

Quantitative Research

QUANTITATIVE ANALYSIS

Research Analysts

Pankaj N. Patel, CFA

212 538 5239

pankaj.patel@credit-suisse.com

Souheang Yao

212 538 3610

souheang.yao@credit-suisse.com

Ryan Carlson, CFA

212 538 9074

ryan.carlson@credit-suisse.com

Abhra Banerji

212 325 4347

abhra.banerji@credit-suisse.com

Joseph Handelman

212 538 9542

joseph.handelman@credit-suisse.com

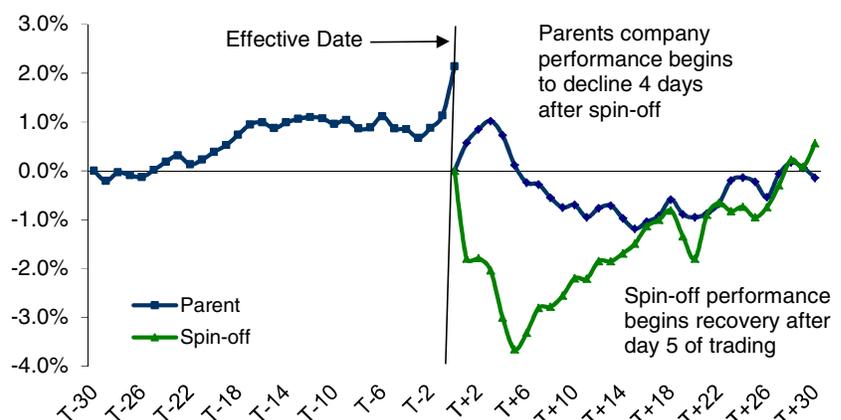
Do Spin-Offs Create or Destroy Value?

We examine the performance of firms involved in spin-offs over the past 17 years. We find that spin-offs lead to price appreciation for parent companies and their spun-off children. We note that investment timing is important in the short term and that the volatility of returns is significant.

- **Spin-Off Announcement Performance:** Parent companies' performance dipped in the days preceding a spin-off announcement. Parent returns exceeded the benchmark on announcement date and then remained above the S&P 500's returns through day 30. (See Exhibit 3.) Parent company share prices increased the most on spin-off announcement date.
- **Spin-Off Date—A Bumpy Month, then Outperformance:** Spin-offs underperformed the S&P 500 for the first 27 trading days after the effective date. Performance then rose above the index and continued upward. Parent firms performed well for the first three days, then declined before recovering.
- **Volatile Strategy:** While performance was positive, the standard deviation of returns following the first 30 trading days after effective date was high: 11.7% for parents and 16.1% for spin-offs.
- **Upcoming Spin-Offs:** We provide a listing of upcoming and recent spin-offs along with their one-month performance relative to S&P 500.

Exhibit 1: Short-Term Performance—Effective Date

average performance, spin-offs from January 1995 through July 2012, relative to the S&P 500



Source: Credit Suisse Quantitative Equity Research.

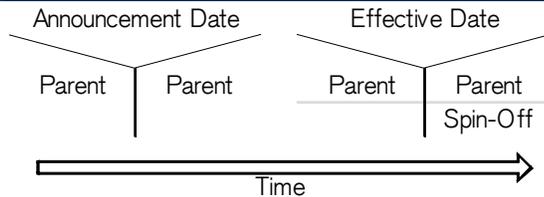
DISCLOSURE APPENDIX CONTAINS IMPORTANT DISCLOSURES, ANALYST CERTIFICATIONS, INFORMATION ON TRADE ALERTS, ANALYST MODEL PORTFOLIOS AND THE STATUS OF NON-U.S. ANALYSTS. FOR OTHER IMPORTANT DISCLOSURES, visit www.credit-suisse.com/researchdisclosures or call +1 (877) 291-2683. U.S. Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Performance Measurement

We examined spin-off performance over the past 17 and ½ years (1995 to present). We focused on firms in the top 1,000 U.S. companies by market cap.

For each spin-off, there are two key dates: “announcement date” and the date the spin-off first trades, the “effective date.” We measured the performance of parent firms before and after the announcement and effective dates. We measured the performance of spun-off firms from the effective date forward.

Exhibit 2: Measuring Performance—Around Announcement and Effective Date



Source: Credit Suisse Quantitative Equity Research.

To measure parent-firm performance, we created an equal-weighted portfolio composed of all the parent firms. We then measured their performance over various periods from before the announcement date until one year after the effective date. We created a similar portfolio to measure spin-off performance.

30-Day Performance

Parent Company Announcement Date

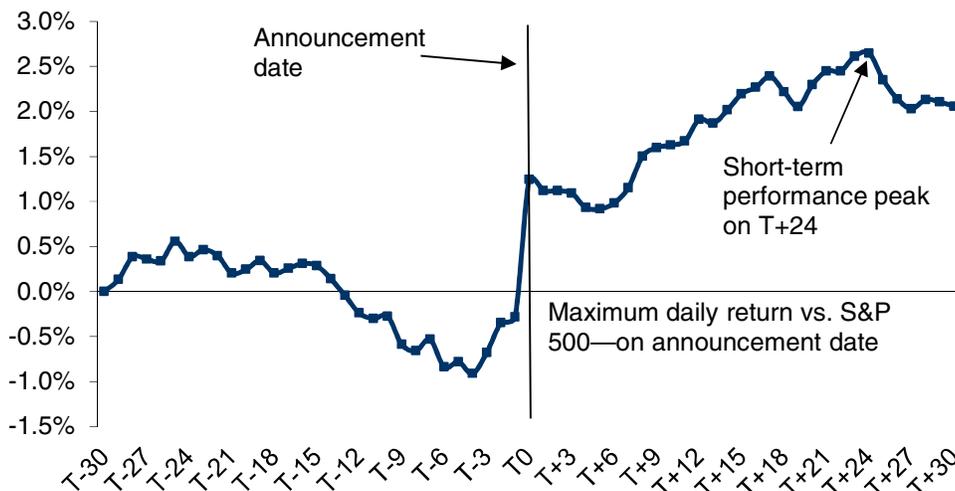
Beginning 30 trading days before spin-off announcement and continuing until 30 days afterward, Exhibit 3 plots parent firm performance around spin-off announcement date.

Parent firms dipped just before the announcement of a spin-off. Share prices subsequently jumped on spin-off announcement date. The daily return was greatest on announcement date. After the announcement, performance declined initially, but remained ahead of the S&P 500. Short-term performance peaked around day T+24.

T = 0 is the announcement date

Exhibit 3: Parent Company Relative Performance—Announcement Date

from January 1995 through July 2012, relative to the S&P 500



Parent company trading volume frequently increases around announcement date

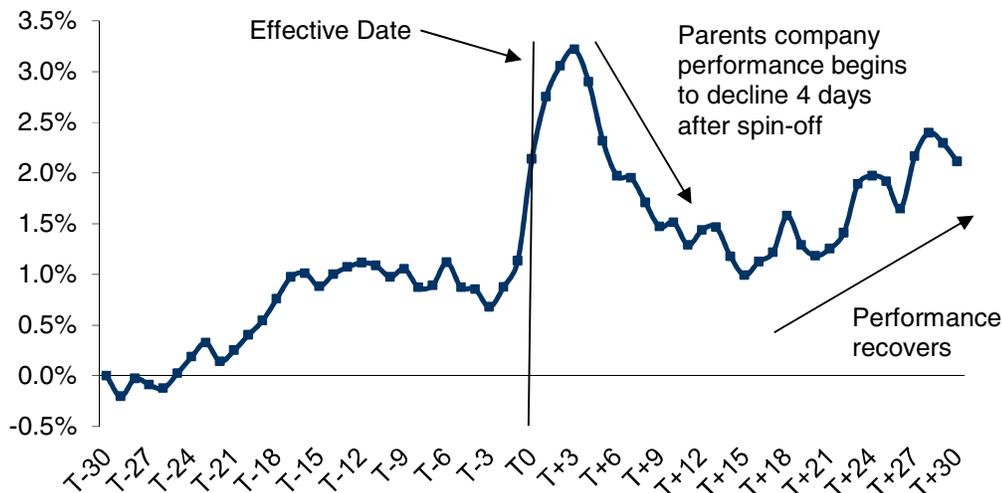
Source: Credit Suisse Quantitative Equity Research.

Parent Company Effective Date

We tested the relative performance of the parent portfolio around effective date. Our test window was 30 days before and after spin-off effective date. The parent portfolio rose about 1% in the 30 days prior to the spin-off date, further gaining in the dates immediately before and after the effective date. After peaking three days after the effective date, stock prices started declining. Parent company positive performance, in this observation window, was concentrated before and just after effective date.

An average of 135 days separated announcement and effective dates

Exhibit 4: Parent Company Relative Performance—Effective Date
from January 1995 through July 2012, relative to the S&P 500



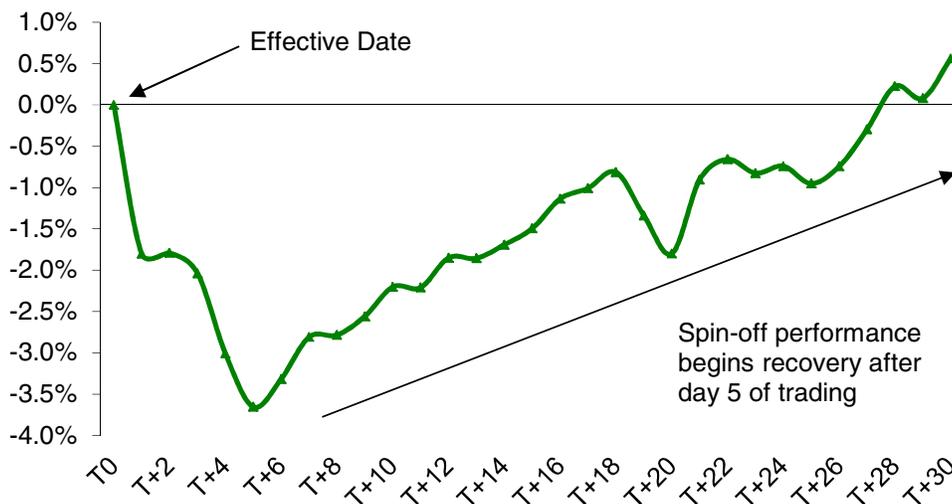
After bottoming on the 15th day, performance began to move upward

Source: Credit Suisse Quantitative Equity Research.

Spin-Off Effective Date

The spin-off portfolio had a somewhat similar post-effective-date performance. The spin-off portfolio began declining immediately following the effective date, bottoming out on day 5. The spin-off portfolio recovered to breakeven by day 28.

Exhibit 5: Spin-off Relative Performance—Effective Date
from January 1995 through July 2012, relative to the S&P 500



Spin-off performance bottomed out on the 5th day of trading

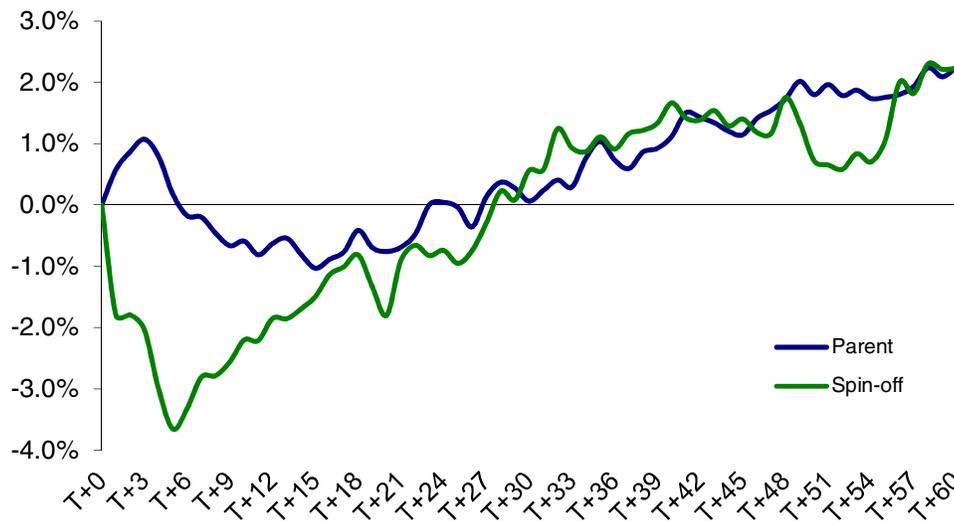
In the 'Why Does Spin-Off Value Dip?' section, we discuss reasons why spin-off prices may drop after spin-off effective date

Source: Credit Suisse Quantitative Equity Research.

60-Day Performance from Effective Date

Immediately following the effective date, spin-offs declined relative to the S&P 500. Parent companies followed just a few days later. During recovery, spin-offs headed upward more steeply than parent companies. Spin-offs exceeded the index return on day 28. Parent company performance was more gradual, but it too surpassed the benchmark by day 27. At day 60, both portfolios had produced excess performance of 2.2% versus the S&P 500.

Exhibit 6: Parent & Spin-Off 60-Day Relative Performance
 first 60 trading days after effective date of spin-off, relative to the S&P 500



The 60-day observation window is 60 trading days, or roughly one calendar quarter

The standard deviation of returns at 60 days was 16% for parent companies and 23% for spun-off firms

The spin-off portfolio rose 5.9% from the close of day 5 to the close of day 60

Source: Credit Suisse Quantitative Equity Research.

Why Does Spin-Off Value Dip?

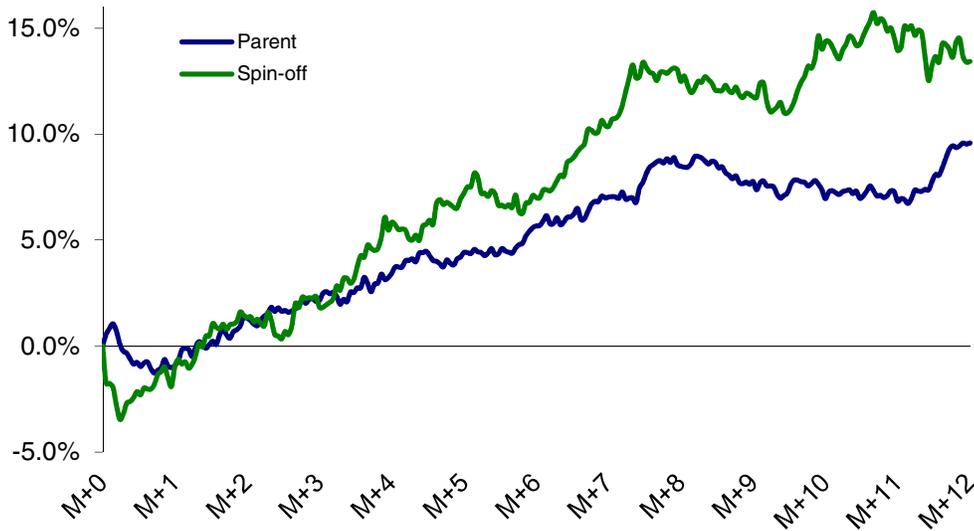
In the spin-offs we examined, the average spin-off underperformed for the first five trading days after the effective date. There are a number of reasons why the prices of spun-off firms may initially trade at lower prices, making them of special interest to investors.

- 1) **Index Selling:** If the parent firm was a member of an index, such as the S&P 500, the spun-off entity likely is not. Index funds and institutional investors will sell the spun-off shares when they do not meet their fund mandates.
- 2) **Ownership Criteria:** The new owners of the firm (investors who received the spun-off shares), now own a firm that they never purchased. The spun-off firm may not meet their investment criteria. The parent may be a large-cap firm, while the spin-off a small- or mid-cap firm. The investor may decide to sell the new spin-off shares.
- 3) **Limited History:** Available financial information may not be complete. Investors may wait to see how the spin-off fares on its own before investing.
- 4) **Low Analyst Coverage:** Coverage from Wall Street analysts is significantly less for the spin-off versus the parent firm.

12-Month Performance

Over a 12-month observation period, parent and spun-off firms outperformed the index by 9.6% and 13.4%. These positive results were reached with a large variability among the individual 12-month returns for the different parent and spin-off firms.

Exhibit 7: Parent and Spin-Off 12-Month Relative Performance
first 12 months after effective date of spin-off, relative to the S&P 500



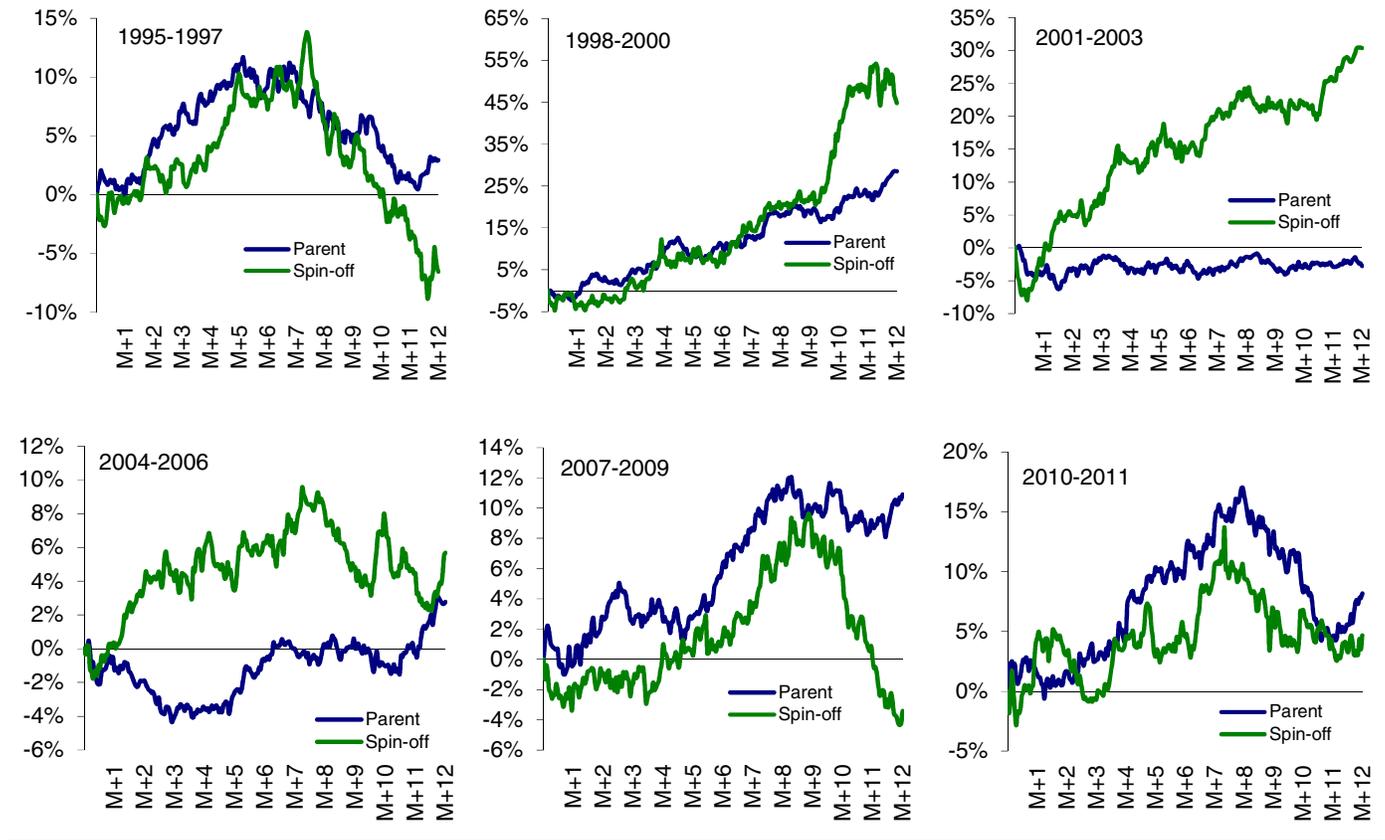
The standard deviation of returns at the end of 12 months was 42% for parent companies and 82% for spun-off firms

Source: Credit Suisse Quantitative Equity Research.

12-Month Performance, Three-Year Increments

We segmented the 17 years from 1995 through 2011 into three-year groups and measured the 12-month-performance of the spin-offs in each group. Volatility was considerably lower over certain periods. However, spin-off positive performance was not always present and was certainly more concentrated in the three-year periods during and after the tech boom.

Exhibit 8: Parent and Spin-Off 12-Month Relative Performance Every Three Years
first 12 months after effective date of spin-off, relative to the S&P 500



Source: Credit Suisse Quantitative Equity Research.

Recent and Upcoming Spin-Offs

Exhibit 9: Recent U.S. Spin-offs

Parent Company (Ticker)	Spin-Off (Ticker)	Sector	Effective Date	Parent (30-Day Return)	Spin-Off (30-Day Return)	S&P 500 (30-Day Return)
Beam Inc (BEAM)	Fortune Brand Home & Sec (FBHS)	Cons Disc	10/4/2011	14.31%	25.93%	12.22%
ITT Corp (ITT)	Xylem Inc (XYL)	Industrials	11/1/2011	0.62%	-13.92%	-0.17%
ITT Corp (ITT)	Exelis Inc (XLS)	Industrials	11/1/2011	0.62%	-26.61%	-0.17%
Marriott International Inc (MAR)	Marriott Vacations WW Corp (VAC)	Cons Disc	11/22/2011	10.33%	-2.71%	7.89%
Expedia Inc (EXPE)	TripAdvisor Inc (TRIP)	Cons Disc	12/21/2011	20.37%	27.03%	8.33%
Williams Cos Inc (WMB)	WPX Energy Inc (WPX)	Energy	1/3/2012	8.02%	-0.55%	5.47%
General Growth Properties Inc (GGP)	Rouse Properties Inc (RSE)	Financials	1/13/2012	12.00%	35.89%	6.75%
Sunoco Inc (SUN)	SunCoke Energy Inc (SXC)	Energy	1/18/2012	6.64%	14.23%	5.35%
Ralcorp Holdings Inc (RAH)	Post Holdings Inc (POST)	Cons Staples	2/6/2012	-4.42%	10.75%	4.89%
ConocoPhillips (COP)	Phillips 66 (PSX)	Energy	5/1/2012	-3.03%	0.03%	-6.13%
MeadWestvaco Corp (MWV)	ACCO Brands Corp (ACCO)	Materials	5/1/2012	-3.88%	-12.82%	-6.13%
Matson Inc (MATX)	Alexander & Baldwin Inc (ALEX)	Industrials	7/2/2012	-6.37%	21.23%	3.10%
L-3 Comm. Holdings Inc (LLL)	Engility Holdings Inc (EGL)	Industrials	7/18/2012	-0.65%	3.22%	3.04%

Source: Credit Suisse Quantitative Equity Research.

Exhibit 10: Upcoming U.S. Spin-Offs

Parent Company	Parent Ticker	Spin-Off	Spin-Off Ticker	Announced Date
Kraft Foods Inc	KFT US Equity	Kraft Foods Group Inc	KRFT US Equity	8/4/2011
McGraw-Hill Cos Inc	MHP US Equity	McGraw-Hill Education	0108839ZUS Equity	9/12/2011
Tyco International Ltd	TYC US Equity	Pentair Inc	PNR US Equity	9/19/2011
Tyco International Ltd	TYC US Equity	ADT North Am residential sec.	0199809ZUS Equity	9/19/2011
Abbott Laboratories	ABT US Equity	AbbVie Inc	0330845ZUS Equity	10/19/2011
Entergy Corp	ETR US Equity	ITC Holdings Corp	ITC US Equity	12/5/2011
Covidien PLC	COV US Equity	Mallinckrodt LLC	0110664DUS Equity	12/15/2011
Sears Holdings Corp	SHLD US Equity	Sears Canada Inc	SCC CN Equity	5/17/2012
News Corp	NWSA US Equity	Media and Entertainment business	0557875DUS Equity	6/28/2012
PPG Industries Inc	PPG US Equity	Georgia Gulf Corp	GGC US Equity	7/19/2012

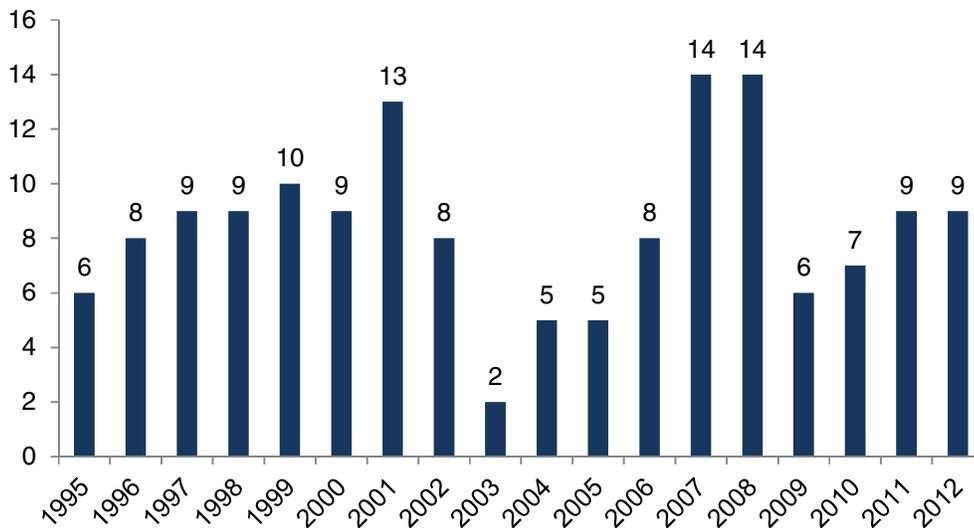
Source: Credit Suisse Quantitative Equity Research.

The author of this report wishes to acknowledge the contribution made by Tarun Agarwal, an employee of CRISIL Global Research and Analytics, a business division of CRISIL Limited, a third-party provider of offshore research services to Credit Suisse

Spin-Off Statistics

We restricted our investigation of spin-offs to parent firms in the top 1,000 companies by market cap from 1995 to the present. We focused on the top 1,000 firms to avoid the data issues present with smaller companies spinning off. With smaller firms, there was frequently inconsistent pricing and spin-off data. We also omitted several large spin-offs due to incomplete information and/or inconsistent trading after the spin-off date.

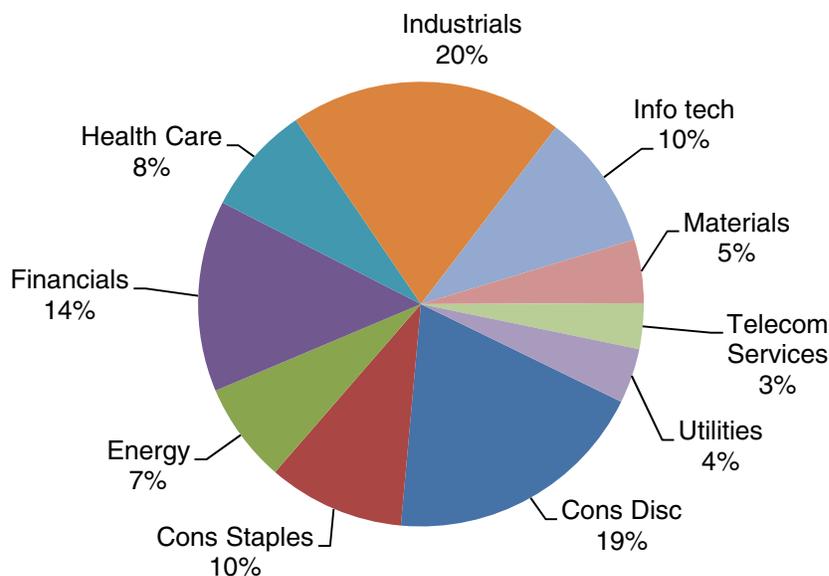
Exhibit 11: Spin-Offs by Year Among the Top 1,000 U.S. Firms by Market Cap
from January 1995 through July 2012



Source: Credit Suisse Quantitative Equity Research.

Industrials and Consumer Discretionary led, with the highest number of spin-offs.

Exhibit 12: Spin-Off Counts by Sector
from January 1995 through July 2012



Source: Credit Suisse Quantitative Equity Research.

Appendix: Spin-Off Primer

Companies engaging in spin-offs typically hope to maximize shareholder value by 'unlocking the value' of subsidiaries that are part of the parent firm. Expectations of increased operational and financial efficiency are usual.

A spin-off is a form of corporate restructuring through which a portion of the parent company is divested. Three common types of corporate restructurings are as follows.

Pure Spin-off: Shares of a subsidiary are distributed among the parent shareholders on a pro-rata basis.

Equity Carve-outs: Shares of the spun-off entity are distributed to the market through an initial public offering (IPO).

Split-Offs: Shares of the spun-off entity are exchanged with appropriate number of shares of parent entity.

Exhibit 13: Types of Corporate Restructuring



Source: Credit Suisse Quantitative Equity Research.

Companies Mentioned (Price as of 04 Sep 12)

Abbott Laboratories (ABT, \$65.75, NEUTRAL, TP \$60.00)
 ACCO Brands Corp. (ACCO, \$6.37, OUTPERFORM [V], TP \$14.00)
 Alexander & Baldwin, Inc. (ALEX, \$29.72)
 Beam (BEAM, \$59.34)
 ConocoPhillips (COP, \$54.87, NEUTRAL, TP \$60.00)
 Covidien (COV, \$56.12)
 Engility Holdings Inc (EGL)
 Entergy Corp. (ETR, \$68.31, NEUTRAL, TP \$71.00)
 Exelis (XLS, \$10.14)
 Expedia, Inc. (EXPE, \$52.10, NEUTRAL, TP \$56.00)
 Fortune Brands Home & Security, Inc. (FBHS, \$25.30, NEUTRAL, TP \$23.00)
 General Growth Properties (GGP, \$20.98)
 Georgia Gulf Corp. (GGC, \$39.47)
 ITC Holdings Corp. (ITC, \$72.24, NEUTRAL, TP \$80.00)
 ITT Corporation, Inc. (ITT, \$19.55)
 Kraft Foods Group Inc (KRFT)
 Kraft Foods, Inc. (KFT, \$41.67, OUTPERFORM, TP \$45.00)
 L-3 Communications (LLL, \$69.38, NEUTRAL, TP \$75.00)
 Marriott International (MAR, \$37.40, OUTPERFORM, TP \$43.00)
 Matson Inc (MATX)
 McGraw-Hill Companies (MHP, \$51.79)
 MeadWestvaco (MWV, \$28.80)
 MeadWestvaco Corp (VAC)
 News Corp. (NWSA, \$23.75, NEUTRAL, TP \$23.00)
 Pentair, Inc. (PNR, \$42.89, NEUTRAL, TP \$50.00)
 Phillips 66 (PSX, \$41.74, OUTPERFORM, TP \$46.00)
 Post Holdings Inc (POST)
 PPG Industries, Inc. (PPG, \$108.77, OUTPERFORM, TP \$133.00)
 Ralcorp, Inc. (RAH, \$71.91, OUTPERFORM, TP \$75.00)
 Rouse Properties (RSE, \$14.15)
 Sears Canada Inc (SCC)
 Sears Holding Corp. (SHLD, \$52.11, UNDERPERFORM [V], TP \$20.00)
 SunCoke Energy, Inc. (SXC, \$16.40, OUTPERFORM, TP \$19.00)
 Sunoco, Inc. (SUN, \$47.72, RESTRICTED)
 TripAdvisor, Inc. (TRIP, \$35.40)
 Tyco International, Ltd. (TYC, \$55.54, OUTPERFORM, TP \$60.00)
 Williams Companies (WMB, \$32.13)
 WPX Energy, Inc. (WPX, \$15.81)
 Xylem, Inc. (XYL, \$24.07)

Disclosure Appendix

Important Global Disclosures

Pankaj N. Patel, CFA & Ryan Carlson, CFA each certify, with respect to the companies or securities that he or she analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's investment banking activities.

Analysts' stock ratings are defined as follows:

Outperform (O): The stock's total return is expected to outperform the relevant benchmark* by at least 10-15% (or more, depending on perceived risk) over the next 12 months.

Neutral (N): The stock's total return is expected to be in line with the relevant benchmark* (range of $\pm 10-15\%$) over the next 12 months.

Underperform (U): The stock's total return is expected to underperform the relevant benchmark* by 10-15% or more over the next 12 months.

Relevant benchmark by region: As of 29th May 2009, Australia, New Zealand, U.S. and Canadian ratings are based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. Some U.S. and Canadian ratings may fall outside the absolute total return ranges defined above, depending on market conditions and industry*

factors. For Latin American, Japanese, and non-Japan Asia stocks, ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark; for European stocks, ratings are based on a stock's total return relative to the analyst's coverage universe**. For Australian and New Zealand stocks, 12-month rolling yield is incorporated in the absolute total return calculation and a 15% and a 7.5% threshold replace the 10-15% level in the Outperform and Underperform stock rating definitions, respectively. The 15% and 7.5% thresholds replace the +10-15% and -10-15% levels in the Neutral stock rating definition, respectively.

**An analyst's coverage universe consists of all companies covered by the analyst within the relevant sector.

Restricted (R): In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

Volatility Indicator [V]: A stock is defined as volatile if the stock price has moved up or down by 20% or more in a month in at least 8 of the past 24 months or the analyst expects significant volatility going forward.

Analysts' coverage universe weightings are distinct from analysts' stock ratings and are based on the expected performance of an analyst's coverage universe* versus the relevant broad market benchmark:**

Overweight: Industry expected to outperform the relevant broad market benchmark over the next 12 months.

Market Weight: Industry expected to perform in-line with the relevant broad market benchmark over the next 12 months.

Underweight: Industry expected to underperform the relevant broad market benchmark over the next 12 months.

*An analyst's coverage universe consists of all companies covered by the analyst within the relevant sector.

**The broad market benchmark is based on the expected return of the local market index (e.g., the S&P 500 in the U.S.) over the next 12 months.

Credit Suisse's distribution of stock ratings (and banking clients) is:

Global Ratings Distribution		
Outperform/Buy*	45%	(52% banking clients)
Neutral/Hold*	42%	(49% banking clients)
Underperform/Sell*	11%	(39% banking clients)
Restricted	2%	

*For purposes of the NYSE and NASD ratings distribution disclosure requirements, our stock ratings of Outperform, Neutral, and Underperform most closely correspond to Buy, Hold, and Sell, respectively; however, the meanings are not the same, as our stock ratings are determined on a relative basis. (Please refer to definitions above.) An investor's decision to buy or sell a security should be based on investment objectives, current holdings, and other individual factors.

Credit Suisse's policy is to update research reports as it deems appropriate, based on developments with the subject company, the sector or the market that may have a material impact on the research views or opinions stated herein.

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: http://www.csfb.com/research-and-analytics/disclaimer/managing_conflicts_disclaimer.html

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

Important Regional Disclosures

Singapore recipients should contact a Singapore financial adviser for any matters arising from this research report.

Restrictions on certain Canadian securities are indicated by the following abbreviations: NVS--Non-Voting shares; RVS--Restricted Voting Shares; SVS--Subordinate Voting Shares.

Individuals receiving this report from a Canadian investment dealer that is not affiliated with Credit Suisse should be advised that this report may not contain regulatory disclosures the non-affiliated Canadian investment dealer would be required to make if this were its own report.

For Credit Suisse Securities (Canada), Inc.'s policies and procedures regarding the dissemination of equity research, please visit http://www.csfb.com/legal_terms/canada_research_policy.shtml.

As of the date of this report, Credit Suisse acts as a market maker or liquidity provider in the equities securities that are the subject of this report.

Principal is not guaranteed in the case of equities because equity prices are variable.

Commission is the commission rate or the amount agreed with a customer when setting up an account or at anytime after that.

CS may have issued a Trade Alert regarding this security. Trade Alerts are short term trading opportunities identified by an analyst on the basis of market events and catalysts, while stock ratings reflect an analyst's investment recommendations based on expected total return over a 12-month period relative to the relevant coverage universe. Because Trade Alerts and stock ratings reflect different assumptions and analytical methods, Trade Alerts may differ directionally from the analyst's stock rating.

The author(s) of this report maintains a CS Model Portfolio that he/she regularly adjusts. The security or securities discussed in this report may be a component of the CS Model Portfolio and subject to such adjustments (which, given the composition of the CS Model Portfolio as a whole, may differ from the recommendation in this report, as well as opportunities or strategies identified in Trading Alerts concerning the same security). The CS Model Portfolio and important disclosures about it are available at www.credit-suisse.com/ti.

Taiwanese Disclosures: This research report is for reference only. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. Reports may not be reprinted without permission of CS. Reports written by Taiwan-based analysts on non-Taiwan listed companies are not considered recommendations to buy or sell securities under Taiwan Stock Exchange Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers.

To the extent this is a report authored in whole or in part by a non-U.S. analyst and is made available in the U.S., the following are important disclosures regarding any non-U.S. analyst contributors:

The non-U.S. research analysts listed below (if any) are not registered/qualified as research analysts with FINRA. The non-U.S. research analysts listed below may not be associated persons of CSSU and therefore may not be subject to the NASD Rule 2711 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

For Credit Suisse disclosure information on other companies mentioned in this report, please visit the website at www.credit-suisse.com/researchdisclosures or call +1 (877) 291-2683.

Disclaimers continue on next page.



This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse AG, the Swiss bank, or its subsidiaries or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of CS or its affiliates.

The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients as its customers by virtue of their receiving the report. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice or a representation that any investment or strategy is suitable or appropriate to your individual circumstances or otherwise constitutes a personal recommendation to you. CS does not offer advice on the tax consequences of investment and you are advised to contact an independent tax adviser. Please note in particular that the bases and levels of taxation may change.

CS believes the information and opinions in the Disclosure Appendix of this report are accurate and complete. Information and opinions presented in the other sections of the report were obtained or derived from sources CS believes are reliable, but CS makes no representations as to their accuracy or completeness. Additional information is available upon request. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, a trading call regarding this security. Trading calls are short term trading opportunities based on market events and catalysts, while stock ratings reflect investment recommendations based on expected total return over a 12-month period as defined in the disclosure section. Because trading calls and stock ratings reflect different assumptions and analytical methods, trading calls may differ directionally from the stock rating. In addition, CS may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report. CS is involved in many businesses that relate to companies mentioned in this report. These businesses include specialized trading, risk arbitrage, market making, and other proprietary trading.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgement at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADR's, the values of which are influenced by currency volatility, effectively assume this risk.

Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase.

Some investments discussed in this report have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment, in such circumstances you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed.

This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed the linked site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of the linked site does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in Europe (except Switzerland) by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is regulated in the United Kingdom by The Financial Services Authority ("FSA"). This report is being distributed in Germany by Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"). This report is being distributed in the United States by Credit Suisse Securities (USA) LLC ; in Switzerland by Credit Suisse AG; in Canada by Credit Suisse Securities (Canada), Inc.; in Brazil by Banco de Investimentos Credit Suisse (Brasil) S.A. or its affiliates; in Mexico by Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); in Japan by Credit Suisse Securities (Japan) Limited, Financial Instrument Firm, Director-General of Kanto Local Finance Bureau (Kinsho) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Securities Investment Advisers Association, Type II Financial Instruments Firms Association; elsewhere in Asia/Pacific by whichever of the following is the appropriately authorised entity in the relevant jurisdiction: Credit Suisse (Hong Kong) Limited, Credit Suisse Equities (Australia) Limited, Credit Suisse Securities (Thailand) Limited, Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse AG, Singapore Branch, Credit Suisse Securities (India) Private Limited regulated by the Securities and Exchange Board of India (registration Nos. INB230970637; INF230970637; INB010970631; INF010970631), having registered address at 9th Floor, Ceejay House, Dr.A.B. Road, Worli, Mumbai - 18, India, T- +91-22 6777 3777, Credit Suisse Securities (Europe) Limited, Seoul Branch, Credit Suisse AG, Taipei Securities Branch, PT Credit Suisse Securities Indonesia, Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorised affiliate of the above. Research on Taiwanese securities produced by Credit Suisse AG, Taipei Securities Branch has been prepared by a registered Senior Business Person. Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn. Bhd., to whom they should direct any queries on +603 2723 2020.

In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements. Non-U.S. customers wishing to effect a transaction should contact a CS entity in their local jurisdiction unless governing law permits otherwise. U.S. customers wishing to effect a transaction should do so only by contacting a representative at Credit Suisse Securities (USA) LLC in the U.S.

Please note that this report was originally prepared and issued by CS for distribution to their market professional and institutional investor customers. Recipients who are not market professional or institutional investor customers of CS should seek the advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents. This research may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA or in respect of which the protections of the FSA for private customers and/or the UK compensation scheme may not be available, and further details as to where this may be the case are available upon request in respect of this report.

Any Nielsen Media Research material contained in this report represents Nielsen Media Research's estimates and does not represent facts. NMR has neither reviewed nor approved this report and/or any of the statements made herein.

If this report is being distributed by a financial institution other than Credit Suisse AG, or its affiliates, that financial institution is solely responsible for distribution. Clients of that institution should contact that institution to effect a transaction in the securities mentioned in this report or require further information. This report does not constitute investment advice by Credit Suisse to the clients of the distributing financial institution, and neither Credit Suisse AG, its affiliates, and their respective officers, directors and employees accept any liability whatsoever for any direct or consequential loss arising from their use of this report or its content.

Copyright 2012 CREDIT SUISSE AG and/or its affiliates. All rights reserved.