

Part I : 7 - 7:40 PM

Part II : 7:42 - 8:20 PM

Part III : 8:22 - 9 PM

Textbooks:

- AD Damodaran
- B Bruner
- Scholes et al.
- RP

Midterm Qs:

- Selection (at random) of 5 out of 23 questions
- 5 questions will be verbatim
- Can work together to study for those questions
- Cannot submit same (group) answers!
- Can arrange for specific exam time

SOME DEFINITIONS:

1. Shares Definitions

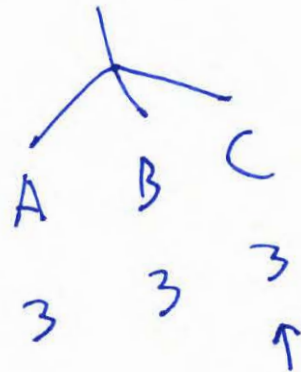
Outstanding stock

Issued & Authorized

2. Disclosure

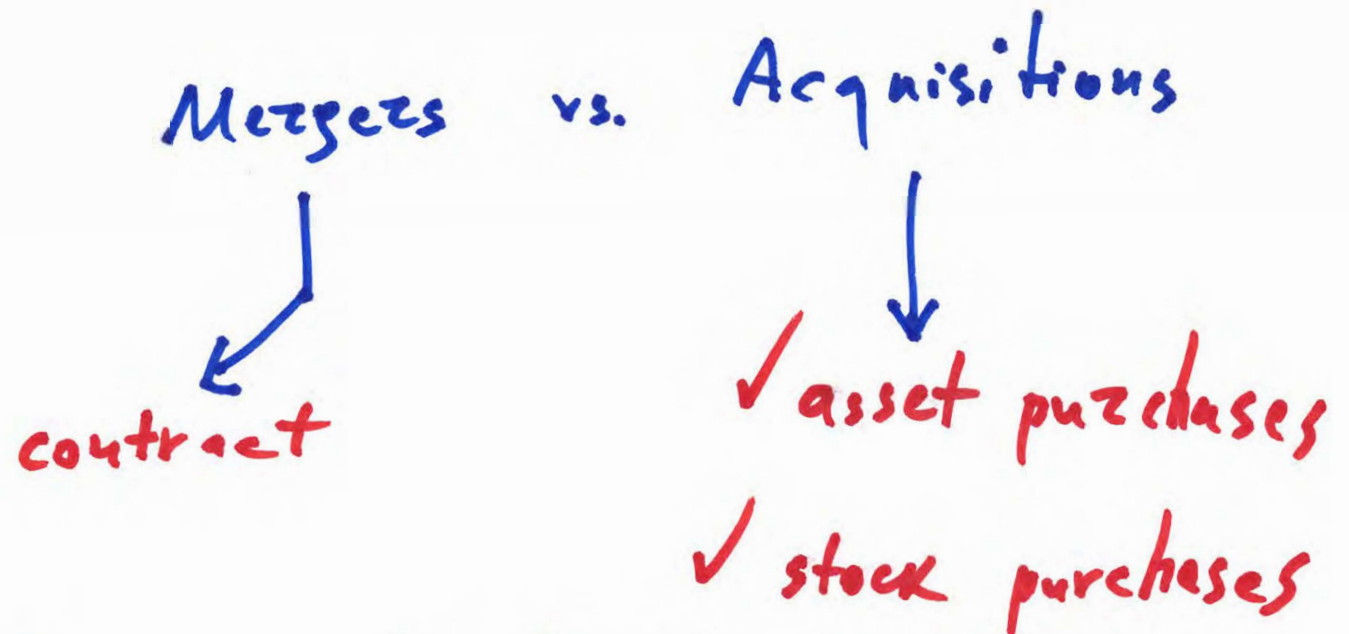
Basic vs. Levinson (1988)

3. Classified vs. Unitary Board



In a staggered board, there are usually three classes of directors, that are elected every three years.

In a unitary board, all directors are elected every year.



Datasources: Bloomberg, SDC, Capital IQ

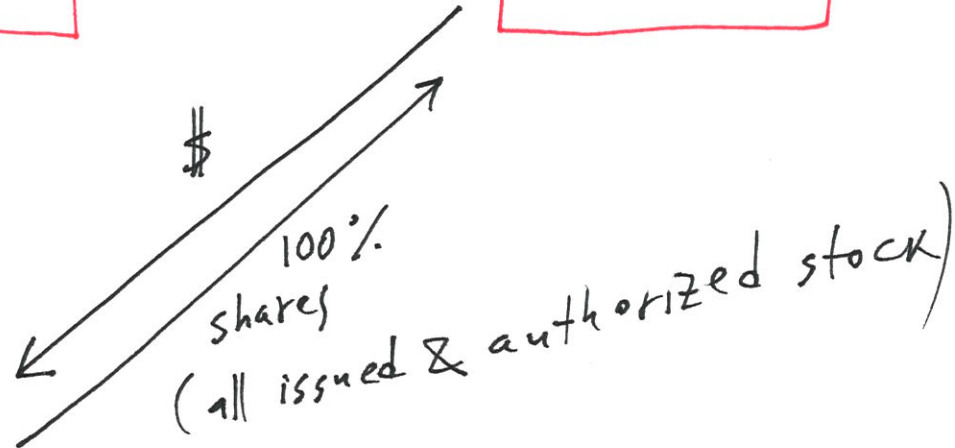
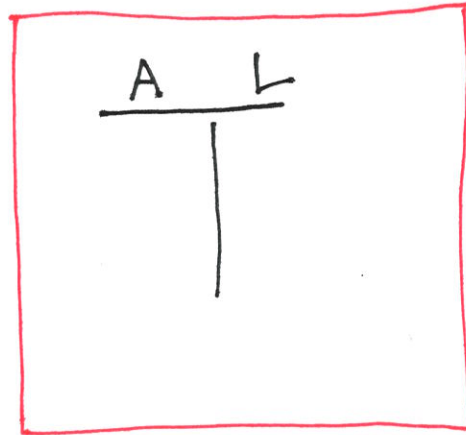
Main Source → Bloomberg → MA (for entire market)
BUYP, MRGC (per given firm)

Example: TNT purchase by Fedex

Blue Sky Laws — state laws that additionally restrict merger activity, separately so from federal regulations.

Stock Purchase

Target
Company

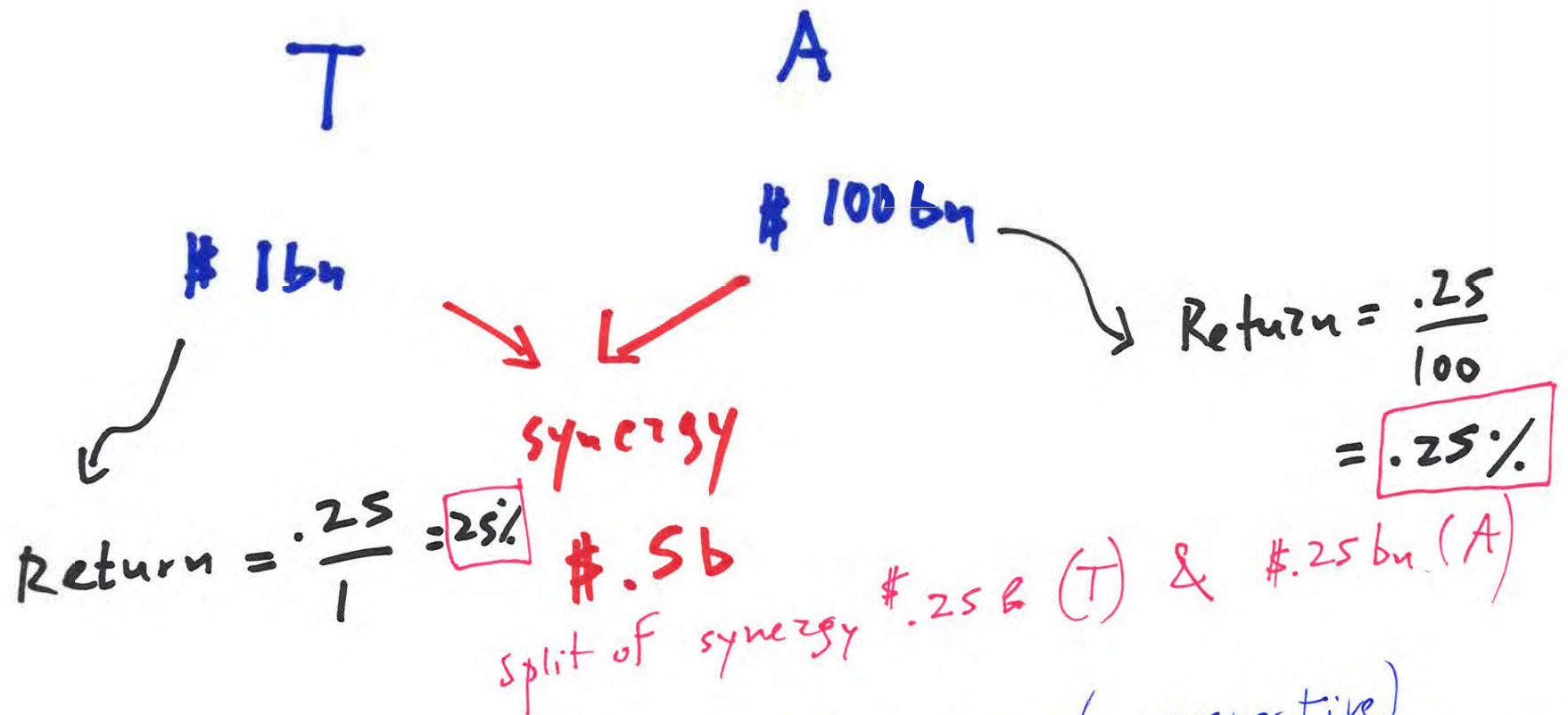


Why do mergers happen if returns to acquirers are usually negative?

- Value creation is disguised (synergies already priced-in before merger announcement)
- Disproportionate benefit to sellers (because they are smaller)
- Winning bidder overpays (i.e., winner's curse)

Why are returns from M&A so low?

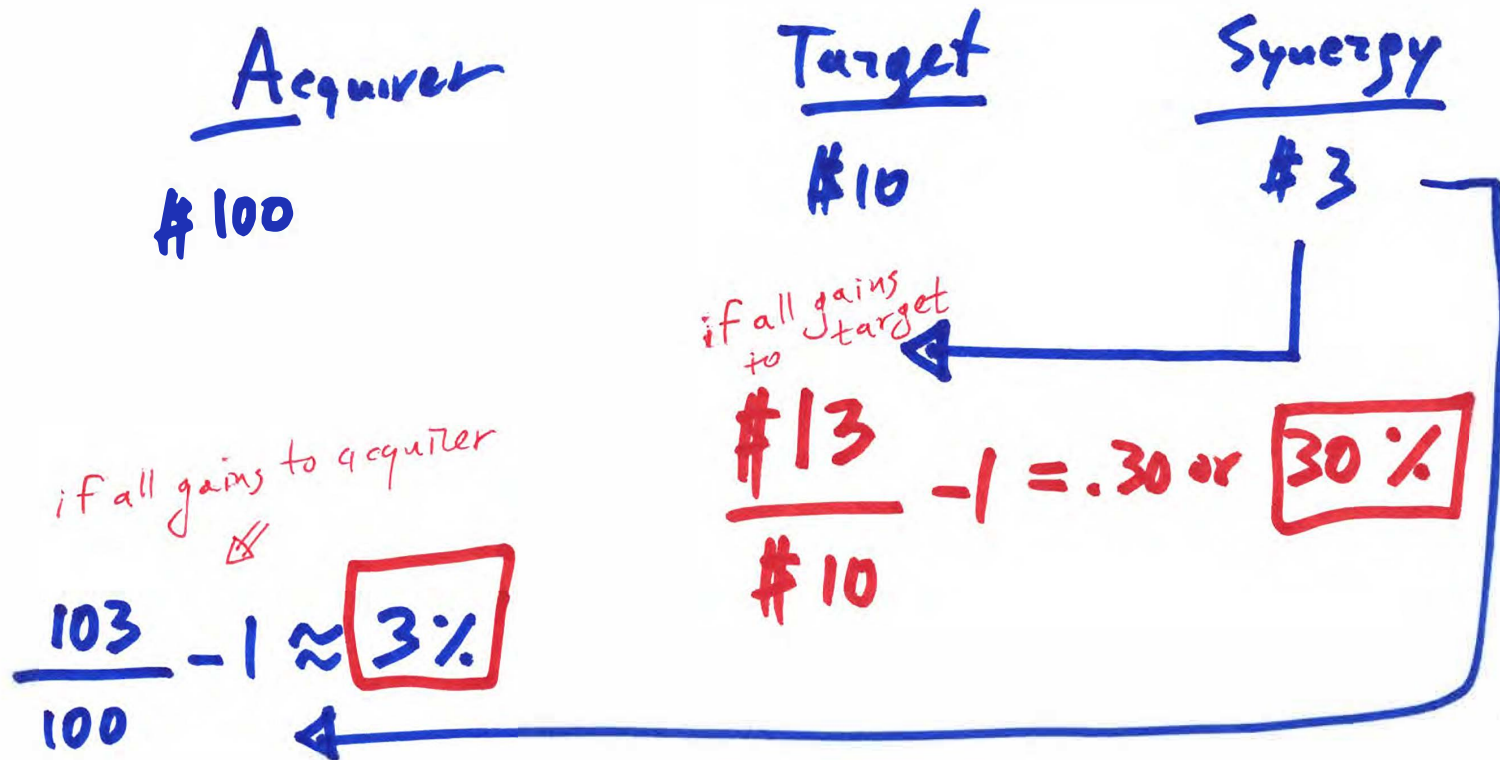
→ Returns are disguised!



Bottomline: it may appear (from buyer's perspective) as if returns are nil.
This is possibly due to the significantly greater size of the buyer!

Value is "hidden" - an example

most value appears to be received by the target!
This is because of its smaller size.



Compare w/ 1.6% gain in Andrade et. (2001)

For example, if gains equally split $\Rightarrow$ gain to acquirer is $\frac{101.5}{100} - 1 = \boxed{1.5\%}$

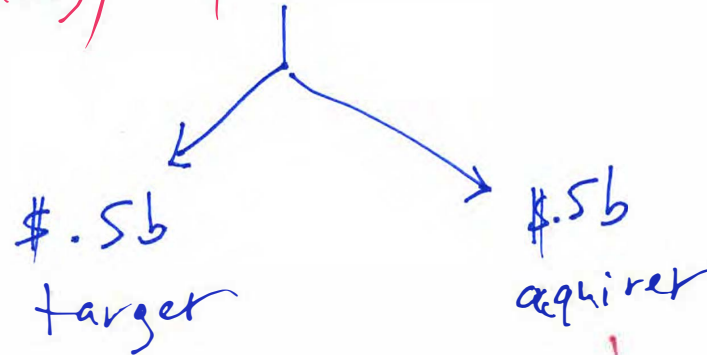
gain to target $\Rightarrow \frac{11.50}{10} - 1 = \boxed{15\%}$

Disproportionate benefit to sellers vs. buyers

Deal \$1b company (target)

Buyer \$10b company

Synergy \$1b



$$\frac{$.5b}{\$1b} = \boxed{50\%}$$

$$\frac{$.5b}{\$10b} = \boxed{5\%}$$

SPAC = Special Purpose Acq. Comp.

Emerging Growth Company (EGC)

JOBS Act (2012)

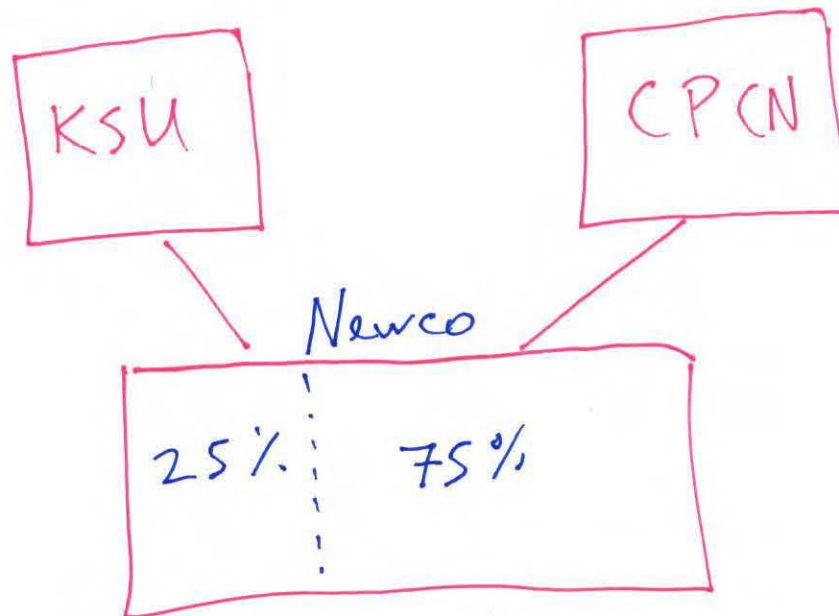
Runup vs. Markup

RUNUP = the increase in the target price prior to the announcement of the merger;

MARKUP = the increase in the target price after the announcement of the merger.

Outstanding
Shares

Authorized & Issued Stock



Merger Arbitrage

- 1. Buy target stock @ announcement
 - 2. Sell buyer stock @ announcement
(short-sell)
- shown in Bloomberg as "Gross Spread"

$$\left\{ \frac{\text{Offer Price} - \text{Buy Price}}{\text{Buy Price}} \right.$$

for an example
to compute the gross
spread, please refer to spreadsheet "Arbitrage Spreads (Brunner).
xlsx

Merger Arbitrage

- Buy target @ announcement
- sell (short - sell) buyer @ announcement

$$\text{Gross Spread} = \frac{\text{Offer Price} - \text{Buy Price}}{\text{Buy Price}}$$

How is arbitrage spread calculated?

$$\text{Arbitrage Spread} = \frac{\text{Offer Price} - \text{Current Price}}{\text{Current Price}}$$

Usually arbitrage involves buying target stock in cash mergers or buying target stock & selling acquirer stock and buying equivalent amount in target stock in stock-for-stock mergers

Target price

$$\beta_E = \beta_A + \frac{D}{E}(\beta_A - \beta_D)$$

$$g = ROE \times \underbrace{(1 - \text{payout ratio})}_{\text{Retention Ratio}}$$

Reasons for mergers

Reasons for mergers:

- (1) Necessary restructuring
- (2) Diversification
- (3) Market Power
- (4) Operating Synergies
- (5) Tax Reduction

NSMIA (1996) discussion
National Securities Markets
Improvement Act

— the main cause
for increase in
private equity
funding in the
U.S.

Discussion of Market

Power as a cause of M&A

Used to judge
the level of
competition
in an industry

HHI (Index)
Herishman - Herfindahl Index

10,000

HHI threshold
If a merger
results in
increase of
HHI above
10,000 $\Rightarrow$

Federal Trade
Commission (FTC)
& Justice
Department
will look into
the transaction.

Before

A	40%
B	30%
C	30%

After
Merge

After

A	40%
BC	60%

$$HHI = \left[40\%^2 + 30\%^2 + 30\%^2 \right] \rightarrow$$
$$= 3,400$$

$$40\%^2 + 60\%^2$$

=

5,200

(increase in
concentration of
market power)

Why are public firms disappearing today in the U.S. stock markets?

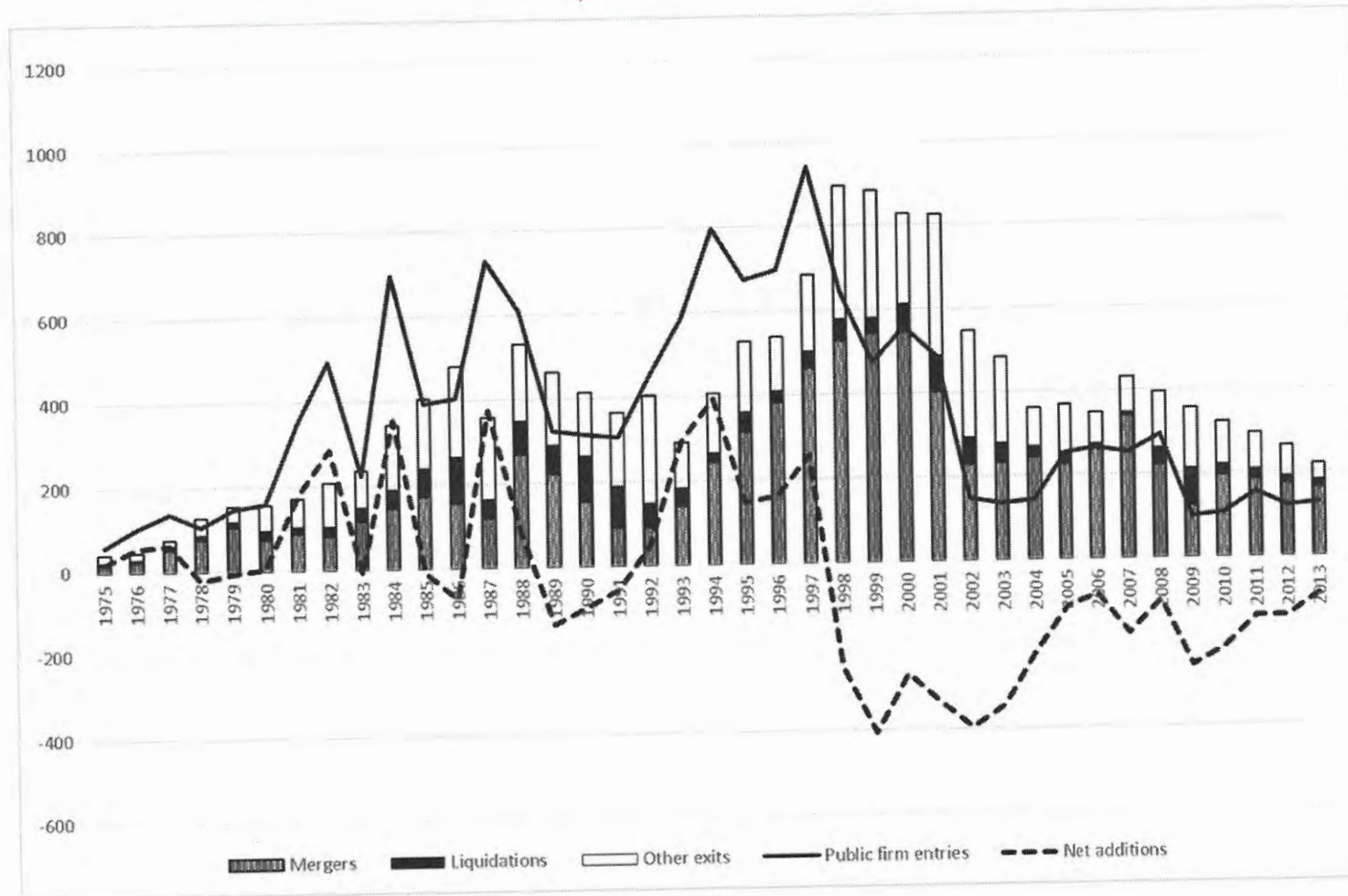
1. The rise of private equity investing
(post 1996 NSMIA discussed above)

2. Concentration of market power through
Mergers & Acquisitions (fueled in great part by
the large supply of cheap debt by the Fed in the
past 20 years — the so called "credit expansion")

3. Most importantly, because of the rise of intangible
assets in this economy (a.k.a. the 3rd industrial
revolution 1978 - 2003)

(Intangible assets are harmed by public disclosure in competitive
markets — how much does it cost to make a copy of a 1 TB dataset?)
⇒ Intangible rich firms prefer to stay private!

The pronounced increase in private equity funding has contributed to the decrease in the new listings (IPOs) in the U.S. public equity markets



On NSMIA Act (except from Ewens & Farre-Mensa, 2017)

What explains the growth in the supply of private capital to late-stage startups?

As is often the case with such macroeconomic changes, a variety of factors are likely at play. Kahle and Stulz (2016) note that the Internet has reduced search costs for firms searching for investors (and vice versa), thus reducing one of the fundamental advantages of centralized stock exchanges. A number of regulatory changes affecting private firms and their investors have also facilitated the process of raising capital privately (e.g., de Fontenay (2017)).

One notable change was the *National Securities Markets Improvement Act (NSMIA)* of 1996. The NSMIA made it easier for private firms to sell securities to "qualified purchasers" (e.g., institutions or accredited investors) in different states by exempting those sales from state-level regulations known as blue-sky laws (public firms have long been exempt from these state laws). The NSMIA also made it easier for unregistered funds such as VC and PE funds to raise capital. In addition to exempting them from blue-sky laws, it introduced new exclusions from registration that effectively increased the maximum number of investors in a fund.¹ This exclusion was particularly important for funds investing in late-stage startups, which tend to be larger and have more investors to meet mature startups' higher capital needs.

effect
of
NSMIA

→ According to Investment Company Act: qualified purchaser is:

- ✓ — a person with no less than \$5 million in investment
- ✓ — an investment manager with no less

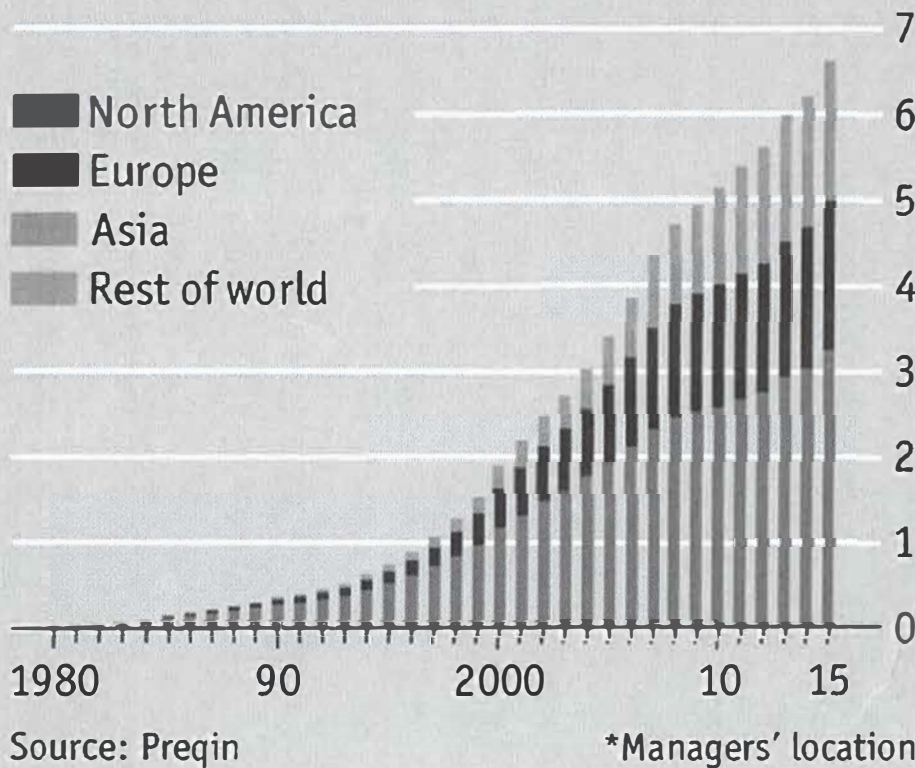
¹ Prior to the NSMIA, only funds with 100 or fewer investors were excluded from registering as investment companies under the Investment Company Act. Such registration can be burdensome, as it requires the regular disclosure of investment positions and limits the use of leverage, among other requirements.

- than \$25 million under management
- ✓ — A company with no less than \$25 million in investment

On the influence of the NSMIA (1996) Act
on private equity funding in the U.S.

All around the world

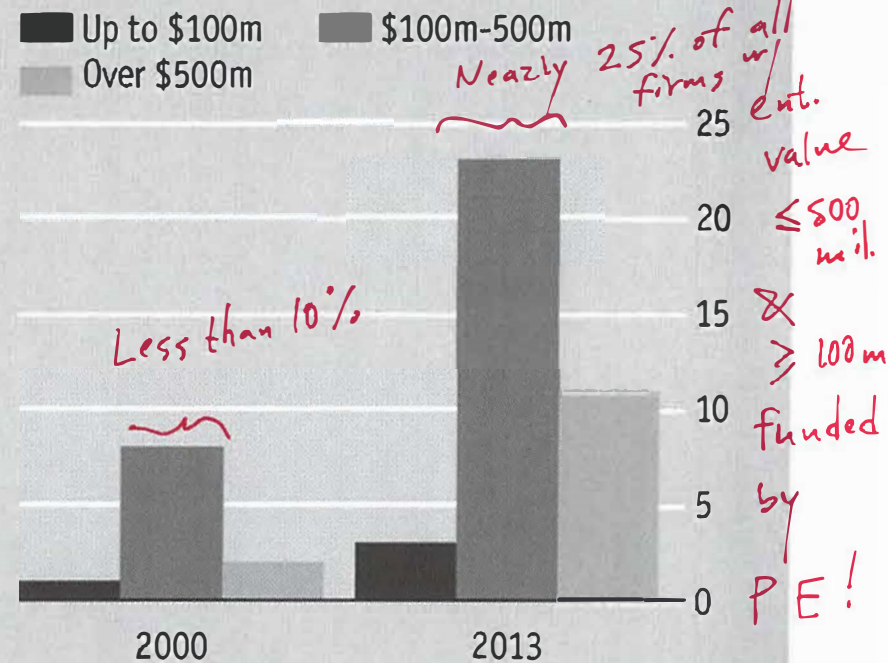
Private-equity firms by region*, '000



Economist.com

A greater share

Private-equity-backed companies
As % of all US companies* by enterprise value



Economist.com

The remarkable growth of
PE-funded enterprises

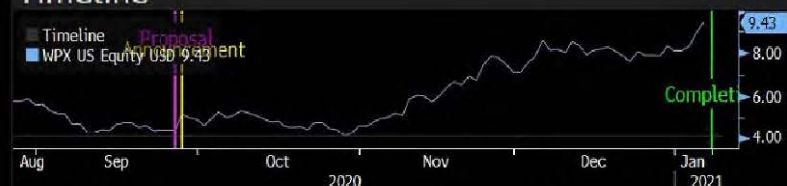
Merger Examples

Class Example of a Recently Announced Merger: The Acquisition of WPX Energy by Devon Energy

WPX and DEVON ENERGY merger

Target	1) WPX Energy Inc WPX US Px USD 9.43 Oil Comp-Explor&Prodtn	Acquirer	2) Devon Energy Corp DVN US Px USD 18.57 Oil Comp-Explor&Prodtn	Currency	USD
				Announcement	09/28/20
				Transaction Value	5,951.70M
Details	Description				
11) Summary	Devon Energy Corp acquired WPX Energy Inc for USD 5,951.70M. The transaction was announced on 09/28/2020 and completed on 01/07/2021.				
12) Timeline					
13) Parties					
14) Structure					
15) Advisers					
16) Approvals					
17) Sources/News					
Comps	Dates				
18) Deal Comps	Announcement 09/28/20				
19) Trading Comps	Completion 01/07/21				
	Status Completed				
	Duration (# Days) 101				
Markets	Deal Terms				
20) Arbitrage	Nature of Bid Friendly				
	Percent Owned/Sought 0.00% / 100.00%				
	Payment Type Stock				
	Stock Terms (Acq Sh/Tgt Sh) 0.5165				
	Deal Attributes				
	Company Takeover				
ID	221982820	Notes	--		

Timeline



Deal Value	Announced	Final
Tran Value (M)	5,951.70	8,480.24
Equity Value (M)	2,779.70	5,308.24
Deal Price	--	--
Premium	+2.88%	+0.34%
Net Debt (M)	3,172.00	3,172.00
TTM Deal Multiples	Target	Comp Median
TV/Revenue	3.65x	5.61x
TV/EBIT	--	20.46x
TV/EBITDA	14.07x	11.49x

The intuition for the merger: diversity exposure to possible governmental restrictions on fracking in the near future (DVN is substantially more exposed to federal acreage).

The FedEx - TNT Merger (class example)



Note the regulatory approvals needed, especially the one by the HSR Act

Hart-Scott-Rodino Act

Another
Example:

The FedEx - TNT merger

Target	1) TNT Express BV TNTE NA Px EUR 8.447 Transport-Services	Acquirer	2) FedEx Corp FDX US Px USD 153.84 Transport-Services	Currency	USD	Announcement	04/07/15	Transaction Value	4,406.23M
Details		Description							
11) Summary	On 04/07/2015, FedEx Corp announced the acquisition of TNT Express NV for EUR 4,060.67M. The transaction is expected to close in the first half of calendar year 2016. This is the second largest transaction for the transport-service sector at the date of announcement since 01/01/2013.								
12) Timeline									
13) Parties									
14) Structure									
15) Financing									
16) Advisers									
17) Approvals									
18) Sources/News									
Comps									
19) Deal Comps									
20) Trading Comps									
Markets									
21) Arbitrage									
Dates		Timeline							
Announcement		04/07/15							
Completion		07/04/16							
Status		Completed							
Duration (# Days)		454							
Deal Terms									
Nature of Bid		Friendly							
Percent Owned/Sought		0.00% / 100.00%							
Payment Type		Cash							
Cash Terms (per Tgt Sh)		USD 8.6808							
Deal Attributes									
Tender Offer, Cross Border, Company Takeover									

The Announced Sonic – Inspire Brands Merger

A recent merger example – a brief introduction to M&A

1. Inspire Brands acquisition of Sonic Corp

Type MA on the Bloomberg terminal, then click on "Summary"

→ Type in upper left corner search window the ticker for → SONC US Equity

Target	1) Sonic Corp	Acquirer	2) Inspire Brands Inc	Currency	USD
	SONC US Px USD 43.49		0208044D US	Announcement	09/25/18
	Retail-Restaurants		Retail-Restaurants	Transaction Value	2,263.08M
Details	Description				
11) Summary	Roark Capital Group Inc announced the acquisition of Sonic Corp for USD 2,263.08M. The transaction was announced on 09/25/2018 and completed on 12/10/2018. On 11/02/2018, it was reported that a shareholder-driven lawsuit was challenging Inspire Brands Inc's planned acquisition.				
12) Timeline	Dates				
13) Parties	Announcement 09/25/18				
14) Structure	Completion 12/10/18				
15) Financing	Status Completed				
16) Advisers	Duration (# Days) 76				
17) Approvals	Deal Terms				
18) Sources/News	Nature of Bid Friendly				
Comps	Percent Owned/Sought 0.00% / 100.00%				
19) Deal Comps	Payment Type Cash				
20) Trading Comps	Cash Terms (per Tgt Sh) USD 43.5000				
Markets	Deal Attributes				
21) Arbitrage	Company Takeover				
ID 178276891	Notes --				

Timeline



Deal Value	Announced	Final
Tran Value (M)	2,263.08	2,263.08
Equity Value (M)	1,613.17	1,613.17
Deal Price	--	--
Premium	+20.33%	+0.02%
Net Debt (M)	649.90	649.90

TTM Deal Multiples	Target	Comp Median
TV/Revenue	5.34x	1.84x
TV/EBIT	21.27x	20.49x
TV/EBITDA	15.63x	10.68x

} multiples for deal

Why was premium so much higher in the past?

B/c stocks were less expensive!

all cash deal

note premium of 20.33%

A bit lower by historic standard but above current annual average for market (18%)

2. Timeline



↑
note the immediate (and permanent) jump in valuation.

Such price jump is reflection of "merger arbitrageurs" buying Sonic (or more generally target) stock right after announcement.
Their strategy → buy @ less than offer price, hoping that if deal completes they will make profit (= gross spread = $\frac{\text{offer} - \text{buy price}}{\text{buy price}}$)

3. Parties

Target	1) Sonic Corp SONC US Px USD 43.49 Retail-Restaurants	Acquirer	2) Inspire Brands Inc 0208044D US Retail-Restaurants	Currency	USD
				Announcement	09/25/18
				Transaction Value	2,263.08M
Details	Target	Acquirer			
11) Summary	Name*	Sonic Corp	Name*	Inspire Brands Inc	
12) Timeline	Ticker*	SONC US	Ticker*	0208044D US	
13) Parties	Industry	Retail-Restaurants	Industry	Retail-Restaurants	
14) Structure	Country/Region	U.S.	Country/Region	U.S.	
15) Financing	Mkt Cap (M)	1,568.29	Mkt Cap (M)	--	
16) Advisers	Shrs Out (M)	36.09	Shrs Out (M)	--	
17) Approvals	Board Size	11	Board Size	--	
18) Sources/News	Classified Board	Yes	Classified Board	No	
Comps	ESG Disc Score	12.44	ESG Disc Score	--	
19) Deal Comps	Gov Disc Score	37.50	Gov Disc Score	--	
20) Trading Comps	Prim Exch*	--	Prim Exch*	--	
Markets	Auditor*	KPMG LLP	Auditor*	--	
21) Arbitrage	Employees*	391	Employees*	27,930	
	Fiscal Year End*	08/2019	Fiscal Year End*	12/2015	
	Poison Pill Plan*	No	Poison Pill Plan*	--	
	Approved Poison Pill*	No	Approved Poison Pill*	--	
ID	178276891	*Data as of today. Other data as of deal announcement date.			

target

parent of buyer
(a private equity firm)

4. Structure

Target	1) Sonic Corp SONC US Px USD 43.49 Retail-Restaurants	Acquirer	2) Inspire Brands Inc 0208044D US Retail-Restaurants	Currency	USD	Announcement Transaction Value	09/25/18 2,263.08M
Details	Structure						
11) Summary	Legal		Dates				
12) Timeline	Taxable	Yes	Merger Agreement Date			09/25/18	
13) Parties	Dissenter Rights	Yes	Dissenter Cut-Off Date			--	
14) Structure	State / Section	--	Drop Dead Date			12/21/18	
15) Financing	Fractional Shares	--	Election Expiration Date			--	
16) Advisers	Letter of Transmittal	Yes	Contingency			--	
17) Approvals	Exchange	--	Stock Cont Payment			--	
18) Sources/News	Non-Equity Payments	--	Cash Cont Payment			--	
Comps	Governing Law	DE	Go-Shop			--	
19) Deal Comps	Expiration Time	--	Go-Shop Period			--	
20) Trading Comps	Exp Time Zone	--	Go-Shop Start			--	
Markets	Financing Conditions	--	Go-Shop End			--	
21) Arbitrage	Material Adverse Effect	Yes	Termination Fees			--	
	Additional Info		Target to Acquirer		USD 47.74 M	--	
	Exercisable Options (Shares)	1.63M	Acquirer to Target		--	--	
	Target Ownership in NewCo	--	Synergy		--	--	
	Acquirer Ownership in NewCo	--	Cost Synergy Amount		--	--	
	Purpose	--	Cost Syn Realization Date		--	--	
			Revenue Syn Amount		--	--	
			Rev Syn Realization Date		--	--	
ID	178276891						

Note the "Material Adverse Effect" clause
It allows the parties to break a deal subject to certain exceptions (e.g., acts of God, etc)

Drop Dead Date is the latest date by which transaction needs to close

Fee payable from seller to buyer

Indicative of weak bargaining position for Sonic

Note the presence of dissenter rights (right to disagree w/ valuation of stock & seek remedy in DE courts) → only available for mergers & stock purchases (not asset purchases)

Options held by Sonic management

As a rule, upon acquisition (or more generally change of control) all unvested options or vested & unexercised options → they all vest & convert to newly issued & authorized shares

Those shares are also bought by buyer

5. Advisers

Target	1) Sonic Corp		Acquirer	2) Inspire Brands Inc		Currency	USD
	SONC US Px USD 43.49			0208044D US		Announcement	09/25/18
	Retail-Restaurants			Retail-Restaurants		Transaction Value	2,263.08M
Details	Target Adviser	Credit	Fee	Acquirer Adviser	Credit	Fee	
11) Summary	Financial			Financial			
12) Timeline	Guggenheim Capital	100%					
13) Parties	Legal			Legal			
14) Structure	Shearman & Sterling LLP	100%		White & Case LLP	100%		
15) Financing				J William Dantzler Jr "Bill"			
16) Advisers				John M Reiss			
17) Approvals				Steven Chabinsky "Steve"			
18) Sources/News				Henrik P Patel			
Comps				Arlene Arin Hahn			
19) Deal Comps				Brenda T Dieck			
20) Trading Comps				Rebecca H Farrington			
Markets				Chang-Do Gong			
21) Arbitrage				Charles J Pesant			
				Daniel U Nam			
				Eric F Leicht			
				Steven M Lutt "Steve"			
				Jonathan Michels			
	Legal to Financial			Legal to Financial			
	Paul Weiss Rifkind Whar...	100%					
	Ross A Fieldston						
ID	178276891						

↑
Shearman & Sterling LLP is one of the main M&A legal
advisories in the U.S.

6. Approvals

Target	1) Sonic Corp	Acquirer	2) Inspire Brands Inc	Currency	USD	
	SONC US Px USD 43.49		0208044D US	Announcement		09/25/18
	Retail-Restaurants		Retail-Restaurants	Transaction Value		2,263.08M
Details	Approvals	State	Date	#Days	Approval History	
11) Summary					Avg # Days*	App Ra... H
12) Timeline	Approved					
13) Parties	Target Shareholders	--	12/06/18	72	111	99%
14) Structure	Target Board of Directors	--	09/25/18	0	96	94%
15) Financing						
16) Advisers						
17) Approvals						
18) Sources/News						
Comps						
19) Deal Comps						
20) Trading Comps						
Markets						
21) Arbitrage						
*Approval times are calculated as the number of days from announcement date of the transaction until the date of approval/rejection by the approver.						
**Dates for pending approvals are estimated based on historical approval times.						
ID	178276891					

anticipate
target
shareholder
proxy
vote
date

7. Sources/ News

Target	1) Sonic Corp SONC US Px USD 43.49 Retail-Restaurants	Acquirer	2) Inspire Brands Inc 0208044D US Retail-Restaurants	Currency	USD	Announcement	09/25/18	Transaction Value	2,263.08M
Details	Source Documents								
11) Summary		Date	Purpose	Description					
12) Timeline	31)	12/07/18	Approval	Sonic Corp: 8-K 2018/12/06					
13) Parties	32)	11/05/18	Merger Agreement	Sonic Corp: DEFM14A 2018/11/05					
14) Structure	33)	09/25/18	Merger Agreement	Sonic Corp: 8-K 2018/09/25					
15) Financing	Show on ☒ Target ☒ Acquirer Custom 09/25/18 - 12/12/18								
16) Advisers	40) News NSE »								
17) Approvals	41)	Press Release: Inspire Brands Completes Acquisition of Sonic Corp.			DJ	12/2018			
18) Sources/News	42)	*DJ Inspire Brands Completes Acquisition of Sonic Corp. >SONC			DJ	12/2018			
Comps	43)	Inspire Brands Completes Acquisition of Sonic Corp. >SONC			DJ	12/2018			
19) Deal Comps	44)	*INSPIRE BRANDS COMPLETES PURCHASE OF SONIC			BN	12/2018			
20) Trading Comps	45)	Inspire Brands Completes Acquisition of Sonic Corp.			BUS	12/2018			
Markets	46)	Jack in the Box Takeout Unlikely, Jefferies Says			BFW	11/2018			
21) Arbitrage	47)	Jack in the Box Unlikely to See Bids Near Sonic Value: Wedbush			BFW	11/2018			
	50) Research BRC »								
	1559575D US, 25...	M&A Keeps Cooking for Restaurants, But IPOs S...			Bloomberg Intell...	01/28/21			
	DNKN US, 155957...	Dunkin' Unlikely to Attract Bid Topping Inspire'...			Bloomberg Intell...	11/03/20			
	1559575D US, 80...	M&A Keeps Cooking for Restaurants, But IPOs Ar...			Bloomberg Intell...	01/22/20			
	0208044D US, 12...	Best of BI Research -- Americas Morning Note			Bloomberg Intell...	08/08/19			
	1559575D US, 80...	M&A Keeps Cooking for Restaurants, But IPOs Ar...			Bloomberg Intell...	08/08/19			
	1559575D US, 80...	Crack at Next Shake Shack? PE, Strategics Rival...			Bloomberg Intell...	08/08/19			
	1559575D US, 80...	M&A Market Keeps Sizzling for Eateries, But IPO...			Bloomberg Intell...	01/31/19			
ID 178276891	1559575D US, CM...	Is There a Next Shake Shack? Casual-Dining Ch...			Bloomberg Intell...	12/24/17			

↑
News sources for the collected information
(mostly from SEC Edgar data @ sec.gov)

8. Deal Comps

Target		1) Sonic Corp		Acquirer		2) Inspire Brands Inc		Currency		USD	
		SONC US Px USD 43.49				0208044D US		Announcement		09/25/18	
		Retail-Restaurants				Retail-Restaurants		Transaction Value		2,263.08M	
Details		Deal Comps									
11) Summary		☒ Trailing 12M Multiples ☐ Forward 12M Multiples									
12) Timeline		Comparable Deals <Select a Deal>							31) Add Deals		32) Restore Defaults
13) Parties		☒ Median ☐ Average ☐ Min ☐ Max									
14) Structure		+									
15) Financing											
16) Advisers											
17) Approvals											
18) Sources/News											
Comps											
19) Deal Comps											
20) Trading Comps											
Markets											
21) Arbitrage											
			Target Company	Ann Date	Total Value↓	TV/EBITDA	TV/EBIT	TV/Rev	TV/Total Assets		
			Sonic Corp	09/25/18	2,263.08	15.63	21.27	5.34	4.26		
			Median		1,670.26	10.68	20.49	1.84	1.78		
		41)	Buffalo Wild Wings Inc	11/28/17	2,832.12	11.49	30.33	1.40	3.04		
		42)	Spirit Pub. Co Ltd	09/23/14	2,413.65	6.34	7.59	1.84	.75		
		43)	Burger King Holdings Inc	04/03/12	2,301.45	15.34	20.49	3.36	1.42		
		44)	Punch Taverns Ltd	12/15/16	1,982.12	7.15	7.48	3.92	.64		
		45)	Popeyes Louisiana Kitche	02/21/17	1,800.34	21.28	24.17	6.70	6.87		
		46)	PizzaExpress Ltd	07/12/14	1,540.17	--	--	--	1.66		
		47)	CEC Entertainment Co LLC	01/16/14	1,309.96	8.06	15.69	1.59	1.65		
		48)	Krispy Kreme Doughnuts	05/09/16	1,296.16	19.35	25.56	2.48	4.06		
		49)	PF Chang's China Bistro I	05/01/12	1,164.71	9.86	31.78	.94	2.07		
		50)	KFC Holdings Malaysia Bh	12/14/11	1,023.34	--	14.66	1.21	1.90		
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Transaction Multiples

These are comparable transactions & their valuation!

Typically, comparable transactions are for targets in the same industry & of similar size.

Transaction Multiples:

TV/EBITDA

TV/EBIT

TV/Revenue & TV/Total Assets

Transaction Value/EBITDA

TV / EBITDAX

$$\text{Transaction Value} = \text{Ent. Value} + \text{Non-oper cash}$$

$$\text{Ent. Value} = \text{Transaction Value} = \boxed{\text{Market Value of Equity} + \text{Assumed Liabilities}} - \text{Non-operating Cash}$$

9. Trading Comps

Target	1) Sonic Corp SONC US Px USD 43.49 Retail-Restaurants	Acquirer	2) Inspire Brands Inc 0208044D US Retail-Restaurants	Currency	USD	Announcement	09/25/18	Transaction Value	2,263.08M
Details	Trading Comps								
11) Summary	Compare trading multiples against comparable companies (Bloomberg Comps from RV). Both Bloomberg Comps and multiples are as of deal announcement date.								
12) Timeline									
13) Parties	☒ Median ☐ Average ☐ Min ☐ Max								
14) Structure									
15) Financing									
16) Advisers									
17) Approvals									
18) Sources/News									
Comps									
19) Deal Comps									
20) Trading Comps									
Markets									
21) Arbitrage									
ID	178276891								

Note also "TTM"
→ it means trailing
twelve months;
e.g. if we pulled data
in Oct 2018, it will

These are the valuations for the targets' competitors
Note the use of Enterprise Value (EV) defined as
Firm Value - Non-operating Cash (or as I like to
call it, the net acquisition cost of the Firm)

Main valuation ratio is $\frac{EV}{TTM \text{ EBITDA}}$

so covering EBITDA
from Oct/17 through Sep/18

10. Arbitrage



(we will further discuss the definition of merger arbitrage in class)

when the gross spread $\uparrow \Rightarrow$
 $\Rightarrow$ that indicates that the merger does not appear likely to happen (why? $\rightarrow$ because if more arbitrageurs view the deal as likely to complete, then they will bid up the price $\Rightarrow$ and the gross spread can go down)

Note the gross spread calculation

$$\text{Gross Spread} = \frac{\text{Offer Price} - \text{Buy Price}}{\text{Buy Price}}$$

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

- Class I (3) 2020 elect
- 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
Contrail A
Seagate } mandatory
reports
for 3 case studies

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 →
- ✓ — flip-over

e.g. Comrail 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.

↓
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.

Make-up Quiz #1 (Week #1) for FIN 5372

Question #1 (1 pts)

Which of the following causes is NOT an economic rationale for a merger or an acquisition?

- ✓ A. Purchasing overvalued assets
- B. Managerial self-interest to acquire a firm
- C. Diversification
- D. Market Power
- E. Operating synergies

→ note that purchasing under-valued assets is economically-meaningful strategy

Question #2 (1 pts)

What is the difference between a merger and an acquisition?

- ✓ A. A merger is a contract whereby a new company is created and to effectuate such contract one needs no unanimity among selling shareholders; in contrast, an acquisition is a sales contract whereby one requires unanimity among selling shareholders.
- ✗ B. An acquisition is a contract whereby a new company is created and to effectuate such contract one needs no unanimity among selling shareholders; in contrast, a merger is a sales contract whereby one requires unanimity among selling shareholder
- ✗ C. Mergers and acquisitions are the same conceptual legal format for two firms to merge
- ✗ D. A merger refers to the purchase of a larger firm while an acquisition refers to the purchase of a smaller firm
- E. None of the above answers is correct

Question #3 (1 pts)

What caused the merger wave of 2015-2019?

- A. Deregulation & lax antitrust enforcement
- B. Consolidation & vertical integration
- ✓ C. The advent of globalization
- ✓ D. The expansion of private equity funding
- E. The wide-spread conglomeration

SPAC - more materials on SPACS on Canvas

NSMIA Act, 1996

Question #4 (0.5 pts)

Which of the following causes for bad M&A performance is NOT valid?

- ✓ A. Too low purchase price
- B. Poor due diligence investigation of the target
- C. Poor integration of the target into the existing business
- D. Inadequate protection from transaction risks

Question #5 (0.5 pts)

According to the discussion in the HBS article by Professors Andrade, Mitchell, and Stafford in 2002, cited and discussed in video lecture "Expected Outcomes of M&A", what is the (i) average target premium and (ii) combined return (or synergy) from M&A of two firms in the 1990-1998 period?

- A. Target premium of 34.5% and combined return of 1.6%
- B. Target premium of 47.2% and combined return of 0.1%
- C. Target premium of 37.7% and combined return of 3.2%
- D. Target premium of 3.2% and combined return of 37.7%

Investment Banking Commands on Bloomberg

Investment Banking Commands – Bloomberg Terminal

News		Searches	
TOP	Top BLOOMBERG NEWS stories	EQS	Equity search
READ	BLOOMBERG's most read news	LSRC	Loan search
NI PREMNA	News on rumored deals	SRCH	Bond search
NI LBO	News on deal financing	BBLB	BLOOMBERG law search
NI PREIPO	IPO deal talk and rumors	NSE	News search
NRR	News ranked by readership	RSE	Research for industries, economics, companies
TLOAN	Top loan news	BI	Bloomberg industries analysis and data
TOP FIN	Top financial news	FSRC	Hedge and mutual fund search
TOP DEAL	Top corporate news	BMAP	Search for energy assets, mines, vessels, utilities
NI WNEWS	Who is in the news	PEOP	Search for people with BLOOMBERG profiles
BRIEF	Bloomberg Brief newsletters		
Market Monitors		Forecasts	
WEI	World equity indices	OUTL	BLOOMBERG NEWS economic surveys
BTMM	US treasuries and money markets	CPF	Commodity price forecasts
WB	World bond markets	CMSE	Monitor commodity market sentiments
IMAP	Intraday market map	FXFC	Access FX rate forecasts
FWCM	Forward interest rate matrix	ECFC	Economic forecasts
EA	Earnings season analysis	BYFC	Bond yield forecasts
MA	Global M&A transactions		
CMDS	Commodity markets	Market Returns	
WCDS	Global CDS pricing	MRR	10 best/worst performing stocks in an index
CMBO	Key commodity price and volatility data	WEIS	Global equity indices returns
FXGN	Major currency markets live	WGRS	Rank 10 best/worst performing currencies
FXIP	BLOOMBERG FX homepage	WBIS	Rank returns of selected bond indices
RATT	Credit rating upgrade/downgrade ratio	CRR	Commodity ranked returns
BLP	Start BLOOMBERG LAUNCHPAD™	FPC	Compare fund returns over time
Calendar & Statistics		Market Movers	
EYTS	Conference calls and transcripts	*MOV	Index movers
ACDR	Earnings announcement calendar	MMAP	Market map for global market sectors
IPO	Equity offerings search and monitor	CMCX	UBS BLOOMBERG CMCI
NIM	New bond and equity offerings	CRB	Reuters/Jefferies Commodity Index
WE	Key economic data worldwide	CMOV	Rank best/worst CDS performers by sector
WEX	Top CEO compensation figures		
Economics		League Tables	
ECO	Global economic releases	LEAG	Underwriter/legal adviser rankings
ECOF	Economic data finder	RANK	Broker-reported equity trading ranking
ECOW	Chart economic data	LMX	Underwriter/legal adviser rankings
LEAD	Leading economic indicators	LTGP	Top loan underwriter rankings
BLS	Historical employment data by super sector	MA	Merger advisor search engine
GEW	Global economic watch	WHF	Best hedge fund players snapshot
		WMF	Best mutual fund players snapshot
		LALT	Legal adviser rankings

Company Analysis

*DES	Fundamental and financial data
*BQ	Composite quote and key price/trade ratios
*MGMT	Executives, board, interlocking relationships
*MGSN	Management snapshot
*PGEO	Product and geographic analysis
*PPC	Product peer comparison
*SPLC	Supply Chain Analysis
*CAST	Company capital structure
*RELS	All related securities and expenditures
*CCM	Company capital market
*CACS	Corporate actions
*FA	Financial statements, key ratios, industry data
*RV	Comparable company analysis
*RVR	Relative value ranking
*GF	Graph financial values and ratios
*WACC	Weighted average cost of capital
*DDM	Dividend discount model
*CRVD	Credit relative value
*CDSH	CDS spread rate history
*DDIS	Company's debt maturity profile
*COV	Covenant/default info on debtholders
*RVRD	Relative debt value ranking

Company Earnings

*EM	Reported earnings and estimates
*EEB	Best consensus estimates
*EEO	Consensus estimates overview
*GUID	Company's own estimates
*ERN	Graph and monitor EPS summaries

Charts

*GIP	Graph intraday prices
*IGPV	Multiple intraday chart with volume
*GP	Graph historical closing prices for a security
*RG	Graph/compare historical equity returns
*RVG	Relative value graph
*G	Multiple security relative charts
GRAPH	All chart-related functions menu

Company News/Research

*CN	Security-specific news
*MCN	Most read news stories
*EVT	Conference calls and transcripts
*ANR	Equity analysts' recommendations
*BRC	Research reports for a specific company

Risk Analysis

*RSKC	Evaluate a company's health
*CRPR	Credit ratings
*GRAT	Company rating, valuation by BLOOMBERG
*GV	Graph volatility
*PC	PEER correlations
*HVT	Historical volatility table
*TRMS	Term structure of volatility
*SKEW	Option volatility skew

Holders/Holdings

*OWN	Security holders ownership analysis
*GPTR	Graph insider transactions
HDSM	Holders' matrix
*PHDCS	Holdings search, company holdings
*AGGD	Debt holders aggregated
FLNG	Search for 13F filings

Legal/Regulatory Filings

*CF	Search all company filings
*EDFS	Free-text EDGAR searches and alerts
*LITI	Company litigation summaries
BLAW	Legal resources menu
SEC	SEC acts and rules menu

Miscellaneous

BERRY	BLOOMBERG info on your BlackBerry®
MSGM	Message-related functions menu
SPDL	Create/organize your contact list for MSG
DINE	Find restaurants and reviews
FLY	Find flight information