

Mergers & Acquisitions: The Good, The Bad, and The Ugly

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ACG Webinar
October 20, 2016

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Agenda

- M&A Returns & Acquirer Fundamentals
- Results of the Study – Factor Analysis/Model Building
- Lessons Learned – A Summary

Acquirer Returns/Fundamentals

Methodology

Look only at acquisitions with total value greater than 5% of total enterprise value.

(If TEV is negative use equity value of acquisition to market cap.)

Fundamentals and returns are all relative to industry peers.

Equal weighting of all company fundamentals/returns.

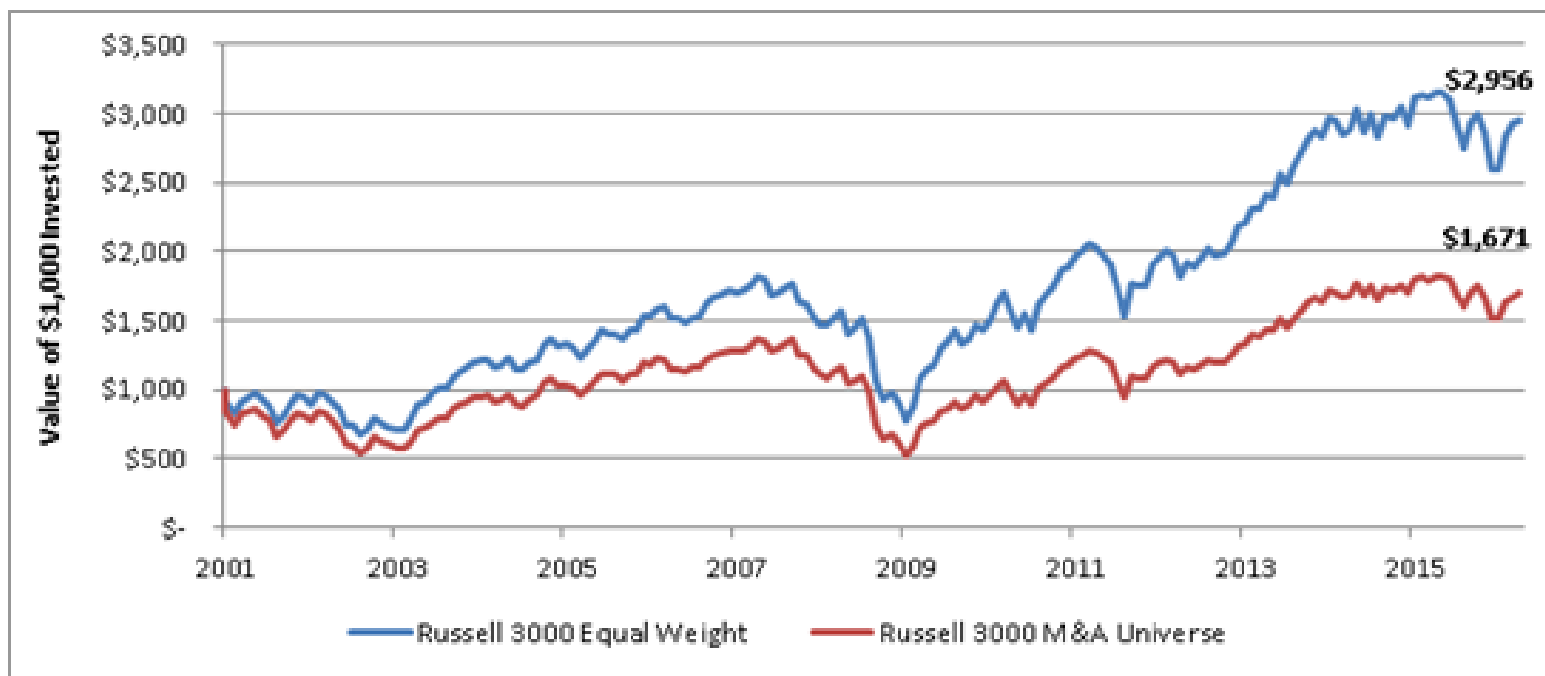
Examine M&A characteristics/returns 1 year prior to close to 3 years post-close.

Data source: S&P Global Transactions Database

M&A Returns

**As a group, M&A acquirers underperform industry peers.
Russell 3000 7.3% Compound Annual Growth (CAGR), Russell 3000
M&A 3.5% CAGR.**

Hypothetical Value of \$1,000 Invested, Equal Weighted Russell 3000 vs. M&A Universe –
January '01 to April '16



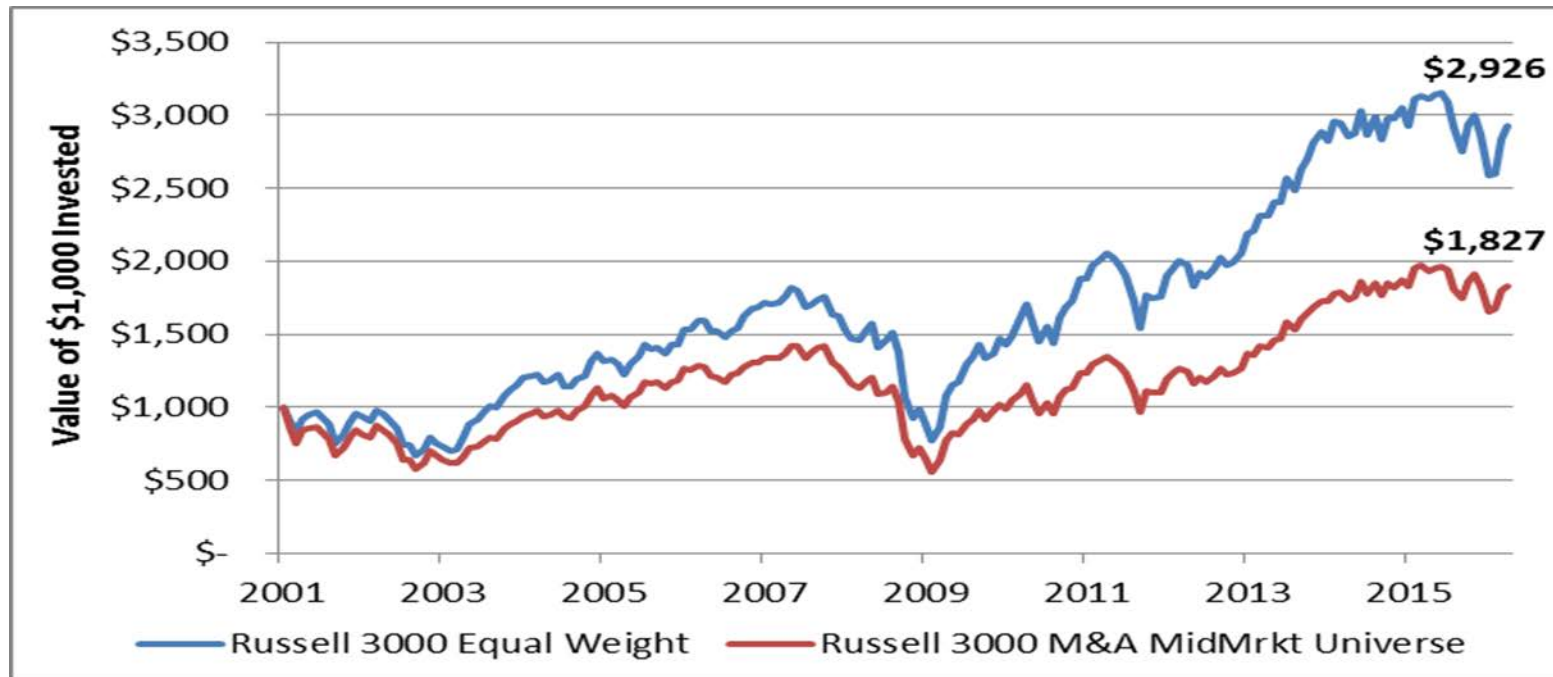
Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. As of August 18, 2016.

M&A Returns – ‘Middle Market’ Acquisitions

Middle Market = total deal value between \$100mm and \$800mm.

Russell 3000 7.3% CAGR, Middle Market M&A 4.2% CAGR.

Hypothetical Value of \$1,000 Invested, Equal Weighted Russell 3000 vs. Russell 3000
‘Middle Market’ M&A Universe – January ‘01 to April ‘16



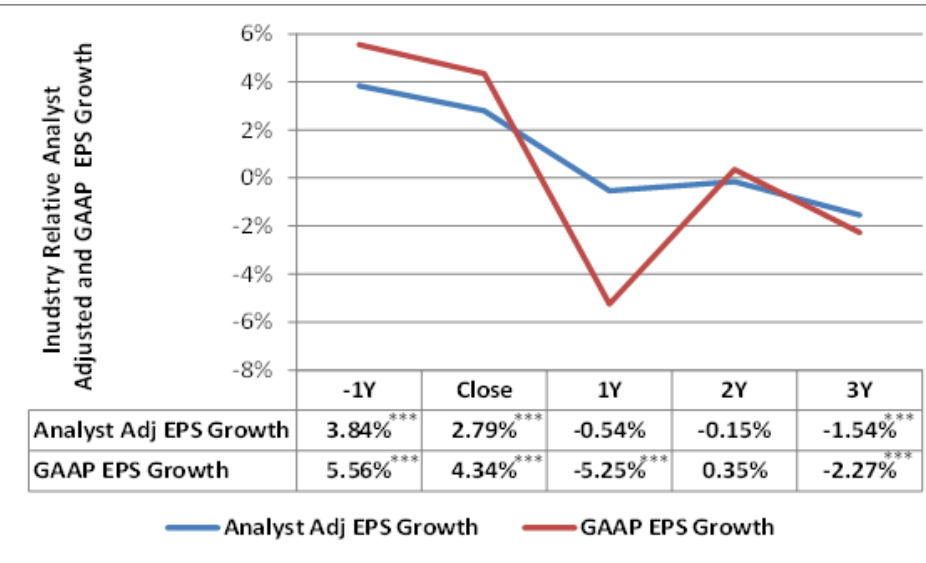
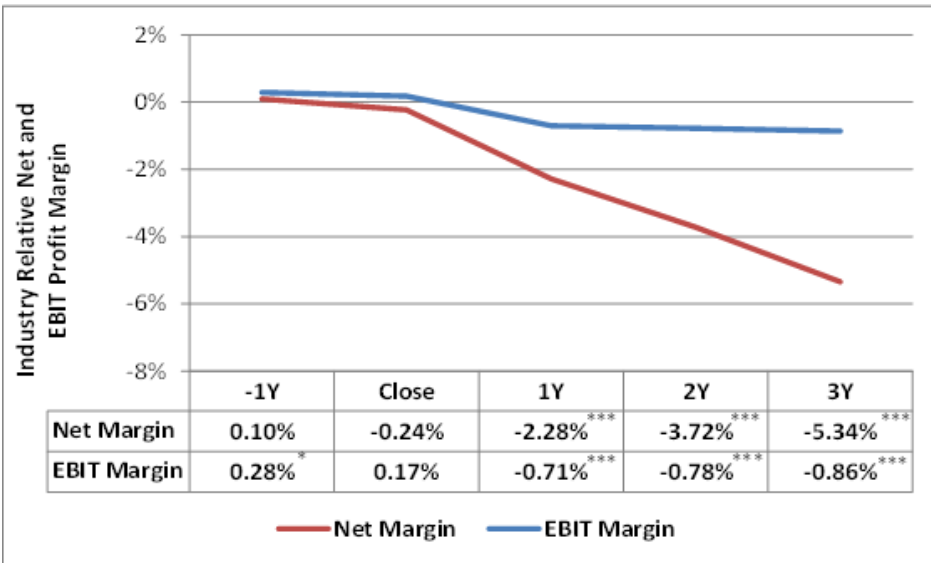
Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. As of September 30, 2016.

Returns Reflect Fundamentals (or Where are the Synergies?)

Profit margins decline in the three years post-acquisition.

Earnings growth also deteriorates significantly post-acquisition.

Russell 3000 M&A Industry Relative Profit Margins and EPS Growth – January 2001 to May 2013 Close Dates



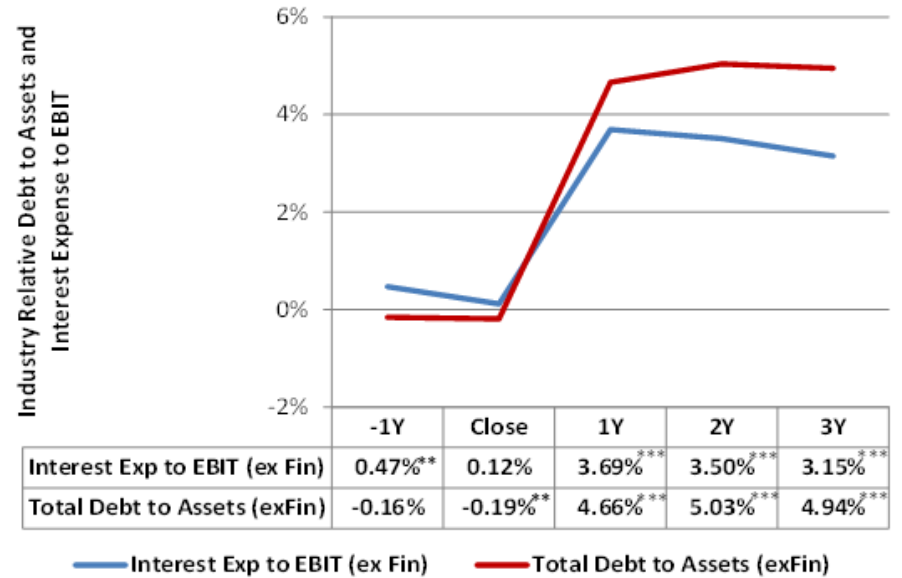
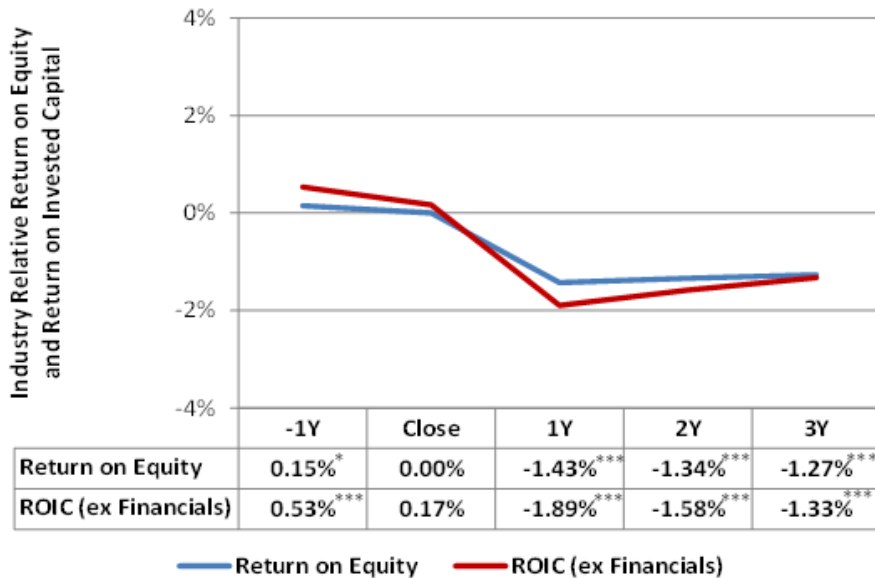
*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Source: S&P Global Market Intelligence Quantamental Research. Data as of August 18, 2016.

Fundamentals Ratios Fall as Debt Rises

Post-acquisition returns are hurt by significant increases in both debt and interest expense.

Russell 3000 M&A Industry Relative Profitability, Debt to Assets, and Interest Expense to EBIT– January 2001 to May 2013



*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Source: S&P Global Market Intelligence Quantamental Research. Data as of August 18, 2016.

Factor Analysis & Modeling

Identifying M&A Factors (Signals)

Regression analysis used to isolate deal-related/fundamental factors that have a strong relation to post-M&A acquirer returns.

Four factors identified: % Stock, Asset Growth, Change in Shares, Cash to Assets

Panel Regression: 1-Year Forward Returns vs. Various Factors – January 2001 to May 2013

	Intercept	Deal Value %	% Stock Consid	Asset Growth	1Yr Chg Shrs	Cash to Assets	Cash ROIC	ROA	Adj R ²	Observations
1-Year Forward Return - Stock minus Market	-3.14%*** (-6.6)	-1.34%* (-2.2)							0.07%	7,324
	-1.80%*** (-3.7)		-11.58%*** (-8.2)						0.92%	7,324
	-2.82%*** (-6.2)			-3.76%*** (-5.9)					0.47%	7,324
	-3.17%*** (-7.0)				-3.58%*** (-4.1)				0.23%	7,324
	-3.37%*** (-7.6)					-8.82%*** (-3.2)			0.14%	7,324
	-3.61%*** (-8.2)						12.23%*** (3.5)		0.17%	7,324
	-3.57%*** (-8.1)							10.03%** (2.2)	0.06%	7,324
	-1.16%** (-2.3)		-10.48%*** (-7.4)	-2.63%*** (-3.9)	-1.96%** (-2.2)	-6.17%** (-2.2)	5.89%* (1.7)		1.42%	7,324
	-1.05%** (-2.1)		-10.75%*** (-7.6)	-2.71%*** (-4.0)	-2.05%** (-2.2)	-6.61%** (-2.4)			1.39%	7,324
	-1.00%* (-1.9)	-0.51% (-0.8)	-10.47%*** (-7.3)	-2.56%*** (-3.8)	-2.02%** (-2.2)	-6.36%*** (-2.3)	7.46%* (1.8)	-4.60% (-0.8)	1.37%	7,324

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Source: S&P Global Market Intelligence Quantamental Research. Data as of August 18, 2016.

Consideration Paid: Stock vs. Cash

Acquirers that use the highest % of stock consideration underperform peers by 8% over three years.***

Why?

- Timing: Stock deals are often done near market tops.
- Lack of Discipline: The use of overvalued stock as currency may encourage questionable deal making.

*** Significant at the 1% level.



Asset Growth

Acquirers with the highest % of yr./yr. asset growth pre-close, underperform peers by 13% over three years.***

Why?

- The “asset growth anomaly” is well-known (e.g., Frank Zhao/Li Ma “[Behind the Asset Growth Anomaly](#)” June 2013).
- High growth in assets may signal over-expansion.

*** Significant at the 1% level.



Change in Shares

M&A companies with the largest one-year increase in shares underperform by 12% over three years.***

Why?

- These may be companies that have engaged in multiple stock acquisitions.
- Current shareholders are diluted / the rise in share count may signal over-expansion.

*** Significant at the 1% level.



Source: simpleicons.com

Cash to Assets

Acquirers with the highest pre-acquisition cash balances underperform by 10% three years post-acquisition.***

Why?

- Lack of Discipline: Like over-valued stock, too much cash on the books may lead to ill-considered deal making.
- Sector Effects: May also reflect fact that info tech deals don't do well in general.

*** Significant at the 1% level.



A Multi-Factor Model

Model uses five factors: four factors previously discussed plus percent deal value.

(% deal value is used to boost the performance of % stock consideration factor.)

Factors equal-weight, except % stock consideration is double-weighted.

Portfolio looks back 365 days (all acquirers with cumulative deal value > 5% of TEV/Mcap). Returns calculated one month forward.

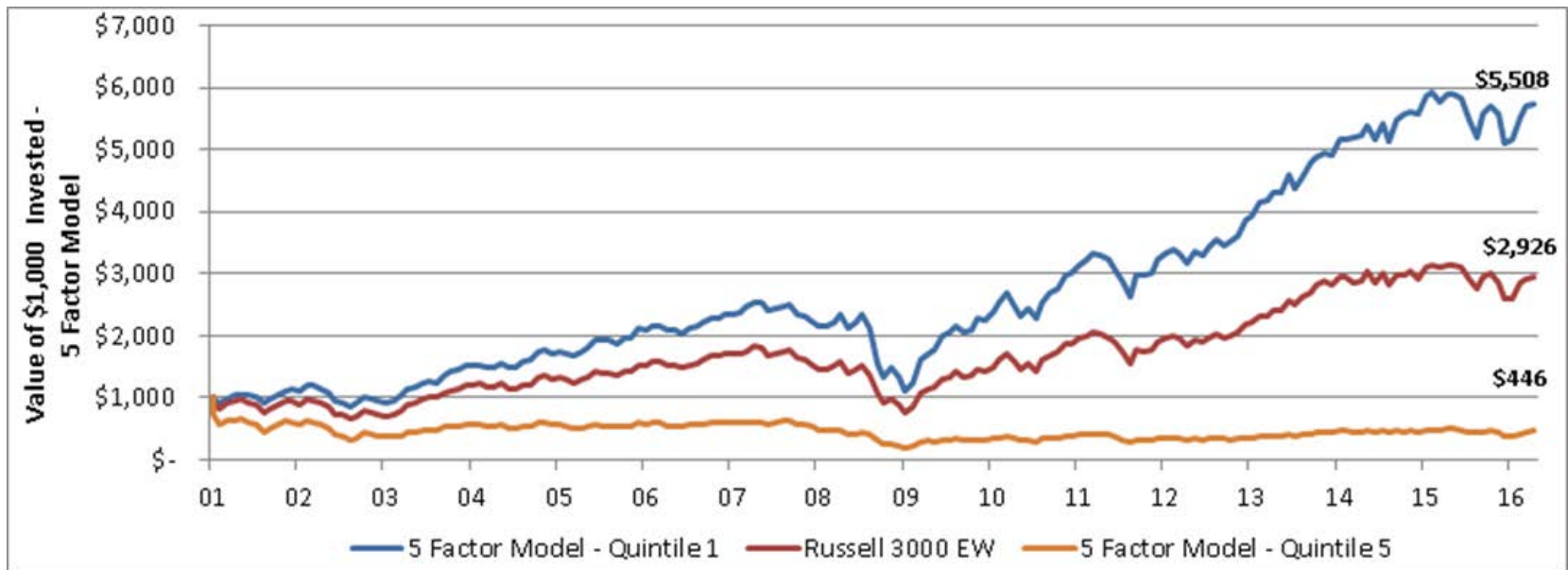
Quintiles – sorted into five buckets by model rankings.

Model Performance

Benchmark 7.3% CAGR, Quintile 1, 12.1%, Quintile 5, a -4.9%.

Hit Rates Quintile 1, 64.1%, Quintile 5, 33.7%.

Value of \$1,000 Invested Russell 3000 5 Factor Model, Top and Bottom Quintiles – Unadjusted Returns vs. Equal-Weighted Russell 3000 Returns, January 2001 to April 2016 Close Dates



Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. As of August 18, 2016.

Lessons Learned (Summary)

What to Look for in a Deal

- **All or mostly cash.**
- **Not funded by a large increase in debt.**
- **Acquirer is undergoing “controlled growth.”**
 - **Moderate asset growth.**
 - **Modest share count increases.**
- **Valuation makes sense; deal not justified solely on large expected synergies.**
- **Ideally done when market/economic conditions are poor.**
 - **“Buy during a downturn.”**
- **Experience – frequent small deals / infrequent large deals.**

What to Avoid in a Deal

- **All or mostly stock.**
- **Done with inflated currency near the top of a market.**
- **Acquirer is growing rapidly; current investors are being diluted.**
- **High valuation multiples are downplayed due to large expected synergies.**

S&P Global Market Intelligence Solutions

Data and Analytics Leveraged for This Research

Transactions Database

Our Transactions database provides detailed information on M&A and financing transactions covering the most active markets in the world. We track all publicly announced mergers, acquisitions, private placements, public offerings, shelf registrations, equity buybacks and bankruptcies. Information is seamlessly integrated in the S&P Global Market Intelligence platform and Excel® Plug-In. The transaction data is updated daily from various sources such as regulatory filings, company websites, newsletters, trade publications, and press releases.

Alpha Factor Library

Built using our Global Point-in-Time database, the Alpha Factor Library facilitates the construction of investment screens and candidate lists from a catalog of alpha signals. Analyze top-down macroeconomic regimes and what's working across 94 countries. Drill down into industry-specific signals and trends and quickly incorporate ideas into your fundamental and quantitative portfolio construction processes. With a focus on new and novel datasets, our team of experienced researchers expands your field of vision to the cutting edge of alpha generation.

Xpressfeed

Xpressfeed is a data feed management solution combining the key strengths of the S&P Capital IQ platform, Compustat and select third-party vendors to deliver financial and non-financial data to help clients enhance their proprietary analytics, financial portals, CRM systems, and more. Xpressfeed's turnkey database loading and maintenance technology provides efficient data delivery and management for robust and useful content in a relational database warehouse.

Thank you

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Audience Poll

M&A Performance Overview

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Performance Of Active Buyers

Most Active Buyers by Number of Transactions – U.S. Deals Closed in Past Three Years

Company Name	Number of Transactions	Annualized Third-Year % Change
Alphabet Inc. (NasdaqGS:GOOGL)	39	21.15%
Team Health Holdings, Inc. (NYSE:TMH)	28	-7.13%
The Ensign Group, Inc. (NasdaqGS:ENSG)	24	-1.03%
MEDNAX, Inc. (NYSE:MD)	22	9.23%
International Business Machines Corporation (NYSE:IBM)	21	-2.84%
Yahoo! Inc. (NasdaqGS:YHOO)	21	7.32%
Lithia Motors Inc. (NYSE:LAD)	19	10.28%
Microsoft Corporation (NasdaqGS:MSFT)	19	22.18%
Twitter, Inc. (NYSE:TWTR)	19	-18.48%
Arthur J Gallagher & Co. (NYSE:AJG)	18	4.65%

Most Active Buyers by Total Size – U.S. Deals Closed in Past Three Years

Company Name	Total Size (\$mm)	Annualized Third-Year % Change
Verizon Communications Inc. (NYSE:VZ)	135,154.2	5.29%
Illumina Inc. (NasdaqGS:ILMN)	99,999.0	24.62%
Kinder Morgan, Inc. (NYSE:KMI)	86,122.0	-9.97%
Charter Communications, Inc. (NasdaqGS:CHTR)	78,881.5	29.37%
AT&T, Inc. (NYSE:T)	75,604.2	10.11%
The Kraft Heinz Company (NasdaqGS:KHC)	55,032.0	n/a
Berkshire Hathaway Inc. (NYSE:BRK.A)	48,161.5	8.11%
Pfizer Inc. (NYSE:PFE)	38,364.8	7.26%
AbbVie Inc. (NYSE:ABBV)	29,274.6	12.49%
Reynolds American Inc. (NYSE:RAI)	28,459.9	36.04%

Source: S&P Global Market Intelligence October 12, 2016. Past performance is not indicative of future results.

Most Active Buyers/Investors – LTM Middle Market M&A

Most Active Buyers/Investors by Numbers of Transactions

Company Name	Number of Transactions	LTM % Change
Installed Building Products, Inc. (NYSE:IBP)	8	33.94%
Patrick Industries Inc. (NasdaqGS:PATK)	6	45.78%
Green Plains Inc. (NasdaqGS:GPPE)	5	33.03%
Salem Media Group, Inc. (NasdaqGM:SALM)	4	4.72%
Amedisys Inc. (NasdaqGS:AMED)	3	19.00%
Blackhawk Network Holdings, Inc. (NasdaqGS:HAWK)	3	-30.66%
Capital Senior Living Corp. (NYSE:CSU)	3	-28.90%
Carrols Restaurant Group, Inc. (NasdaqGS:TAST)	3	2.00%
ClubCorp Holdings, Inc. (NYSE:MYCC)	3	-35.18%
Farmland Partners Inc. (NYSE:FPI)	3	3.85%
	Average	4.76%

Most Active Buyers/Investors by Total Transaction Size

Company Name	Total Transaction Size (\$mm)	LTM % Change
NeuStar, Inc. (NYSE:NSR)	670.0	-10.73%
Kinder Morgan, Inc. (NYSE:KMI)	592.0	-32.86%
Pandora Media, Inc. (NYSE:P)	577.0	-32.11%
Valero Energy Partners LP (NYSE:VLP)	563.2	-8.97%
NuVasive, Inc. (NasdaqGS:NUVA)	508.0	28.37%
Calpine Corp. (NYSE:CPN)	499.9	-19.45%
Penske Automotive Group, Inc. (NYSE:PAG)	498.7	-7.05%
Celgene Corporation (NasdaqGS:CELG)	485.0	-13.57%
Comtech Telecommunications Corp. (NasdaqGS:CMTL)	481.7	-47.50%
Gannett Co., Inc. (NYSE:GCI)	472.6	-22.76%
	Average	-16.66%

Source: S&P Global Market Intelligence October 12, 2016. Past performance is not indicative of future results.

Transactions Above \$10 Billion Where Buyer Is Smaller Than Target

Announced Date	M&A Closed Date	Target	Total Transaction Value (\$mm)	Buyers/Investors	Acquirer Market Cap 1-Day Prior (\$mm)	% change
05/26/2015	05/18/2016	Time Warner Cable Inc.	78,746.5	Charter Communications, Inc. (NasdaqGS:CHTR)	19,653.62	17.78%
08/10/2014	11/26/2014	Kinder Morgan Energy Partners, L.P.	62,632.74	Kinder Morgan, Inc. (NYSE:KMI)	37,139.42	-45.48%
12/14/2015	04/15/2016	Jarden Corp.	19,031.08	Newell Brands Inc. (NYSE:NWL)	12,094.29	16.69%
10/21/2015	05/12/2016	SanDisk Corp.	19,728.02	Western Digital Technologies, Inc.	17,310.84	55.40%
11/17/2014	03/17/2015	Allergan, Inc.	72,915.63	Actavis plc	64,613.92	-21.09%
05/28/2015	02/01/2016	Broadcom Corporation	36,949.59	Broadcom Limited (NasdaqGS:AVGO)	36,273.65	28.15%

Source: S&P Global Market Intelligence October 12, 2016. Past performance is not indicative of future results.

Leading Closed U.S. M&A Deals (LTM) Anticipated Earnings Growth Of Top Buyers

Announced Date	Target	Total Transaction Value (\$mm)	Buyers	EPS 2016E	EPS 2017E	% change	Sector CY 2017E Earnings % Change
05/26/2015	Time Warner Cable Inc.	78,746.5	Charter Communications, Inc. (NasdaqGS:CHTR)	3.64	5.77	58.52%	11.67%
10/12/2015	Dell EMC	75,716.5	Dell Technologies Inc. (NYSE:DVMT)	n/a	n/a	n/a	12.83%
12/11/2015	E. I. du Pont de Nemours and Company (NYSE:DD)	72,834.7	The Dow Chemical Company (NYSE:DOW)	3.51	4.00	13.96%	15.71%
05/18/2014	DIRECTV, LLC	70,290.3	AT&T, Inc. (NYSE:T)	2.85	3.01	5.61%	11.67%
08/10/2014	Kinder Morgan Energy Partners, L.P.	62,632.7	Kinder Morgan, Inc. (NYSE:KMI)	0.69	0.76	10.14%	294.13%
03/25/2015	Kraft Foods Group, Inc.	55,032.0	The Kraft Heinz Company (NasdaqGS:KHC)	3.25	3.99	22.77%	10.20%
06/20/2015	Cigna Corp. (NYSE:CI)	53,075.0	Anthem, Inc. (NYSE:ANTM)	10.87	11.87	9.20%	9.67%
07/03/2015	Humana Inc. (NYSE:HUM)	39,352.4	Aetna Inc. (NYSE:AET)	8.05	8.88	10.31%	9.67%
08/10/2015	Precision Castparts Corp.	37,916.7	Berkshire Hathaway Inc. (NYSE:BRK.A)	7.29	7.93	8.78%	5.78%
04/28/2016	St. Jude Medical Inc. (NYSE:STJ)	30,174.8	Abbott Laboratories (NYSE:ABT)	2.20	2.44	10.91%	9.67%

Source: S&P Global Market Intelligence October 12, 2016. Past performance is not indicative of future results.

Cash-Rich Companies Acquisitions

Company Name	Total Cash & ST Investments (\$mm)	Long-term Investments	Total (\$mm)	Acquisitions in the Past 3 Years
Apple Inc. (NasdaqGS:AAPL)	41,995.0	164,065.0	206,060.0	24
Microsoft Corporation (NasdaqGS:MSFT)	113,036.0	10,438.0	123,474.0	38
Alphabet Inc. (NasdaqGS:GOOGL)	71,926.0	5,183.0	77,109.0	55
Cisco Systems, Inc. (NasdaqGS:CSCO)	65,767.0	1,369.0	67,136.0	22
Oracle Corporation (NYSE:ORCL)	56,125.0	122.0	56,247.0	21
General Electric Company (NYSE:GE)	10,372.0	31,973.0	42,345.0	6
Yahoo! Inc. (NasdaqGS:YHOO)	5,857.0	34,972.0	40,829.0	26
Pfizer Inc. (NYSE:PFE)	23,292.0	16,834.0	40,126.0	13
Johnson & Johnson (NYSE:JNJ)	38,384.0	1,514.0	39,898.0	1
Chevron Corporation (NYSE:CVX)	11,332.0	27,110.0	38,442.0	0

Source: S&P Global Market Intelligence October 12, 2016. Past performance is not indicative of future results.

Thank you

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S&P Global

Market Intelligence

Q&A

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