

Capital Market Implications of Spinoffs

Recent enhancements to S&P Global Market Intelligence's S&P Capital IQ platform include click-through capabilities for spinoff activities. Now professionals have the capability of drilling-down into spinoff details.

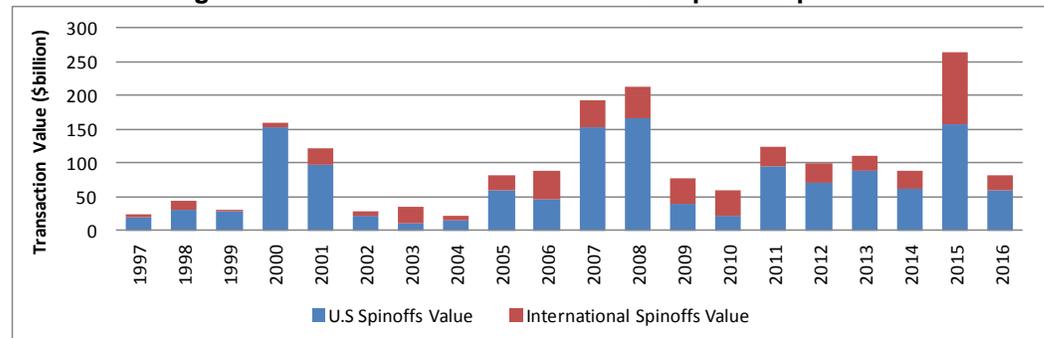
Spinoff activities have picked up in recent years; in 2015, more than \$250 billion worth of spinoff transactions were closed globally (Figure 1), the highest level in the last 20 years.

Authors

Li Ma, CFA
Quantamental Research
312-233-7124
lma@spglobal.com

Temí Oyeniya, CFA
Quantamental Research
312-233-7151
toyeniya@spglobal.com

Figure 1 Total Transaction Value of Completed Spinoffs



Source: S&P Global Market Intelligence Quantamental Research. Data as of 03/05/2017.

This report analyzes the short- and long-term performance of spun-off entities and their parent companies in the U.S and international markets. We also examine a related but distinct corporate restructuring activity – equity carve-outs, which separate a subsidiary through a public offering. The main findings of this research include:

- **Within the U.S., spun-off entities generated long-term outperformance after the spinoff.** In the 1-year (3-year) period following the closing date, spun-off entities outperformed their industry peers by a cumulative 8.39% (22.08%) on average, despite underperforming by more than 2% in the initial 30 days.
- **In the U.S., parent companies outperformed their industry peers between the announcement date and closing date.** The average daily excess return was 5 basis points, significant at the 5% level. Over the three-year period following the closing date, only parents that divested subsidiaries in a different industry¹ showed outperformance.
- **Outside the U.S., spun-off entities and their parents demonstrated similar return patterns as those in the U.S.**
- **Carve-outs are difficult to profit from, unless the investor participates in the initial stock offering.** On average, the first day price jump over the offering price was 21.48% (62.22%) above industry mean in the U.S. (outside the U.S.). Long-term excess returns of carve-outs were not statistically significant.
- **A strategy of buying U.S. companies that were spun off in the past three years outperformed the market by 0.48% per month between 1998 and 2016.**

¹ Industries were determined using the Global Industry Classification Standard (GICS) 6-digit code. See

Appendix A for more details on the Global Industry Classification Standard.

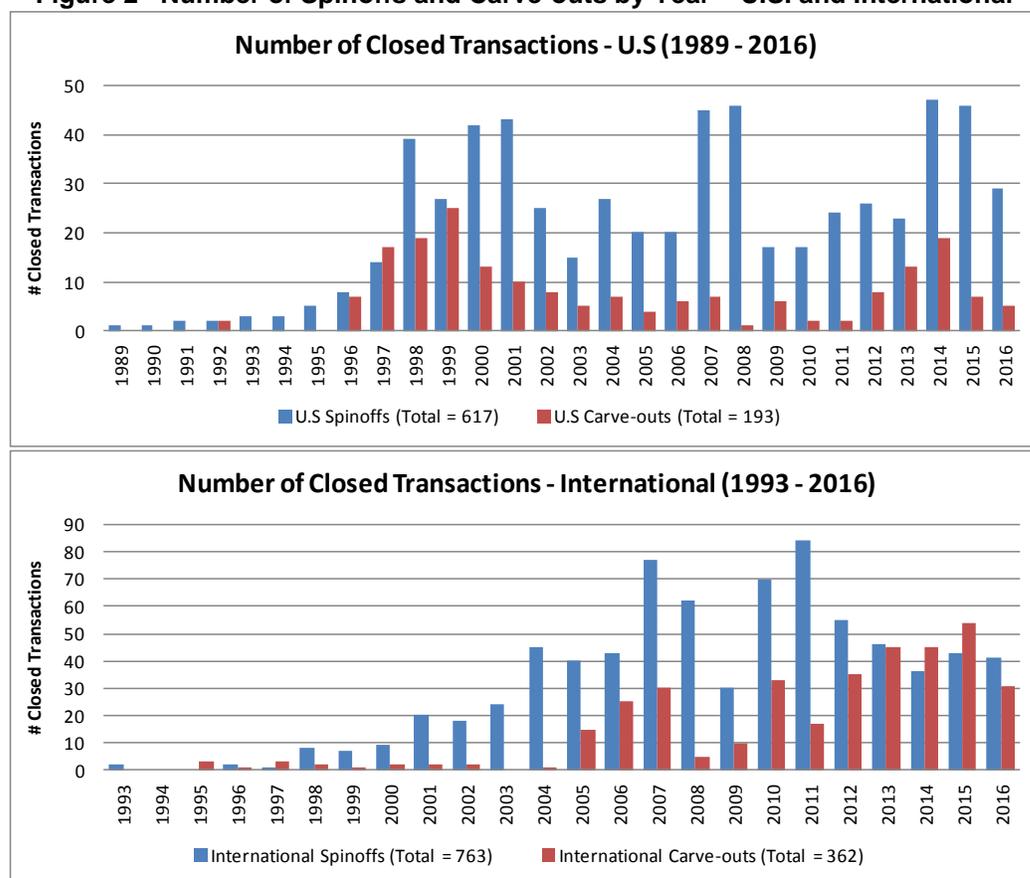
1 Introduction

A spinoff occurs when a parent company distributes the shares of a subsidiary pro-rata among its shareholders. Following the spinoff, the subsidiary trades as a separate public company, and the shareholders of the parent hold shares in both companies. As a result of tax-free treatments in the U.S., spinoffs have been a popular method of divestiture. Studies have found that companies involved in spinoffs tend to outperform. Miles, et al. (1983) documented a positive announcement effect on the parent company's stock price. McConnell, et al. (2004) showed economically significant long-term excess returns for spun-off entities following the closing date.

While previous research has focused largely on the U.S. market due to data availability, in this report we extend the analysis to international markets, leveraging S&P Global Transactions data. This research also examines carve-outs, another form of corporate restructuring. In a carve-out, the parent company sells a portion of a subsidiary through a public offering, thus receiving cash and incurring taxes upon the sale. Unlike in a spinoff, the parent typically retains substantial ownership in the carved out entity.

Figure 2 shows the number of spinoff (blue bars) and carve-out (red bars) transactions by calendar year available in the database. Spinoffs are more prevalent in the U.S. than carve-outs (top chart), while carve-outs have caught up with spinoffs outside the U.S. in recent years (bottom chart). A regional breakdown of spinoff/carve-out transactions in international markets (Appendix B) shows that the Asia/Pacific region is the largest contributor to the total number of deals outside the U.S.

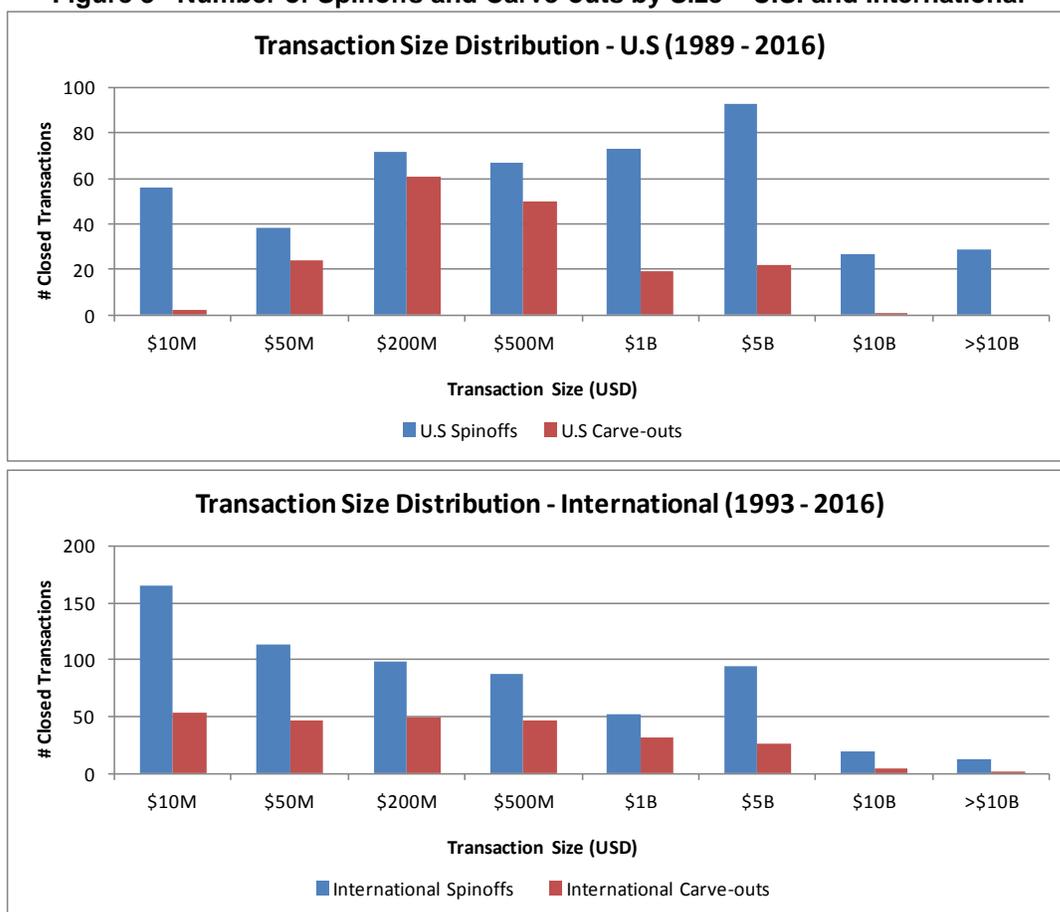
Figure 2 Number of Spinoffs and Carve-outs by Year – U.S. and International



Source: S&P Global Market Intelligence Quantamental Research. Data as of 03/05/2017.

Figure 3 shows the distribution of spinoffs/carve-outs by transaction size for the U.S. and international markets. In the U.S. (top chart), spinoffs tend to be larger, with nearly one-third of all transactions above \$1 billion dollars. Carve-outs, by contrast, tend to be smaller, with three-quarters of all carve-outs below \$500 million. Transactions outside the U.S. tend to be smaller in size (bottom chart).

Figure 3 Number of Spinoffs and Carve-outs by Size – U.S. and International



Source: S&P Global Market Intelligence Quantamental Research. Data as of 03/05/2017.

2 Do Spinoffs Create Value?

Using an event study framework, we examine the short- and long-term performance of spinoff entities, as well as their parents following the transaction closing date for both U.S. and international markets. A spinoff is considered a U.S. transaction if the spun-off entity is traded on a U.S. exchange. We also examine the performance of parent companies between the announcement date and closing date. All returns are calculated in excess of GICS 6-digit industry level average within the Russell 3000 Index for the U.S. and S&P Global Broad Market Index (“BMI”) excluding U.S. for international markets². To ensure that a security has at least one year of pricing data after the closing date, we focus on transactions closed before the end of 2015.

2.1 U.S. Spinoffs

Table 1 summarizes the industry excess returns for all U.S. spinoffs between 1989 and 2015. The top half of the table shows the average cumulative industry excess returns

² See Section 5 for more details on data and methodology.

following the closing date for the spun-off entities, along with their hit rate³. The bottom half shows the same information for the parents, in addition to the average daily excess return between the announcement and closing date in the first column.

Table 1 Industry Excess Returns for U.S. Spinoffs (1989 – 2015)

		All Events (N = 516)						
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-1.37%***	-2.28%***	1.18%	3.29%*	8.39%***	10.20%**	22.08%***
Hit Rate		39.5%***	42.9%***	51.2%	54.1%*	53.1%	49.6%	48.9%
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.05%**	0.24%	-1.36%*	-1.39%	-0.39%	3.28%	-2.20%
Hit Rate		54.9%*	53.8%	43.4%***	44.5%**	47.3%	48.4%	43.9%**

*** 1% level of significance; ** 5% level of significance; * 10% level of significance⁴

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

Spun-off entities initially underperformed their industry peers. The cumulative excess return was -2.28% in the first month after the spinoff, significant at the 1% level. This initial underperformance could be due to selling pressure from index funds that have to dispose their holdings in spun-off entities not included in a tracked index, or from institutional investors complying with mandates that specify the characteristics of holdings such as dividends or market capitalization thresholds. **Over the long term, spun-off entities outperformed the industry.** The one-year excess return following the closing date was 8.39% on average, significant at the 1% level. Spun-off entities continued to generate positive excess returns in the 2-year and 3-year period after the spinoff.

Parent companies experienced positive announcement effects. The average daily industry excess return was 5 basis points (bps) between the spinoff announcement and closing date, significant at the 5% level. This suggests that market participants view spinoffs as positive news as this action may enable the parent company to be more focused on its core operations post divestiture. Long-term performance after the closing date did not demonstrate statistical significance.

2.1.1 Does Transaction Size Matter?

To examine the impact of transaction size on spinoffs, we examined the performance for both parent companies and spun-off entities separated by the transaction size of the spinoff (Table 2)⁵. As with the overall sample, spun-off entities underperformed their industry peers initially, but outperformed over a 1-year period, irrespective of transaction size. Parent companies also yielded positive excess returns between the announcement and closing date, significant at the 5% level in both sub-samples.

³ Hit rate is the percentage of events with a positive excess return.

⁴ This annotation applies to all tables in the paper.

⁵ We chose 500 million U.S. dollars as the threshold for U.S. spinoffs as it breaks the sample into roughly two halves. We confirmed that all calendar years are well represented in both sub-samples to ensure there is no regime bias by using this cutoff.

Table 2 Industry Excess Returns for U.S. Spinoffs by Transaction Size (1989 – 2015)

Transaction Size > \$500M (N = 204)								
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-1.23%***	-1.03%	3.20%**	4.61%**	6.22%*	6.62%	22.30%**
Hit Rate		37.6%***	48.5%	55.4%	57.5%**	52.6%	46.2%	51.8%
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.04%**	0.82%**	-0.48%	-0.73%	1.82%	2.50%	-0.37%
Hit Rate		55.7%	58.4%**	45.7%	44.7%	53.6%	51.9%	49.7%
Transaction Size < \$500M (N = 201)								
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-2.24%***	-4.44%***	-0.50%	1.22%	10.44%**	10.64%	17.79%
Hit Rate		39.4%***	34.7%***	45.3%	50.0%	49.4%	46.7%	42.5%
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.08%**	-0.68%	-2.28%	-2.27%	-1.78%	4.38%	-0.76%
Hit Rate		58.5%**	47.3%	42.3%**	43.3%*	41.6%**	45.3%	41.3%**

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

2.1.2 Cross-Industry and Within-Industry Spinoffs

A frequently quoted motivation for companies carrying out spinoffs is the need to increase corporate focus⁶. To investigate whether a “focus increasing” transaction creates more value, we consider two types of spinoffs:

- Cross-industry spinoffs – transactions in which the parent and spun-off entity belong to different industries (GICS 6-digit level).
- Within-industry spinoffs – transactions where the parent and spun-off entity belong to the same industry.

We use the former type as a proxy for focus increasing transactions, since subsidiaries in a different industry are more likely to be non-core assets for a parent. We examine the performance of both parents and spun-off entities for cross-industry and within-industry spinoffs, respectively, and report the results in Table 3.

Cross-industry spinoffs created more value for parent companies than within-industry transactions did in the U.S. The industry excess return between the announcement and closing date was 7bps per day for parents that spun off a subsidiary in a different industry, significant at the 1% level. The long-term performance following the closing date was positive for parent in cross-industry spinoffs, compared to the negative industry excess returns for those in within-industry spinoffs, albeit not statistically significant. The difference in the cumulative 3-year excess returns between the two groups of parents was 21.68%, significant at the 10% level.

⁶ Daley, et al. (1997)

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Similar to the overall sample, spun-off entities underperformed their industry peers initially and later outperformed in the longer term following the closing date in both cross-industry and within-industry transactions.

Table 3 Industry Excess Returns for U.S. Spinoffs by Focus (1989 – 2015)

Cross-Industry Transactions (N = 233)								
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-1.11%*	-1.56%	3.73%**	5.07%**	8.30%**	11.25%*	20.22%**
Hit Rate		41.3%**	42.7%**	53.2%	57.8%**	52.8%	51.0%	45.2%
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.07%***	0.04%	-0.42%	-0.57%	2.04%	4.44%	2.30%
Hit Rate		55.1%	54.2%	48.5%	46.2%	49.1%	48.4%	45.0%
Within-Industry Transactions (N = 191)								
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-2.10%***	-3.42%***	-0.49%	2.48%	8.47%*	5.70%	28.33%***
Hit Rate		35.4%***	42.3%**	48.9%	51.1%	51.4%	44.5%	53.8%
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.04%	0.79%*	-1.41%	-1.09%	-0.84%	3.35%	-2.95%
Hit Rate		54.7%	54.1%	38.1%***	44.1%	48.3%	50.6%	42.9%

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

2.2 Spinoffs in International Markets

Companies involved in international spinoffs demonstrated similar return pattern as those in the U.S. Table 4 shows that spun-off entities traded outside the U.S. generated negative industry excess returns in the first 6 months after the spinoff, which were statistically significant. However, there was a reversal in performance subsequently and spun-off entities outperformed their industry peers in the 2-year and 3-year window following the closing date. The parent companies yielded positive and significant excess returns between the announcement and closing date, similar to our U.S. findings.

Table 4 Industry Excess Returns in USD for International Spinoffs (1993 – 2015)

All Events (N = 666)								
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-1.12%***	-3.20%***	-2.85%**	-3.46%**	-0.33%	7.08%*	13.71%**
Hit Rate		40.0%***	37.5%***	39.7%***	40.9%***	41.8%***	44.4%**	43.9%**
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.06%***	-0.50%	-2.17%***	-3.13%***	-2.72%*	-0.10%	2.60%
Hit Rate		53.1%	43.6%***	42.2%***	41.2%***	41.2%***	39.7%***	36.7%***

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

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Table 5 summarizes the performance for transactions above and below 100 million U.S. dollars in size⁷. **Spinoff transactions with a size below \$100 million destroy value for both parents and spun-off entities in international markets.** Both parents and spun-off entities underperformed their industry peers in all return horizons we examined, with hit rates significantly below 50%. One possible reason for this observation could be due to the fact that less than 43% of transactions below \$100 million were focus-increasing, cross-industry spinoffs, as opposed to 50% for spinoffs with transaction value larger than \$100 million. We next investigate whether cross-industry spinoffs indeed created value for international parents as we found in the U.S.

**Table 5 Industry Excess Returns in USD for International Spinoffs
By Transaction Size (1993 – 2015)**

Transaction Size > \$100M (N = 258)									
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return	
Average Hit Rate		-0.43% 42.5%**	-1.50% 40.2%***	-0.11% 45.7%	1.48% 46.3%	3.49% 47.2%	11.17%** 52.0%	24.53%*** 51.1%	
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return	
Average Hit Rate		0.07%** 57.6%**	0.14% 48.3%	0.25% 49.4%	0.42% 51.9%	-0.37% 47.7%	-0.67% 44.1%*	3.03% 43.2%*	9.72% 46.9%
Transaction Size < \$100M (N = 266)									
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return	
Average Hit Rate		-2.46%*** 34.4%***	-6.79%*** 30.3%***	-8.79%*** 30.3%***	-12.90%*** 31.1%***	-12.39%*** 32.3%***	-3.72% 35.2%***	-3.87% 35.0%***	
Parent Company	Average Daily Return between Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return	
Average Hit Rate		0.07%* 47.5%	-0.68% 39.6%***	-4.02%*** 37.6%***	-6.09%*** 32.2%***	-5.60%** 33.8%***	-5.60% 31.2%***	-5.67% 26.3%***	-7.73% 25.5%***

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

Table 6 summarizes the performance for cross-industry and within-industry spinoffs, respectively. **Consistent with the U.S. results, we observe a stronger long-term performance for parent companies following the closing date of cross-industry spinoffs in the international markets.** Forward 1-year and 2-year industry excess returns were positive, while those for within-industry spinoffs were negative (although both were not statistically significant). Unlike in the U.S., spun off entities that operated in the same industry as their parents did not produce superior long-term returns relative to their industry after the spinoffs in the international markets.

⁷ As in the U.S., the \$100 million threshold was chosen to break the international sample into roughly two halves. We also confirmed that all calendar years are well represented in both sub-samples to ensure there is no regime bias by using this cutoff.

Table 6 Industry Excess Returns in USD for International Spinoffs By Focus (1993 – 2015)

Cross-Industry Transactions (N = 259)								
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-1.18%**	-3.31%***	-3.17%*	-2.91%	1.07%	8.16%	19.40%**
Hit Rate		40.6%***	34.6%***	39.7%***	43.7%*	45.7%	48.7%	48.3%
	Average Daily Return between							
Parent Company	Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.07%**	-0.57%	-1.25%	-1.83%	-1.20%	2.34%	3.61%
Hit Rate		56.3%*	41.7%**	47.1%	43.5%*	43.8%*	45.7%	41.6%**
Within-Industry Transactions (N = 302)								
Spun off Entity		Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		-1.60%***	-4.11%***	-4.17%**	-5.32%**	-3.97%	2.80%	5.90%
Hit Rate		36.8%***	37.2%***	37.2%***	37.6%***	38.0%***	40.1%***	39.8%***
	Average Daily Return between							
Parent Company	Announcement and Closing	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average		0.07%**	-0.33%	-2.49%**	-4.53%***	-4.11%*	-4.13%	-0.39%
Hit Rate		53.6%	45.1%	39.8%***	38.0%***	39.2%***	33.9%***	32.2%***

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

3 Carve-outs Event Study

In this section, we discuss the performance of carve-outs in the U.S. and international markets. We focus on carved-out entities themselves due to limited information on parent companies in our database. Since carve-outs are a special type of IPO (initial public offering), we also calculate their price gains on the first day of trading in excess of industry average, using the close price on the first day of trading and the IPO price⁸.

Table 7 summarizes the results for all U.S. carve-outs between 1992 and 2015, as well as for large and small transactions, respectively⁹. **Similar to standard IPOs, U.S. carved-out entities experienced a large jump on the first day of trading**, which on average was more than 21% above industry mean, with 78% of carved-out entities outperforming their industry peers. After the first day, carved-outs performance did not show any statistical significance for either large or small transactions.

Table 8 summarizes the same analysis for international carve-outs. **The first day price jump is also evident in the international sample**, while the longer-term performance of the carved-out entities exhibits some difference between large and small transactions. Large carved-out entities outperformed their industry peers throughout the 3-year period following the transaction, with the cumulative excess return peaking after one year at 13.87%, significant at the 1% level. Small carved-out companies did not show statistically significant outperformance in the long term.

⁸ See Section 5 for more details on data and methodology.

⁹ The \$200 million threshold was chosen to break the U.S sample into roughly two halves. We also confirmed that all calendar years are well represented in both sub-samples to ensure there is no regime bias by using this cutoff. The same applies to the international cutoff in Table 8.

Table 7 Industry Excess Returns for U.S. Carve-outs (1992 – 2015)

All Events (N = 179)								
Carved-Out Entity	Initial Day Return	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average	21.48%***	0.01%	0.42%	2.20%	3.31%	3.15%	10.41%	14.20%
Hit Rate	78.3%***	46.6%	51.7%	49.4%	50.6%	48.8%	46.8%	45.9%

Transaction Size > \$200M (N = 92)								
Carved-Out Entity	Initial Day Return	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average	15.33%***	0.20%	1.46%	1.96%	0.63%	1.76%	7.01%	9.89%
Hit Rate	79.8%***	45.5%	56.8%	51.1%	50.0%	49.4%	45.6%	43.5%

Transaction Size < \$200M (N = 87)								
Carved-Out Entity	Initial Day Return	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average	27.85%***	-0.19%	-0.64%	2.44%	6.05%	4.58%	13.82%	18.67%
Hit Rate	76.7%***	47.7%	46.5%	47.7%	51.2%	48.2%	48.1%	48.3%

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

Table 8 Industry Excess Returns in USD for International Carve-outs (1995 – 2015)

All Events (N = 265)								
Carved-Out Entity	Initial Day Return	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average	62.22%	-1.16%**	-1.79%*	-0.65%	1.83%	6.44%*	10.40%*	5.47%
Hit Rate	74.5%***	41.4%**	44.2%*	48.4%	48.4%	45.5%	45.8%	36.2%***

Transaction Size > \$100M (N = 137)								
Carved-Out Entity	Initial Day Return	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average	87.70%	0.47%	1.88%*	3.83%**	6.18%**	13.87%***	12.88%**	8.00%
Hit Rate	75.0%***	50.8%	57.3%	61.3%**	55.6%	52.0%	51.0%	44.0%

Transaction Size < \$100M (N = 123)								
Carved-Out Entity	Initial Day Return	Forward 5-Day Return	Forward 30-Day Return	Forward 3-Month Return	Forward 6-Month Return	Forward 1-Year Return	Forward 2-Year Return	Forward 3-Year Return
Average	29.62%***	-2.98%***	-6.13%***	-6.00%**	-3.14%	-2.24%	9.20%	1.55%
Hit Rate	74.7%***	30.6%***	28.9%***	33.3%***	39.6%*	37.0%**	39.4%*	23.7%***

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

4 Historical Performance of Spinoff Strategies

To explore how investors might leverage these empirical findings, we examine the historical performance of two portfolio strategies that focus on the outperformance of U.S. companies involved in spinoffs.

In the first strategy, the portfolio consists of companies that were spun off in the past year, excluding the ones that were spun off over the past 30 days to avoid the initial underperformance that follows the spinoff. We also examine portfolios with lookback windows of 2 years and 3 years. Stocks are market cap weighted and portfolios are rebalanced at the end of each month.

In the second strategy, the portfolio consists of parent companies that announced a spinoff over the past 6 months. Stocks are market cap weighted and the portfolio is rebalanced monthly. For both strategies, we track the portfolio return in excess of Russell 3000 Index return between 1998 and 2016.

Table 9 summarizes the historical performance of these strategies. **A portfolio that invests in companies spun off in the last 3 years (skipping the first month) outperformed the market by 0.48% per month on average, significant at the 5% level.** This demonstrates that investors can benefit from the long-term outperformance of spun-off entities.

**Table 9 Historical Monthly Performance – U.S. Spinoff Portfolios
(January 1998 – December 2016)**

Strategy	#1	#1	#1	#2
Lookback Window	1 Year	2 Years	3 Years	6 Months
Excess Return	0.19%	0.38%	0.48%**	0.37%
Hit Rate	56.1%*	58.3%**	60.5%***	52.2%
# Stocks	22	44	63	12

Source: S&P Global Market Intelligence Quantamental Research. 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. Data as of 03/05/2017.

5 Data and methodology

Spinoffs and carve-outs are collected from the S&P Global Transactions database, which covers the announcement date, closing date and transaction size, among other data items. For spinoffs, the database also provides information on the parent company through cross-referencing the company relationships database. For carve-outs, it covers the initial offering price. We classify a transaction as a U.S. (international) one if the spun off or carved out entity is listed on a U.S. exchange (a non-U.S. exchange).

In the event studies, we calculate the industry excess return using the difference between individual security return (winsorized at the 1% and 99% level) and the industry average return within the Russell 3000 Index (S&P Global BMI excluding U.S.) for U.S. events (international events). All forward returns are calculated based on the close price on the day after the transaction closing date. For spinoff parents, the average daily excess return between the announcement and closing date is calculated by first summing up the daily industry excess returns from the day after the announcement until the closing date, then dividing this sum by the total number of trading days between the two dates. For carve-outs, the initial day excess return is calculated by first dividing the difference between close price on the first day of trading and the IPO price by the IPO price, then subtracting the industry average one-day return for the same day. All returns are in U.S. dollar.

6 Conclusions

This report investigates the short- and long-term performance of companies involved in these restructuring activities around the globe. We documented a positive announcement effect for spinoff parents in the U.S. and international markets. Spun-off entities initially underperformed their industry peers but in the long run generated superior returns after the spinoff. Carved-out subsidiaries experienced a large jump in stock price on the first day of trading, but long-term performance is not particularly attractive.

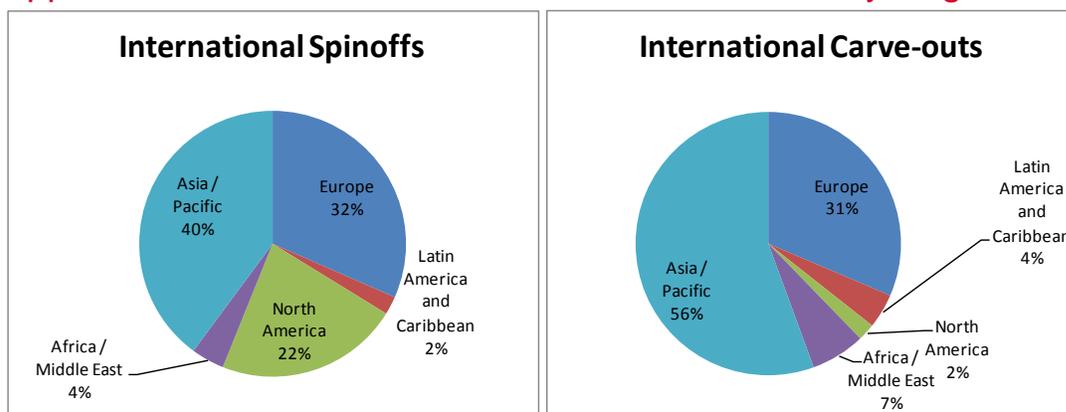
Appendix A Global Industry Classification Standard

The Global Industry Classification Standard (GICS®) was jointly developed by Standard & Poor's and MSCI Barra to meet the global financial community's need for one complete, consistent set of global sector and industry definitions. The GICS methodology has helped pave the way for sector-based investing by providing transparency and efficiency to the investment process. With GICS, sell-side research and reporting can be organized around industry data without geographic limitations.

The GICS methodology has been commonly accepted as an industry analysis framework for investment research, portfolio management and asset allocation. The GICS classification system currently consists of 11 sectors, 24 industry groups, 68 industries and 157 sub-industries. The GICS sectors are:

- Consumer Discretionary
- Consumer Staples
- Energy
- Financials
- Health Care
- Industrials
- Information Technology
- Materials
- Telecommunication Services
- Utilities
- Real Estate

Appendix B Number of International Transactions by Region



Source: S&P Global Market Intelligence Quantamental Research. Data as of 03/05/2017.

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Our Recent Research

January 2017: [U.S. Stock Selection Model Performance Review](#)

2016 proved to be a challenging year for active investing. Against a backdrop of a sharp selloff in equities at the beginning of the year and political uncertainty over the course of the year, valuation was the only fundamental investing style that delivered positive excess returns. In this report, we review the performance of S&P Global Market Intelligence's four U.S. stock selection models in 2016. Given the weak performance of all other fundamental styles, apart from valuation, it was a difficult year for our models. Three of the four models underperformed their benchmarks in 2016, the first annual underperformance since the models' launch in January 2011.

November 2016: [Electrify Stock Returns in U.S. Utilities](#)

The U.S. utilities sector has performed especially well in the past several years as the Federal Reserve and central banks around the world enacted accommodative monetary policies to spur growth. As global active investors flock to the U.S. utilities sector in search of yields and high risk-adjusted returns, we explore a number of utility-specific metrics from a unique database that is dedicated to the utilities sector – S&P Global Market Intelligence's Energy (Source: SNL Energy) – to ascertain whether investors could have historically made stock selection decisions within the sector to achieve excess returns.

October 2016: [A League of their Own: Batting for Returns in the REIT Industry - Part 2](#)

SNL Financial's ("SNL") 1 global real estate database contains property level and geographical market-based demographic information that can be difficult for investors to obtain. These unique data points are valuable to investors seeking an understanding of the relationship between property level information and future stock price movement. In this report, we demonstrate how investors can use these data points as alpha strategies. Our back-tests suggest that metrics constructed from property level information may provide insights about future price direction not captured by fundamental or estimates data. Investors may want to consider incorporating information on a REIT's property portfolio when building a robust REIT strategy

September 2016: [A League of their Own: Batting for Returns in the REIT Industry - Part 1](#)

This month REITs (Real Estate Investment Trusts) have been separated from the GICS (Global Industry Classification Standard) Financial sector into a sector of their own. Even prior to the sector reclassification, investors have been attracted to REITs' strong performance and attractive yield. REITs differ from traditional companies in several important ways. Metrics that investors typically use to value or evaluate the attractiveness of stocks such as earnings yield or book-to-price are less meaningful for REITs. For active investors interested in understanding their REITs portfolio, an understanding of the relationship between REIT financial ratios and price appreciation is instructive. Is dividend yield relevant? What about funds from operations ("FFO"), one of the most widely used metrics?

August 2016: [Mergers & Acquisitions: The Good, the Bad and the Ugly \(and how to tell them apart\)](#)

In this study we show that, among Russell 3000 firms with acquisitions greater than 5% of acquirer enterprise value, post-M&A acquirer returns have underperformed peers in general. Specifically, we find that:

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- Acquirers lag industry peers on a variety of fundamental metrics for an extended period following an acquisition.
- Stock deals significantly underperform cash deals. Acquirers using the highest percentage of stock underperform industry peers by 3.3% one year post-close and by 8.1% after three years.
- Acquirers that grow quickly pre-acquisition often underperform post-acquisition.
- Excess cash on the balance sheet is detrimental for M&A, possibly due to a lack of discipline in deploying that cash.

July 2016: [Preparing for a Slide in Oil Prices -- History May Be Your Guide](#)

With the price of West Texas Intermediate (WTI) in the mid-forties, oversupply concerns and the continued threat of a global slowdown have led many to fear a resumed oil price decline. The year-to-date performance of Oil & Gas (O&G) companies, particularly Integrated O&G entities has been strong, further contributing to concerns that oil may be poised to retrench.

June 2016: [Social Media and Stock Returns: Is There Value in Cyberspace?](#)

This review of social media literature represents a selection of articles we found particularly pragmatic and/or interesting. Although we have not done research in the area of social media, we are always on the hunt for interesting insights, and offer these papers for your thoughtful consideration.

April 2016: [An IQ Test for the “Smart Money” – Is the Reputation of Institutional Investors Warranted?](#)

This report explores four classes of stock selection signals associated with institutional ownership ('IO'): Ownership Level, Ownership Breadth, Change in Ownership Level and Ownership Dynamics. It then segments these signals by classes of institutions: Hedge Funds, Mutual Funds, Pension Funds, Banks and Insurance Companies. The study confirms many of the findings from earlier work – not only in the U.S., but also in a much broader geographic scope – that Institutional Ownership may have an impact on stock prices. The analysis then builds upon existing literature by further exploring the benefit of blending 'IO' signals with traditional fundamental based stock selection signals.

March 2016: [Stock-Level Liquidity – Alpha or Risk? - Stocks with Rising Liquidity Outperform Globally](#)

Most investors do not associate stock-level liquidity as a stock selection signal, but as a measure of how easily a trade can be executed without incurring a large transaction cost or adverse price impact. Inspired by recent literature, such as Bali, Peng, Shen and Tang (2012), we show globally that a strategy of buying stocks with the highest one-year change in stock-level turnover has historically outperformed the market and has outperformed strategies of buying stocks with strong price momentum, attractive valuation, or high quality. One-year change in stock-level turnover has a low correlation (i.e., <0.15) with commonly used stock selection signals. When it is combined with these signals, the composites have yielded higher excess returns and information ratios (IR) than the standalone raw signals.

February 2016: [U.S. Stock Selection Model Performance Review - The most effective investment strategies in 2015](#)

Since the launch of the four S&P Capital IQ[®] U.S. stock selection models in January 2011, **the performance of all four models (Growth Benchmark Model, Value Benchmark Model, Quality Model, and Price Momentum Model) has been positive each year.** The models' key differentiators – a distinct formulation for large cap versus small cap stocks, incorporation of industry specific information for the financial sector, sector neutrality to

target stock specific alpha, and factor diversity – enabled the models to outperform across disparate market environments. In this report, we assess the underlying drivers of each model's performance in 2015 and since inception (2011), and provide full model performance history from January 1987.

January 2016: [What Does Earnings Guidance Tell Us? – Listen When Management Announces Good News](#)

This study examines stock price movements surrounding earnings per share (EPS) guidance announcements for U.S. companies between January 2003 and February 2015 using S&P Capital IQ's Estimates database. Companies that experienced positive guidance news, i.e. those that announced optimistic guidance (guidance that is higher than consensus estimates) or revised their guidance upward, yielded positive excess returns. We focus on guidance that is not issued concurrent with earnings releases in order to have a clear understanding of the market impact of guidance disclosures. We also explore practical ways in which investors may benefit from annual and quarterly guidance information.

December 2015: [Equity Market Pulse – Quarterly Equity Market Insights Issue 6](#)

November 2015: [Late to File - The Costs of Delayed 10-Q and 10-K Company Filings](#)

October 2015: [Global Country Allocation Strategies](#)

September 2015: [Equity Market Pulse – Quarterly Equity Market Insights Issue 5](#)

September 2015: [Research Brief: Building Smart Beta Portfolios](#)

September 2015: [Research Brief – Airline Industry Factors](#)

August 2015: [Point-In-Time vs. Lagged Fundamentals – This time i\(t\)'s different?](#)

August 2015: [Introducing S&P Capital IQ Stock Selection Model for the Japanese Market](#)

July 2015: [Research Brief – Liquidity Fragility](#)

June 2015: [Equity Market Pulse – Quarterly Equity Market Insights Issue 4](#)

May 2015: [Investing in a World with Increasing Investor Activism](#)

April 2015: [Drilling for Alpha in the Oil and Gas Industry – Insights from Industry Specific Data & Company Financials](#)

March 2015: [Equity Market Pulse – Quarterly Equity Market Insights Issue 3](#)

February 2015: [U.S. Stock Selection Model Performance Review - The most effective investment strategies in 2014](#)

January 2015: [Research Brief: Global Pension Plans - Are Fully Funded Plans a Relic of the Past?](#)

January 2015: [Profitability: Growth-Like Strategy, Value-Like Returns Profiting from Companies with Large Economic Moats](#)

November 2014: [Equity Market Pulse – Quarterly Equity Market Insights Issue 2](#)

October 2014: [Lenders Lead, Owners Follow - The Relationship between Credit Indicators and Equity Returns](#)

August 2014: [Equity Market Pulse – Quarterly Equity Market Insights Issue 1](#)

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