a merger → 10/1/2018, Akorn vs. Fresenius Kabi AG

Hexion Specialty Chemicals (owned by Apollo Management Group) acquisition of Huntsman Inc.

In 2008 Apollo Management group contested the merger of its wholly-owned subsidiary Hexion with Huntsman → they argued in favor of a MAC (material adverse change) clause applicability

APD US Equity

Target	1) Huntsman Corp HUN US Px USD 3.44 Chemicals-Diversified	Acquirer	2) Apollo Global Management... APO US Private Equity	Currency	USD
				Announcement	12/15/08
				Transaction Value	250.00M
Details		Description			
11) Summary	Apollo Global Management Inc acquired a minority stake in Huntsman Corp. The transaction was announced on 12/15/2008 and completed on 12/31/2008.				
12) Timeline					
13) Parties					
14) Advisers					
15) Sources/News					
Comps	Dates				
16) Deal Comps	Announcement 12/15/08 Completion 12/31/08 Status Completed Duration (# Days) 16				
	Deal Terms				
	Nature of Bid Friendly Percent Owned/Sought 0.00% / 12.14% Payment Type Cash Cash Terms (M) USD 250.0000				
	Deal Attributes				
	Minority purchase, Private Equity				
	Timeline				
	Deal Value				
	Tran Value (M) 250.00 Equity Value (M) 250.00 Deal Price -- Premium -- Net Debt (M) --				
	TTM Deal Multiples				
	TV/Revenue 0.19x TV/EBIT 4.54x TV/EBITDA 2.44x				
	Target 3.89x Comp Median 28.11x 5.94x				
ID	34852531	Notes	ACQ'R PURCH 7% CONVERTIBLE SENIOR NOTES. CONVERSION PRICE APPROX \$7.72. SEE ADDL		

The Delaware court of Chancery disagreed & the merger had to be completed.

## Case Discussion

TransDigm (TDG) Acquisition of Aerosonic LLC

TransDigm originally made an unsolicited offer to acquire Aerosonic in 2008, which Aerosonic's board of directors rejected as insufficient

Over the next few years, TransDigm periodically requested updates from Aerosonic, and the two companies began to discuss acquisition in earnest in 12/2012.

Aerosonic retained Bluestone Capital Partners, an investment banking firm, in January 2013 to consider potential strategic alternatives.

Bluestone would receive: 1) \$522,000 if TransDigm acquired Aerosonic; 2) \$625,000 if Aerosonic accepted a higher offer from another party plus 5% of the incremental amount above TransDigm's offer; or 3) out-of-pocket expenses up to \$15,000 if there were no transaction.

In addition, Aerosonic retained Hyde Park Capital, another investment banking firm, to provide a fairness opinion at a cost of \$100,000.

In 4/2013, TransDigm and Aerosonic agreed to merge under the following terms:

- TransDigm would complete the acquisition in two steps: **first, it would conduct a tender offer to buy shares for \$7.75 in cash.** If it acquired 90% or more of the shares, then it would complete a "short form" merger. In the event that TransDigm failed to acquire at least 90% of the outstanding shares, it would be granted and then exercise **a "top-up" option to buy newly issued Aerosonic shares until it reached the 90% threshold** at which time it would complete the "short form" merger.
- Aerosonic agreed to repay all outstanding debt prior to consummating the merger.
- TransDigm's offer was not subject to a financing contingency, meaning the deal did not depend on TransDigm's ability to raise the cash needed to buy the shares.
- Aerosonic would have a 40 day "go shop" period to seek higher bids, after which point it would be subject to a "non-solicitation" clause which prevented it from seeking higher bids. Although the board could not solicit offers after the "go shop" period expired, it could still consider unsolicited inquiries that could reasonably lead to higher offers.
- TransDigm agreed to honor the "double-trigger" retention agreements Aerosonic had with its CEO and three other senior executives. These agreements obligated Aerosonic to pay the CEO \$1.5 million and the other three executives approximately \$750,000 in severance in the event of a change of control (e.g., a merger) and the subsequent termination of their employment (i.e., the second trigger).
- Aerosonic agreed to pay a termination or "break-up" fee of \$1.2 million (approximately 3% of deal value) to cancel the acquisition during the "go-shop" period and \$1.5 million if it accepted a higher offer from another bidder after the "go shop" period expired.



**Exhibit 7** Financial Data for TransDigm, Aerosonic, and a Set of Comparable Firms Used by Hyde Park Capital

Company	Revenue (\$mil)	Assets (\$mil)	EBITDA Margin	Per Employee (\$000) Revenue SG&A Exp.		As a Percent of Total Revenue CapEx R&D (1)		Average Leverage Over the Prior Two Years (2)		Estimated Equity Beta (3)	Calculated Asset Beta (3)	Trading Multiples Total Enterprise Value Divided by Trailing (4)	
								Book	Market			Sales	EBITDA
TransDigm Group	\$1,778	\$5,550	46%	\$329	\$40	1.4%	1.6%	80%	37%	1.02	0.64	6.4	14.0
Aerosonics Corp.	\$31	\$22	11%	\$157	\$43	2.5%	15.8%	46%	37%	0.79	0.50	0.6	5.6
<b>Public Comparables Used by Hyde Park</b>													
Ametek Inc.	\$3,334	\$5,190	26%	\$243	\$28	1.7%	4.6%	38%	15%	1.33	1.13	3.2	12.4
Astronics Corp.	\$266	\$212	15%	\$230	\$32	6.3%	16.9%	26%	10%	1.30	1.17	1.3	8.9
Esterline Tech.	\$1,878	\$3,227	18%	\$154	\$29	2.6%	5.7%	35%	30%	1.27	0.89	1.5	8.4
Moog, Inc.	\$2,490	\$3,126	14%	\$227	\$36	4.3%	4.7%	38%	28%	1.26	0.90	1.1	7.7
Orbit International	\$29	\$25	8%	\$209	\$58	1.3%	5.3%	17%	18%	0.75	0.62	0.6	8.3
Rockwell Collins	\$4,694	\$5,313	23%	\$247	\$27	2.9%	6.8%	39%	9%	0.94	0.86	2.0	8.6
Triumph Group	\$3,663	\$4,705	18%	\$264	\$17	3.5%	1.7%	41%	31%	1.08	0.74	1.2	6.7
<b>Average</b>	<b>\$2,336</b>	<b>\$3,114</b>	<b>17%</b>	<b>\$225</b>	<b>\$32</b>	<b>3.2%</b>	<b>6.5%</b>	<b>33%</b>	<b>20%</b>	<b>1.13</b>	<b>0.90</b>	<b>1.5</b>	<b>8.7</b>
<b>Median</b>	<b>\$2,490</b>	<b>\$3,227</b>	<b>18%</b>	<b>\$230</b>	<b>\$29</b>	<b>2.9%</b>	<b>5.3%</b>	<b>38%</b>	<b>18%</b>	<b>1.26</b>	<b>0.89</b>	<b>1.3</b>	<b>8.4</b>
<b>Other Publicly Traded Manufacturers of Aerospace Parts</b>													
Curtiss Wright	\$1,823	\$3,115	16%	\$196	\$40	4.6%	1.0%	33%	28%	1.21	0.87	1.3	8.2
Heico Corp.	\$897	\$1,193	22%	\$289	\$53	1.7%	3.4%	7%	3%	1.35	1.31	2.3	10.8
Woodward Inc.	\$1,866	\$2,049	16%	\$283	\$24	3.5%	7.7%	34%	15%	1.65	1.40	1.7	11.0
<b>Median</b>	<b>\$1,823</b>	<b>\$2,049</b>	<b>16%</b>	<b>\$283</b>	<b>\$40</b>	<b>3.5%</b>	<b>3.4%</b>	<b>33%</b>	<b>15%</b>	<b>1.35</b>	<b>1.31</b>	<b>1.7</b>	<b>10.8</b>

Source: Casewriter analysis using data from Standard & Poor's Capital IQ database, accessed 5/26/20. Also uses data from company annual reports and Form 10-K's. The figures were calculated using data from the trailing four quarters ending on the reporting date closest to 12/31/12.

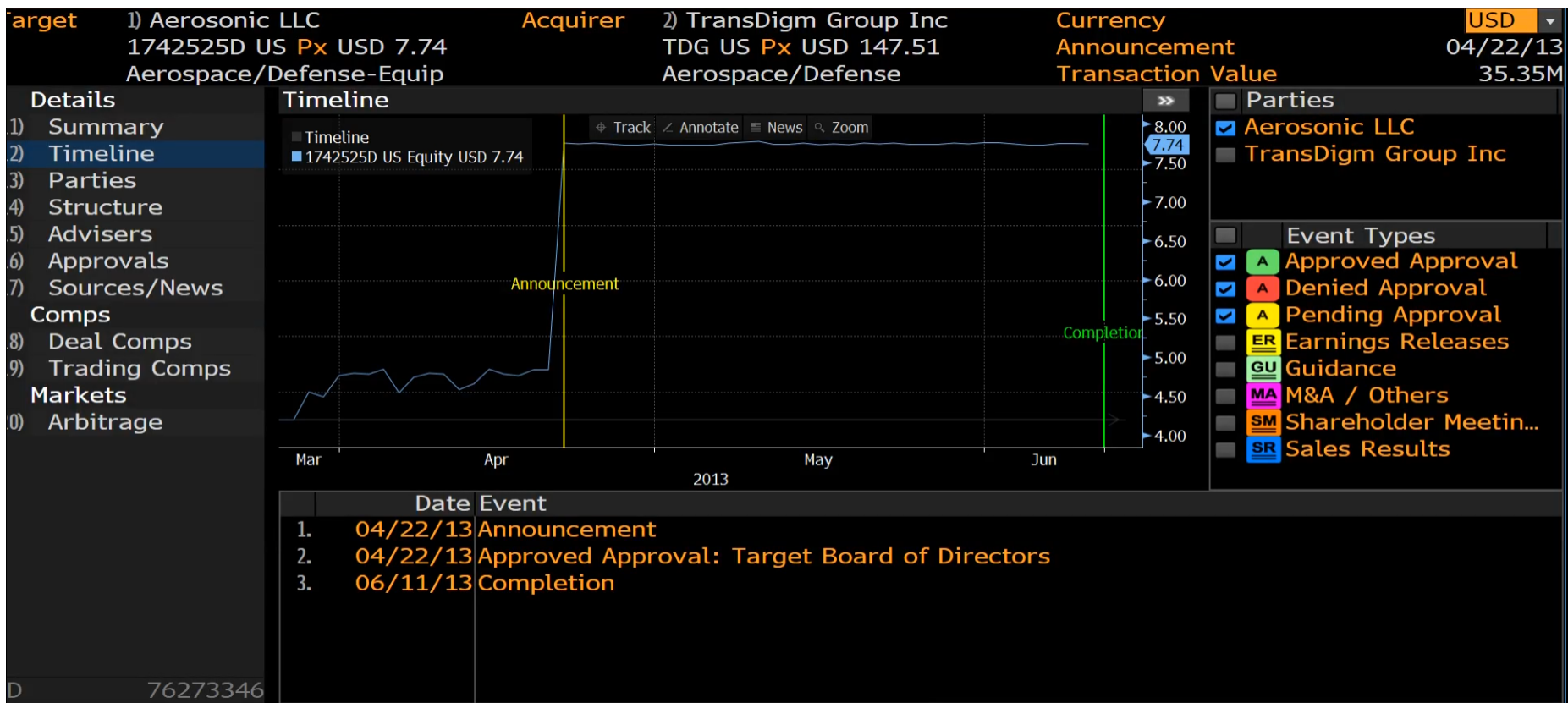
Note 1: R&D expense could vary considerably over time as companies started and finished research programs and product development efforts. Some companies reported *net* expenses (internally funded or company R&D) while others reported *gross* expenditures including both internally and externally funded (or customer funded) R&D expenses.

Note 2: Book value leverage is defined as debt-to-total capitalization  $[D/TC = D/(D+E)]$  using book values. Market value leverage is defined as debt-to-total value  $[D/V = D/(D+E)]$  where debt is the book value and equity is the market value. The average is measured as a simple average for years ending in 2010, 2011, and 2012.

Note 3: The Equity Beta was estimated using two years of weekly data regressed against the S&P 500 Index. The Asset Beta = Equity Beta \*  $[1 - (D/V)]$ , using market-value leverage.

Note 4: The trading multiples were calculated using closing stock prices on 12/31/12.

Target	1) Aerosonic LLC 1742525D US Px USD 7.74 Aerospace/Defense-Equip	Acquirer	2) TransDigm Group Inc TDG US Px USD 147.51 Aerospace/Defense	Currency	USD ▾
				Announcement	04/22/13
				Transaction Value	35.35M
Details	Structure				
1) Summary	Legal				
2) Timeline	Taxable Yes				
3) Parties	Dissenter Rights No				
4) Structure	State / Section --				
5) Advisers	Fractional Shares --				
6) Approvals	Letter of Transmittal Yes				
7) Sources/News	Exchange --				
Cmps	Non-Equity Payments No				
8) Deal Cmps	Governing Law DE				
9) Trading Cmps	Expiration Time 00:00				
Markets	Exp Time Zone Eastern Time (US & Canada)				
0) Arbitrage	Financing Conditions No				
	Material Adverse Effect Yes				
	Additional Info				
	Exercisable Options (Shares) --				
	Target Ownership in NewCo --				
	Acquirer Ownership in NewCo --				
	Purpose --				
	Dates				
	Merger Agreement Date 04/19/13				
	Dissenter Cut-Off Date --				
	Drop Dead Date --				
	Election Expiration Date --				
	Contingency				
	Stock Cont Payment --				
	Cash Cont Payment --				
	Go-Shop				
	Go-Shop Period 40.00 Days				
	Go-Shop Start 04/19/13				
	Go-Shop End 05/29/13				
	Termination Fees				
	Target to Acquirer USD 1.20 M				
	Acquirer to Target --				
	Synergy				
	Cost Synergy Amount --				
	Cost Syn Realization Date --				
	Revenue Syn Amount --				
	Rev Syn Realization Date --				
D	76273346				





target	1) Aerosonic LLC 1742525D US Px USD 7.74 Aerospace/Defense-Equip	Acquirer	2) TransDigm Group Inc TDG US Px USD 147.51 Aerospace/Defense	Currency	USD	Announcement	04/22/13	Transaction Value	35.35M
Details		Description							
1) Summary		TransDigm Group Inc acquired Aerosonic LLC for USD 35.35M. The transaction was announced on 04/22/2013 and completed on 06/11/2013.							
2) Timeline									
3) Parties									
4) Structure									
5) Advisers		Dates							
6) Approvals		Announcement				04/22/13			
7) Sources/News		Completion				06/11/13			
Comps		Status				Completed			
8) Deal Comps		Duration (# Days)				50			
9) Trading Comps									
Markets		Deal Terms							
0) Arbitrage		Nature of Bid				Friendly			
		Percent Owned/Sought				0.00% / 100.00%			
		Payment Type				Cash			
		Cash Terms (per Tgt Sh)				USD 7.7500			
		Deal Attributes							
		Tender Offer, Company Takeover							
		Timeline							
									
		Deal Value				Announced		Final	
		Tran Value (M)				35.35		35.35	
		Equity Value (M)				29.85		29.85	
		Deal Price				--		--	
		Premium				+66.63%		+0.13%	
		Net Debt (M)				5.50		5.50	
		TTM Deal Multiples				Target		Comp Median	
		TV/Revenue				1.14x		1.05x	
		TV/EBIT				19.88x		16.25x	
		TV/EBITDA				14.98x		9.85x	
D	76273346	Notes	T/O EFF 06/04/13 (88.4%).						



		Implied Equity Value	
		Per Share	
Valuation Method		Low	High
Price Premium (prior day)			
	All Merger Transactions in Aerospace & Defense Industry	\$5.75	
	Transactions for Public Targets with Mkt Cap <\$250m		\$7.05
Trading Multiples (TEV/LTM EBITDA)		\$5.78	\$6.52
Transaction Multiples (TEV / LTM EBITDA)		\$6.28	<b>\$7.34</b>
Discounted Cash Flow (DCF) Analysis			
	Terminal Value as a Multiple of EBITDA (Trading Multiple)	\$9.89	\$11.34
	Terminal Value as a Growing Perpetuity (g = 3%)	\$5.47	\$5.79

Source: Aerosonic Corp, Form 14D-9,Solicitation/Recommendation Statement, p.20-24, access 5/20/20

If, however, the ACrosonic LLC valuation is done for a private company buyer, need to use total beta, i.e.,

$$\beta_A^{\text{TOTAL}} = \frac{\beta_A^{\text{PUBLIC}}}{\rho(r_A, r_M)}$$

We know that equity betas for public firms are:

$$\boxed{\beta_E} = \frac{\text{COV}(r_E, r_M)}{\text{var}(r_M)} = \frac{\text{corr}(r_E, r_M) \cancel{\sigma_E} \cancel{\sigma_M}}{\sigma_M \cancel{\sigma_M}} = \underbrace{\text{corr}(r_E, r_M)}_{\text{red}} \times \boxed{\frac{\sigma_E}{\sigma_M}}$$

# Valuation of Private Companies: Cost of Capital

Public firm  
 $\beta_A$

$$\beta_A^{\text{PRIV}} = \text{Total Beta} = \frac{\beta_A^{\text{Public}}}{\rho(r_A, r_M)}$$

$$\left\{ \left[ \frac{\text{COV}(r_A, r_M)}{\sigma_{r_M}^2} \right] \right\}$$

$\Leftarrow$

$$\boxed{\frac{\sigma_{r_A}}{\sigma_{r_M}}}$$

$=$

$$\left\{ \frac{\text{COV}(r_A, r_M)}{\sigma_{r_A} \sigma_{r_M}} \right\}$$

$\rightarrow \rho(r_A, r_M)$

## Make-up Quiz #7 (Week #7) for EMAD 5442

### Question #1 (0.5 pts)

(Essay Question #1 relates to the HBS case to be discussed in class, TransDigm-Aerosonic; please target response of about 100 words)

Why did TransDigm (TDG) acquire Aerosonic Corp? What is the strategy of TransDigm and how did this acquisition fit into their strategy?

- revenue enhancements

✓

### Question #2 (1 pts)

(Essay Question #2 relates to the HBS case to be discussed in class, TransDigm acquisition of Aerosonic; please target a response of about 150 words)

Why did TransDigm choose to do a tender offer followed by a "short form" merger? What is a "short-form" merger?

- top-off option

- Two-piece suit strategy  
- Short-form merger requires 90% ownership in target

### Question #3 (0.5 pts)

(Essay Question #3 relates to the HBS case to be discussed in class, TransDigm Acquisition of Aerosonic; please target response of about 100 words)

What WACC would you assign for the valuation of Aerosonic and what value per share will you recommend? Why?

$$r_A = r_F + \beta_A * M.R.P. \Rightarrow WACC = 2.5\% + \boxed{0.89} * 6\% = 7.84\% \rightarrow CAPM$$

Average  $\beta$  A comp Firms  
or Mean

✓

### Question #4 (1 pts)

The most common Material Adverse Effect (MAE) clause carve out in private target acquisitions - according to the ABA Deal Points study - was:

- A. Industry conditions
- B. War or terrorism
- C. Change in accounting
- D. Economic conditions ✓
- E. Financial market downturn

✓

### Question #5 (0.5 pts)

Anti-sandbagging clause is seller-friendly as it limits buyer's post-closing remedies for a seller's breach of representation, warranty or covenant if buyer had knowledge of such breach prior to closing.

- A. True
- B. False

✓

### Question #6 (0.5 pts)

The true deductible basket is less common than the first dollar basket in private target acquisitions.

- A. True
- B. False