# THE PENNSYLVANIA STATE UNIVERSITY SCHREYER HONORS COLLEGE

# DEPARTMENT OF FINANCE

An Event Study of Equity Spin-Off's in the 21st Century

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A thesis submitted in partial fulfillment of the requirements for a baccalaureate degree in Finance with honors in Finance

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# **ABSTRACT**

The purpose of this study is to examine the stock performance of firms that have spun-off a business in the 21<sup>st</sup> century. The Wharton Research Data Services (WRDS) was used to identify all spin-offs occurring from 2000 to 2009 as well as to collect return data for the companies. These returns were then measured against two benchmarks, the S&P 500 as well as each firms sector in the S&P 500, to evaluate the performance of the firms. These findings will demonstrate whether spin-offs display the same fast growth and high takeover activity as was found in studies of more dated spin-offs.

# TABLE OF CONTENTS

LIST OF FIGURES	iii
LIST OF TABLES	iv
ACKNOWLEDGEMENTS	v
Chapter 1 Introduction	1
Chapter 2 Literature Review	3
Chapter 3 Data Collection	6
Chapter 4 Performance Results	9
Relative Share Performance  Historical Findings  Takeover Activity	11
Chapter 5 Conclusion	15
References	17
Appendix A Stock Returns	18
Appendix B Stock Less SPDR Returns	21
Appendix C Stock Less S&P 500 Returns	24
Vita Geoffrey Southmayd	27

# LIST OF FIGURES

Figure 4-1 Raw Performance	1
Figure 4-1 Raw Performance	. ( )

# LIST OF TABLES

Table 4-1 Raw Returns	10
Table 4-2 Adjusted Returns	11
Table 4-3 Spin-off Parents Outperformance Compared to the Overall Market	12
Table 4-4 Parent Firms Remaining	13

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#### Chapter 1

# Introduction

As time goes on one thing has always been certain in the stock market, things are constantly changing and evolving. As new technology arises traders are able to price in events faster and trade in an instant. When a new law is passed placing restrictions on investors they immediately work on a way to circumvent it. This is the reason why previously attained knowledge must constantly be revisited and tested. Parent firms of spin-offs have previously been found to show strong stock growth and performance but a large amount of the data supporting this was collected in the 90's. This creates the question: In the 21<sup>st</sup> century, do the shares of a parent firm of a spin-off experience the large gains and high incidence of takeover activity that has been seen in the past?

A spin-off as defined by Investopedia is "The creation of an independent company through the sale or distribution of new shares of an existing business/division of a parent company". These new shares are distributed in the form of a dividend to all shareholders of the parent firm. For example, in Time Warner's spin-off of AOL in 1999, every Time Warner shareholder received one share of AOL for every eleven shares of Time Warner common stock they held.

In order to determine the shareholder performance of spin-offs data must first be collected. First, a list of all spin-offs occurring from 2000-2009 must be compiled. Then the shareholder returns for all of these firms gathered from the date of the spin-off until three years after. This three year span will give adequate time for the companies to fully adjust to the

separation of a business unit and to fully see the potential gains or losses due to the spin-off.

Finally, return data of benchmarks will be located so as to compare the performance of the parent firms to that of their peers. With this data in hand it will be possible to analyze and interpret how the firms performed and if their performance matches that of the past.

### Chapter 2

# **Literature Review**

This section of the paper aims to discuss the multiple papers that have already been written on the topic of spin-offs. All of these studies have examined performance of firms after a spin-off. They all have come to the conclusion that spin-offs are generally followed by abnormally large firm returns.

One of the earliest studies on the stock market performance of spin-offs was Miles and Rosenfeld (1983). Miles and Rosenfeld examined the effect of the spin-off announcement on the share price of the underlying stock. 55 companies were analyzed and they found significant positive adjusted returns of 2.5% on the first day after the announcement.

Cusatis, Miles and Woolridge (1993) expanded on the stock market performance of spin-offs and their parents. Their research focused on spin-offs from 965-1988 and found significant positive abnormal returns for parent firms for up to three years after the event. Miles and Woolridge (1999), expanded even further, examining spin-offs and their parents from 1962-1999. They also found that spin-offs see strong growth and performance after the event for periods up to three years. This study compiled a focus group of hundreds of companies that either had or were the product of a spin-off as well as a case study of one of the largest spin-offs of the 90's, AT&T's spin-off of Lucent Technologies and NCR.

One of the first topics discussed in the book are the various reasons for which a company decides to perform a spin-off which included: lack of synergy, deconglomerate, focus on core business and legal/ regulatory issues. The authors also interviewed a variety

of executives and found many issues involved with spin-offs, including: separation of assets, pensions, and CEO selections. The remainder of the book focuses on the operating and stock market performance of the involved companies. As far as operating performance is concerned, the authors found that the parent and daughter companies saw very positive results after the spin-off compared to the overall market. These findings were based off of multiple metrics such as net sales growth, operating income and capital expenditures.

The stock market results painted a very similar picture as the operational results. On both a raw and Matched-Firm-Adjusted returns basis, the parent and daughter companies saw significant stock price growth in the 3 years immediately following a spin-off. One of the other takeaways from this paper was the finding that many of the companies involved in spin-off activity were found to be takeover targets in a short 3-year horizon after the event.

Anslinger, Klepper, and Subramaniam (1999) studied spin-offs in the same time period and also saw strong stock performance after an equity spin-off. These authors found that the gains in price were coming from four different areas, "First, there is an increase in coverage by analysts. Second, the restructured subsidiaries attract new investors. Indeed, there is little overlap between people who invested in a parent company and those who invest in its subsidiaries after a restructuring. Third, the restructuring of ownership usually improves a subsidiary's operating performance through such means as new incentives to management. Finally, restructuring can improve corporate governance and increase strategic flexibility." These findings reinforced what was found by Miles and Woolridge (1999).

Finally, Krishnaswami and Subramaniam (1998) analyzed their hypothesis that the separation of a business's divisions done through a spin-off is value enhancing due to the mitigation of information asymmetry that exists within the firm. Through their work they found that higher levels of information asymmetry did exist in firms that performed spin-offs. These problems with information distribution were found to dramatically decrease after the spin-off. The degree of asymmetry was also found to be positively related to the gains seen by the spin-offs. This study further illustrates the relation between a spin-off event and positive market results.

### Chapter 3

# **Data Collection**

In order to test the hypothesis of this paper, a large amount of data had to be collected. As many spin-offs as possible that occurred between 2000 and 2009 had to be found as well as the dates of said spin-offs and the return data for each firm after the event. To find all of the firms that executed a spin-off the Wharton Research Data Services (WRDS) of the University of Pennsylvania was used. WRDS hosts an array of financial data sets that would allow me to find all spin-offs occurring in the time frame needed. One of the many data sets included in WRDS is The Center for Research in Security Prices (CRSP).

CRSP has a host of stock events that you can search for, such as dividends, acquisitions, liquidations, and so on. Each of these events is described in CRSP's outputs through a system of codes. To find spin-offs, I ran reports on acquisitions and reorganizations to determine which codes I needed. To do this I looked up companies I knew had a spin-off in the correct time frame and then examined which codes appeared on the date of those spin-offs. I found two codes that were being used: 3762 and 3763. Once these were found I double checked they were correct by going through CRSP's data description guide and found the following descriptions for those codes:

3762- Issue on file, received as a spin-off in reorganization, taxable same rate as dividend

3763- Issue on file, received as a spin-off in reorganization, non-taxable

Once I had these codes I was able to search CRSP's data for these codes during the 2000-2009 timeframe and compile a list of companies that conducted spin-offs as well as the exact dates of the events. With a list of companies in hand I was now able to begin collecting return data.

To stay consistent, the CRSP data set was again used to find the return data of the firms. By inputting the ticker symbols of the firms I was able to extract daily return data for each firm including dividends. Dividends needed to be included as they are a significant source of returns for shareholders. Once all daily returns were collected, they were compiled in Excel with a list of spin-off dates for each company. This data was then used to calculate returns over 6, 12, 18, 24 and 36 month time frames from the time of the spin-off. This would allow easier interpretation of the results.

To be able to test the hypotheses of this paper these returns needed to be compared to something. Returns themselves would provide no clear indication of whether the firms did better or worse than any other investment, especially in a time period that contained two economic recessions. As I was studying returns for stocks it seemed most appropriate to compare the returns to that of the stock market. As different sectors of the market tend to perform differently in different economic conditions, sector specific returns were also important.

To collect data for the overall market as well as specific sectors the FactSet Research program was used. Using their excel functions I was able to calculate returns over exact time spans for both the S&P 500 and S&P Sector SPDRs. Sector SPDR's are ETFs that follow companies that are both in the S&P 500 as well as specific sectors. FactSet was used to look up the sectors of each firm so that I could then assign a sector SPDR for them to be compared against. With this information in hand I was then able to use FactSet's Excel codes to pull in

return data for each SPDR as well as the S&P 500 from the date of each company's spin-off until the 6, 12, 18, 24, and 36 month time horizons. It is important to note that these returns also accounted for all dividends paid out by the firms.

Now that all relevant data had been collected, results could be compared between the parents of the spin-offs and the S&P 500 as well as the sector SPDRs. To do this I subtracted the returns of the S&P 500 from the firm returns to find abnormal returns. The same was done with the SPDR returns being subtracted from the parent firm returns. Once these abnormal returns were obtained the mean of the data for each time period (6, 12, 18, 24 and 36 months) was calculated so that the overall performance of the parent firms could be seen compared to the S&P 500 as well as the respective sector SPDRs. These results were then be analyzed and can be found in the next chapter.

# Chapter 4

# **Performance Results**

This chapter aims to examine the relative performance of the parent firms for a 3-year period after the spin-off. It could also show that that the event alters the performance and growth of the company in some fashion. The many reasons for which companies will spin-off a segment of their business generally revolve around a restructuring of the firm so that they can be more efficient in the long run. Due to this you would expect to see increased productivity and growth but this does not necessarily mean that you will see large jumps in share price as investors should be factoring in these positive affects when they determine share prices. This means that large changes in share price of the firm beyond that of the market indicate incorrect valuations. It has been proven in the past that the parent firms see high share price returns in the three years following a spin-off as well as a relatively high amount of takeover activity. The results below will determine if this trend has continued in the 21<sup>st</sup> century.

#### **Relative Share Performance**

The following table and graph show the raw returns of the parent firms, sector SPDRs and the S&P 500:

Table 4-1 Raw Returns

	I-6	I-12	I-18	I-24	I-36
Parent Firm	-3.1%	-2.3%	-0.3%	1.7%	20.8%
Sector	-1.4%	-3.4%	-5.3%	-4.2%	0.6%
S&P 500	-2.9%	-5.7%	-6.9%	-6.6%	-4.6%
N	83	81	80	76	74

<sup>\*</sup>If a firm is delisted or taken over the longest available return is used to represent the whole period

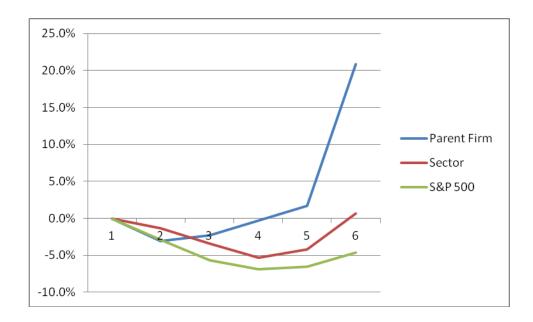


Figure 4-1 Raw Performance

In the graph and table above you can see that the parent firms did outperform both the overall market and their market sectors in almost every time period. The S&P 500 had negative returns over every time period examined while the Parent firms grew over the two and three year time spans. The SPDRs did not do much better than the S&P 500, declinging over each period studied except for the three year time period. One of the reasons the two benchmarks being used are consistently negative is due to the harsh economic times throughout the study. The U.S. saw recessions in both 2001 as well as December 2007-June 2009.

The following table displays the numerical outperformance of the parent firms when compared to the market:

Table 4-2 Adjusted Returns

	I-6	I-12	I-18	I-24	I-36
Parent Less Sector	-1.7%	1.1%	5.0%	5.9%	20.2%
Parent Less S&P 500	-0.2%	3.4%	6.5%	8.3%	25.5%
N	83	81	80	76	74

This table gives a much clearer picture of the performance of the parent firms compared to the overall market. The numbers are calculated by subtracting the SPDR and S&P 500 returns from the parent firms in every timeframe. Only in the first 6 months after a spin-off did the market sectors of the firms and the S&P 500 actually outperform the firms themselves.. The outperformance is extremely apparent in the third year after a spin-off where the parent firms grew 20.2% and 25.5% more than the SPDRs and S&P 500 respectively.

# **Historical Findings**

These findings can also be applied to determine if firms engaging in spin-offs behave as observed in the past. Miles and Woolridge (1999) studied the same events from 1962-1996 and also found that parent firms experienced higher growth rates than the overall market. Their results are compared to the results of this study in the following table:

Table 4-3 Spin-off Parents Outperformance Compared to the Overall Market

Column1	I-6	I-12	I-18	I-24	I-36
2000-2009	-0.2%	3.4%	6.5%	8.3%	25.5%
1962-1996	3.5%	5.9%	9.8%	15.9%	19.3%

Parent firm performance has changed slightly over the years. It can be seen that from 1962-1996 the companies saw relatively consistent outperformance of the market, just around 6% every year for three years. The more recent spin-offs experience much slower growth rates in the beginning but ramped up dramatically in the last year and grew by 6.2% more over the three years than the older spin-offs had. One possible explanation for the lower growth rates in the beginning could be the result of all the literature published in the mid to late 1990's on the topic of spin-offs. Investors may have learned to more properly value the firms in the short run. This could only explain the short run as the recent spin-offs outpace the older after 2 years. The higher long-run growth rates from 2000-2009 could be caused by a greater wealth of spin-off examples to learn from. According to Miles and Woolridge (1999) there were 177 spin-offs throughout 1962-1996, all of which could help modern companies learn from a variety of mistakes and successes. These past events would give current-day firms a wealth of experience that could be used to prevent unsuccessful spin-offs and execute more profitable ones.

### **Takeover Activity**

In the past a trend of takeover activity and delisting was seen with parent firms within the three year span after a spin-off. Miles and Woolridge (1999) saw approximately 14.1% of the parent companies they studied either taken over or delisted from their exchanges. The following

table summarizes the amount of firms remaining in each time period after spinning off a section of their business:

Table 4-4 Parent Firms Remaining

	I-6	I-12	I-18	I-24	I-36
1962-1996	177	167	162	157	152
2000-2009	83	81	80	76	74

As seen above, both studies saw a considerable number of firms fall out during the three year time span after a spin-off. The main reasons a firm is delisted include bankruptcy, failing to satisfy listing rules of an exchange and becoming a private company. In all cases the shares of the firm are no longer traded on an exchange. From 2000-2009 a total of only 9.6% of the firms were either delisted from their exchange, taken over by another corporation or data was not able to be collected for the entire period. Data for Time Warner Cable (TWX) was only able to be collected for the six and twelve month time periods as the CRSP data set only contained returns until the end of 2011 and is therefore not included in the 9.6%. This shows a small decrease in the amount of takeover and delisting activity by modern day spin-offs.

In this study it was found that 7 of the 8 firms no longer trading after three years had been taken over. These firms were Cadbury PLC (CBY), AOL Inc. (AOL), Abbraxis Bioscience (ABBI), Point.360 (PTSX), Neighborcare (NCRX), Pancanadian Energy (PCX) and Trane Inc (TT). As stated earlier in the paper, one reason for having a spin-off is to comply with a company's offer to buy a firm. This was the case in Point.360's takeover. Point.360 spun-off its post-production businesses on the same day it completed a merger with DG FastChannel (DGIT). This deal allowed DGIT to purchase the spot advertising distribution business from PTSX while the remaining businesses of PTSX were spun-off to their shareholders.

While a smaller percentage of firms were no longer trading after three years it is still evident that a large amount of takeover activity is present following a spin-off. Out of the 83 companies this study started with, 7 were taken over within three years, a total of 8.4%.

### Chapter 5

# Conclusion

As detailed in earlier chapters, parents of spin-offs have been found to show above average shareholder performance as well as takeover activity in the three year span following the spin-off. The reasons for this have been written about in several papers and include better operating performance as well as corporate restructuring activity. After all, why would a company decide to make such a drastic change to their business such as separating an entire division unless they believed it was in the best interest of their shareholders, who are the true owners of the firm?

The high incidence of takeovers with regard to a firm spinning-off a division should not come as a surprise. This observation has been seen in the past and is an obvious result when you think about what a spin-off accomplishes for a firm. A spin-off divides a company in two in the hopes that both segments can become more productive. A business generally splits the divisions based on the services provided so as to make each part more focused and easily transparent to shareholders. This makes the newly restructured firms a more ideal match for a merger as an acquiring firm is no longer purchasing any pieces of the old business that does not fit into their business.

If believers of the Efficient Market Hypothesis were correct, than the true value of a spinoff should be immediately reflected in the share price of the firm. This study, as well as others described earlier, has shown that this is not necessarily the case. The returns of the spin-offs of the 21<sup>st</sup> century have shown returns in excess of 25% higher than that of the S&P 500, an index widely regarded as a benchmark of the overall stock market, in a three year span. Not only are these firms outperforming the market, they are doing so by an even greater amount than what was found in the 90's by Miles and Woolridge (1999), who saw positive abnormal returns of 19.3% over the same three year horizon after a spin-off took place. These results indicate that investors are still not properly valuing the positive benefits a spin-off can have and may be doing an even poorer job than previously found. The purpose of this paper is to educate said investors in the hopes that they will begin to better value a spin-offs effect on the parent firm so that the share price is a more appropriate representation of the real value of the firm.

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# Appendix A

# **Stock Returns**

					Stock Return	ıs	
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	I-24	I-36
TTH	Telecom Hldrs Tr Depositry Rcpt	2/1/2000	-14.2%	-23.4%	-34.7%	-46.9%	-64.7%
PALM	Palm Inc.	3/2/2000	-54.9%	-80.9%	-96.3%	-96.9%	-99.5%
IGTE	iGATE Corp.	3/7/2000	-83.7%	-91.6%	-91.8%	-91.2%	-93.3%
KVIKA	Industriforvaltning Ab Kinn Spons Adr A	3/17/2000	-29.1%	-46.8%	-48.3%	-53.9%	-63.1%
KVIKB	Industriforvaltning Ab Kinn Spons Adr B	3/17/2000	-39.0%	-46.6%	-48.5%	-53.2%	-61.4%
WCOM	WorldCom Inc.	5/4/2000	-57.5%	-56.1%	-67.2%	-95.6%	N/A
FAF	First American Financial Corp.	5/22/2000	42.0%	46.9%	28.4%	57.4%	104.2%
MALL	IDEAMALL INC	6/13/2000	-71.0%	-51.7%	-8.6%	-0.4%	3.0%
RKH	Market Vectors Bank and Brokerage ETF	6/23/2000	27.3%	27.8%	22.1%	28.0%	28.2%
UTH	Utilities HOLDRs Trust	6/23/2000	29.6%	18.0%	2.7%	-2.4%	-7.3%
VZ	Verizon Communications Inc.	7/3/2000	-0.4%	10.6%	2.3%	-22.0%	-13.7%
МКН	Market 2000+ HOLDRs Trust	8/30/2000	-26.9%	-36.0%	-36.9%	-51.4%	-46.3%
NVAL	New Valley Corporation	9/27/2000	-24.7%	-12.5%	11.7%	8.7%	11.2%
WMH	Wireless Holdrs Tr Depositry Rcpt	11/1/2000	-27.0%	-40.1%	-59.0%	-62.1%	-52.2%
ADP	ALLIED PRODUCTS CORP DE	12/1/2000	-87.3%	-87.1%	-87.9%	-89.7%	-90.7%
BLC	Belo Corp. (Series A)	1/2/2001	17.3%	17.0%	43.5%	39.1%	84.4%
AOL	AOL Inc.	1/12/2001	4.5%	-36.7%	-72.3%	-68.2%	N/A
IDT	IDT Corp. Cl B	2/26/2001	-6.3%	38.8%	86.6%	62.1%	185.8%
AL	ALCAN INC	3/1/2001	-0.4%	11.0%	-25.2%	-20.7%	35.9%
VWKS	INFOCURE CORP	3/6/2001	57.9%	131.3%	297.3%	90.1%	114.2%
CEN	Ceridian Corp.	4/2/2001	0.1%	49.8%	-4.1%	-0.2%	39.5%
BTU	Peabody Energy Corp.	5/23/2001	-28.3%	-24.6%	-27.6%	-16.4%	27.7%
GR	Goodrich Corp.	6/1/2001	-40.8%	-18.7%	-51.7%	-51.2%	-21.8%
FTI	FMC Technologies Inc.	6/14/2001	-40.0%	-2.5%	-5.7%	-4.1%	22.3%
PNX	Phoenix Cos. Inc.	6/20/2001	4.5%	-3.6%	-58.1%	-40.5%	-23.3%
FRO	Frontline Ltd.	8/6/2001	-35.6%	-54.1%	-37.0%	28.5%	372.2%
LMC	LIBERTY MEDIA CORP NEW	8/10/2001	-29.4%	-60.0%	-50.6%	-43.8%	-49.8%
ABC	AmerisourceBergen Corp.	8/30/2001	7.2%	14.4%	-14.6%	-8.0%	-14.4%
ALOY	Alloy Inc.	9/6/2001	-7.6%	-38.8%	-71.2%	-59.5%	-78.1%
PDE	Pride International	9/17/2001	19.9%	-1.7%	8.4%	24.6%	39.3%

				Stock Returns			
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	I-24	I-36
PCX	PANCANADIAN ENERGY CORP	10/3/2001	22.6%	N/A	N/A	N/A	N/A
KIND	Kindred Healthcare Inc.	11/8/2001	-1.9%	-63.5%	-61.3%	12.7%	12.7%
AYI	Acuity Brands Inc.	11/14/2001	22.7%	-5.5%	18.5%	65.1%	133.2%
BTY	BT Group PLC ADS	11/19/2001	2.3%	-12.3%	-17.7%	-19.5%	-26.9%
sws	SWS Group Inc.	12/3/2001	-4.0%	-11.8%	30.7%	15.4%	40.2%
APPX	APP Pharmaceuticals Inc.	12/14/2001	-37.3%	-10.6%	87.2%	153.8%	167.3%
DF	Dean Foods Co.	12/26/2001	8.9%	8.9%	34.0%	43.0%	42.4%
L	LIBERTY MEDIA CORP NEW	1/2/2002	0.7%	-31.9%	-11.5%	-13.1%	-6.0%
ROK	Rockwell Automation Inc.	2/26/2002	-4.0%	17.8%	44.4%	65.1%	239.3%
DVD	Dover Motorsports Inc.	4/1/2002	-46.6%	-54.7%	-49.3%	-47.7%	-30.8%
USAI	IAC/InterActiveCorp.	5/9/2002	-14.7%	10.5%	12.6%	3.1%	-23.6%
GTN	Gray Television Inc.	8/30/2002	-23.4%	23.1%	34.8%	25.4%	-7.9%
CNP	CenterPoint Energy Inc.	10/1/2002	-4.0%	23.3%	61.5%	43.5%	113.4%
AWC	Alumina Ltd. ADS	12/4/2002	15.2%	95.8%	59.4%	93.3%	123.5%
МО	Altria Group Inc.	1/27/2003	6.9%	50.3%	32.4%	78.2%	121.9%
MNST	Monster Beverage Corp.	5/1/2003	52.0%	52.8%	67.4%	37.4%	242.5%
всо	Brink's Co.	5/5/2003	56.0%	124.6%	173.5%	158.4%	345.0%
IACI	IAC/InterActiveCorp.	6/23/2003	-10.3%	-17.1%	-27.5%	-33.2%	-36.2%
PLMO	Pulmo BioTech Inc.	10/29/2003	-5.6%	71.7%	22.5%	N/A	N/A
NCRX	NeighborCare, Inc.	12/2/2003	43.8%	38.8%	45.1%	N/A	N/A
FNB	F.N.B. Corp.	12/17/2003	18.9%	22.4%	22.2%	18.3%	25.0%
ACV	Alberto-Culver	1/23/2004	15.5%	21.6%	4.2%	6.6%	43.7%
ACCL	Accelrys Inc.	5/14/2004	-33.7%	-46.0%	-26.8%	-28.6%	-35.9%
LBTYA	Liberty Global Inc. Cl A	6/8/2004	24.8%	0.2%	2.5%	5.8%	68.8%
LBTYB	Liberty Global Inc. Cl B	6/8/2004	90.3%	1.1%	-0.4%	-0.6%	55.9%
KND	Kindred Healthcare Inc.	10/27/2004	19.6%	3.9%	-9.8%	3.6%	-0.7%
ВТ	BT Group PLC ADS	11/15/2004	-4.8%	-6.4%	15.0%	49.1%	69.4%
AMCS	Amicas	1/4/2005	5.9%	10.0%	-32.1%	-32.1%	-33.5%
CKXE	CKX Inc.	3/29/2005	-47.5%	-45.8%	-48.2%	-52.3%	-56.3%
DISCA	Discovery Communications Inc. Series A	7/21/2005	1.5%	-10.5%	12.7%	67.0%	40.7%
SPCHB	Sport Chalet Inc. Cl B	9/21/2005	-31.2%	-27.6%	-8.3%	-23.0%	-71.2%
CBS	CBS Corp (Cl B)	1/3/2006	16.9%	63.0%	101.2%	20.6%	-84.8%
PDLI	PDL BioPharma Inc.	1/10/2006	-43.0%	-34.1%	-16.0%	-47.8%	-59.8%
MS	Morgan Stanley	1/17/2006	8.5%	40.9%	38.8%	-6.1%	-66.7%
FIS	Fidelity National Information Services Inc.	2/1/2006	-8.2%	7.8%	25.4%	10.6%	-27.5%
PCH	Potlatch Corp.	2/3/2006	1.4%	40.6%	37.7%	28.1%	-0.5%
DUK	Duke Energy Corp.	4/3/2006	9.5%	29.9%	23.4%	19.8%	-2.0%

				Stock Returns			
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	1-24	I-36
ABBI	ABRAXIS BIOSCIENCE INC	4/19/2006	-7.7%	-6.3%	-20.1%	N/A	N/A
S	Sprint Nextel Corp.	5/24/2006	-10.0%	-0.1%	-31.5%	-60.5%	-76.5%
FSYS	Fuel Systems Solutions Inc.	8/25/2006	63.3%	28.1%	-21.8%	284.4%	131.1%
CAR	Avis Budget Group Inc.	9/5/2006	2.2%	-15.5%	-57.7%	-69.2%	-59.8%
TMO	Thermo Fisher Scientific Inc.	11/10/2006	23.7%	31.5%	31.8%	-14.2%	4.7%
TFONY	Telefonos De Mexico S A B Spon Adr A Shs	12/20/2006	37.6%	31.3%	45.7%	40.8%	18.3%
TYC	Tyco International Ltd.	7/2/2007	-25.2%	-23.0%	-55.6%	-47.9%	-29.7%
PTSX	Point.360	8/14/2007	-21.1%	-33.9%	-39.2%	-42.7%	-31.7%
MI	Marshall & Ilsley	11/2/2007	49.8%	7.6%	-57.1%	-67.9%	-65.2%
TT	Trane Inc.	11/28/2007	34.7%	N/A	N/A	N/A	N/A
DISH	DISH Network Corp. Cl A	1/22/2008	0.6%	-58.9%	-39.8%	-24.8%	-14.9%
HRC	Hill-Rom Holdings Inc.	4/1/2008	14.6%	-61.4%	-18.9%	9.2%	54.1%
СВУ	Cadbury PLC ADR	5/2/2008	-28.4%	-38.7%	2.4%	N/A	N/A
WEN	The Wendy's Co.	9/30/2008	-4.3%	-8.9%	-2.1%	-11.5%	40.3%
MWW	Monster Worldwide Inc.	11/10/2008	2.2%	19.4%	32.6%	56.5%	-32.0%
TWX	Time Warner Inc.	12/9/2009	11.7%	12.8%	N/A	N/A	N/A

Averages -3.1% -2.3% -0.3% 1.7% 20.8%

Appendix B

# **Stock Less SPDR Returns**

			Stock Less SPDR Returns				
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	1-24	I-36
TTH	Telecom Hldrs Tr Depositry Rcpt	2/1/2000	-12.2%	4.4%	13.2%	7.1%	7.2%
PALM	Palm Inc.	3/2/2000	-54.0%	-29.7%	-36.6%	-34.9%	-25.0%
IGTE	iGATE Corp.	3/7/2000	-80.8%	-43.7%	-31.1%	-31.1%	-18.0%
KVIKA	Industriforvaltning Ab Kinn Spons Adr A	3/17/2000	-41.8%	-63.5%	-70.8%	-82.0%	-56.7%
KVIKB	Industriforvaltning Ab Kinn Spons Adr B	3/17/2000	-63.5%	-60.2%	-58.1%	-75.9%	-57.2%
WCOM	WorldCom Inc.	5/4/2000	-42.1%	-12.9%	-9.8%	-30.2%	N/A
FAF	First American Financial Corp.	5/22/2000	33.1%	26.6%	18.5%	45.3%	103.3%
MALL	IDEAMALL INC	6/13/2000	-67.0%	-58.2%	-15.7%	-9.9%	-4.5%
RKH	Market Vectors Bank and Brokerage ETF	6/23/2000	5.9%	5.8%	10.2%	20.6%	19.8%
UTH	Utilities HOLDRs Trust	6/23/2000	16.9%	9.3%	3.3%	8.0%	7.9%
VZ	Verizon Communications Inc.	7/3/2000	42.2%	59.2%	58.3%	50.0%	54.2%
МКН	Market 2000+ HOLDRs Trust	8/30/2000	-9.9%	-12.2%	-12.3%	-14.0%	-16.6%
NVAL	New Valley Corporation	9/27/2000	-17.4%	1.5%	13.8%	33.5%	17.1%
WMH	Wireless Holdrs Tr Depositry Rcpt	11/1/2000	2.8%	8.4%	-1.9%	2.5%	1.9%
ADP	ALLIED PRODUCTS CORP DE	12/1/2000	-67.1%	-56.8%	-39.8%	-38.3%	-48.0%
BLC	Belo Corp. (Series A)	1/2/2001	7.6%	3.7%	38.2%	43.8%	59.6%
AOL	AOL Inc.	1/12/2001	26.5%	-8.3%	-16.3%	-15.5%	N/A
IDT	IDT Corp. Cl B	2/26/2001	10.2%	68.2%	137.0%	114.4%	215.3%
AL	ALCAN INC	3/1/2001	3.7%	15.2%	-12.7%	0.0%	21.0%
VWKS	INFOCURE CORP	3/6/2001	62.0%	128.9%	303.1%	99.0%	101.0%
CEN	Ceridian Corp.	4/2/2001	21.5%	61.9%	44.4%	37.3%	54.5%
вти	Peabody Energy Corp.	5/23/2001	-21.4%	-29.7%	-14.9%	-5.4%	17.4%
GR	Goodrich Corp.	6/1/2001	-28.1%	16.3%	-12.5%	-11.7%	5.8%
FTI	FMC Technologies Inc.	6/14/2001	-28.9%	17.5%	24.9%	18.0%	26.3%
PNX	Phoenix Cos. Inc.	6/20/2001	9.2%	5.0%	-39.3%	-33.1%	-31.0%
FRO	Frontline Ltd.	8/6/2001	-21.3%	-29.2%	-6.3%	47.4%	373.4%
LMC	LIBERTY MEDIA CORP NEW	8/10/2001	-15.8%	-38.4%	-17.8%	-24.1%	-45.7%
ABC	AmerisourceBergen Corp.	8/30/2001	4.2%	14.5%	-10.5%	-11.7%	-26.1%
ALOY	Alloy Inc.	9/6/2001	-26.2%	-36.5%	-56.7%	-75.2%	-101.5%
PDE	Pride International	9/17/2001	2.4%	10.5%	24.0%	20.8%	16.3%

				Stock Less SPDR Returns			
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	I-24	I-36
PCX	PANCANADIAN ENERGY CORP	10/3/2001	3.2%	N/A	N/A	N/A	N/A
KIND	Kindred Healthcare Inc.	11/8/2001	-20.8%	-76.0%	-76.0%	-0.4%	-6.4%
AYI	Acuity Brands Inc.	11/14/2001	43.5%	30.6%	50.9%	85.0%	147.1%
BTY	BT Group PLC ADS	11/19/2001	24.5%	26.2%	18.3%	2.5%	-13.2%
SWS	SWS Group Inc.	12/3/2001	-6.0%	-3.6%	30.4%	4.6%	15.5%
APPX	APP Pharmaceuticals Inc.	12/14/2001	-42.8%	-13.4%	74.9%	140.8%	151.7%
DF	Dean Foods Co.	12/26/2001	22.5%	30.1%	53.7%	57.0%	48.8%
L	LIBERTY MEDIA CORP NEW	1/2/2002	8.6%	-20.4%	-9.5%	-24.3%	-29.4%
ROK	Rockwell Automation Inc.	2/26/2002	10.4%	45.6%	53.2%	61.6%	219.2%
DVD	Dover Motorsports Inc.	4/1/2002	-23.7%	-33.2%	-43.7%	-56.8%	-45.7%
USAI	IAC/InterActiveCorp.	5/9/2002	1.0%	21.7%	7.1%	-2.6%	-35.2%
GTN	Gray Television Inc.	8/30/2002	-13.0%	6.0%	5.1%	0.9%	-45.3%
CNP	CenterPoint Energy Inc.	10/1/2002	-3.9%	3.0%	25.8%	1.3%	16.3%
AWC	Alumina Ltd. ADS	12/4/2002	8.3%	73.4%	29.0%	43.7%	67.8%
МО	Altria Group Inc.	1/27/2003	1.5%	35.1%	13.9%	54.0%	94.3%
MNST	Monster Beverage Corp.	5/1/2003	40.1%	29.5%	50.5%	14.2%	211.0%
ВСО	Brink's Co.	5/5/2003	38.4%	97.0%	132.2%	115.8%	273.1%
IACI	IAC/InterActiveCorp.	6/23/2003	-25.3%	-34.9%	-57.2%	-59.7%	-60.7%
PLMO	Pulmo BioTech Inc.	10/29/2003	-17.0%	70.3%	11.8%	N/A	N/A
NCRX	NeighborCare, Inc.	12/2/2003	36.8%	37.3%	35.2%	N/A	N/A
FNB	F.N.B. Corp.	12/17/2003	13.5%	9.6%	10.5%	-4.4%	-18.9%
ACV	Alberto-Culver	1/23/2004	12.9%	13.2%	-5.6%	-3.9%	13.7%
ACCL	Accelrys Inc.	5/14/2004	-28.2%	-48.4%	-29.9%	-30.1%	-58.6%
LBTYA	Liberty Global Inc. Cl A	6/8/2004	18.8%	-3.1%	-2.7%	0.8%	43.1%
LBTYB	Liberty Global Inc. Cl B	6/8/2004	84.3%	-2.2%	-5.6%	-5.5%	30.2%
KND	Kindred Healthcare Inc.	10/27/2004	10.1%	-3.4%	-21.0%	-19.2%	-33.1%
ВТ	BT Group PLC ADS	11/15/2004	1.1%	-8.0%	14.1%	34.9%	42.2%
AMCS	Amicas	1/4/2005	0.1%	-1.0%	-36.4%	-49.7%	-56.1%
CKXE	CKX Inc.	3/29/2005	-46.4%	-50.3%	-56.9%	-70.3%	-52.4%
DISCA	Discovery Communications Inc. Series A	7/21/2005	3.4%	-2.4%	-4.1%	50.2%	54.5%
SPCHB	Sport Chalet Inc. Cl B	9/21/2005	-38.7%	-37.3%	-32.1%	-42.3%	-69.9%
CBS	CBS Corp (Cl B)	1/3/2006	15.3%	45.3%	79.8%	22.1%	-56.0%
PDLI	PDL BioPharma Inc.	1/10/2006	-37.5%	-39.1%	-27.0%	-62.8%	-44.2%
MS	Morgan Stanley	1/17/2006	8.7%	23.1%	22.4%	9.6%	0.3%
FIS	Fidelity National Information Services Inc.	2/1/2006	0.8%	-1.8%	5.4%	0.2%	3.1%
PCH	Potlatch Corp.	2/3/2006	-5.0%	19.3%	32.7%	29.3%	67.5%
DUK	Duke Energy Corp.	4/3/2006	-3.2%	-6.1%	-13.7%	-15.8%	5.1%

20.2%

5.9%

			Stock Less SPDR Returns				
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	1-24	I-36
ABBI	ABRAXIS BIOSCIENCE INC	4/19/2006	-17.1%	-24.3%	-37.9%	N/A	N/A
S	Sprint Nextel Corp.	5/24/2006	-26.5%	-23.1%	-57.6%	-81.9%	-62.0%
FSYS	Fuel Systems Solutions Inc.	8/25/2006	56.0%	18.3%	-34.7%	266.0%	125.9%
CAR	Avis Budget Group Inc.	9/5/2006	-5.2%	-17.7%	-35.4%	-35.2%	-6.3%
тмо	Thermo Fisher Scientific Inc.	11/10/2006	11.3%	22.3%	32.5%	1.7%	8.2%
TFONY	Telefonos De Mexico S A B Spon Adr A Shs	12/20/2006	27.4%	16.2%	41.0%	74.1%	19.1%
TYC	Tyco International Ltd.	7/2/2007	-25.7%	-11.1%	-15.8%	-6.9%	-4.4%
PTSX	Point.360	8/14/2007	-11.7%	-20.5%	5.3%	-19.0%	-22.3%
MI	Marshall & Ilsley	11/2/2007	61.3%	57.1%	7.4%	-15.2%	-14.6%
TT	Trane Inc.	11/28/2007	35.8%	N/A	N/A	N/A	N/A
DISH	DISH Network Corp. Cl A	1/22/2008	3.9%	-26.4%	-23.1%	-26.5%	-46.8%
HRC	Hill-Rom Holdings Inc.	4/1/2008	18.8%	-39.5%	-12.2%	3.1%	42.6%
СВУ	Cadbury PLC ADR	5/2/2008	-15.1%	-19.3%	6.7%	N/A	N/A
WEN	The Wendy's Co.	9/30/2008	24.3%	-9.4%	-23.1%	-35.5%	8.9%
MWW	Monster Worldwide Inc.	11/10/2008	-8.3%	-21.9%	-15.3%	-8.8%	-103.7%
TWX	Time Warner Inc.	12/9/2009	3.4%	-18.0%	N/A	N/A	N/A

Averages

-1.7%

1.1%

5.0%

Appendix C

# Stock Less S&P 500 Returns

			Stock Less S&P 500 Returns				
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	I-24	I-36
TTH	Telecom Hldrs Tr Depositry Rcpt	2/1/2000	-16.3%	-20.3%	-20.9%	-27.1%	-25.4%
PALM	Palm Inc.	3/2/2000	-65.0%	-70.3%	-78.2%	-78.8%	-59.9%
IGTE	iGATE Corp.	3/7/2000	-93.8%	-84.7%	-71.9%	-76.6%	-54.4%
KVIKA	Industriforvaltning Ab Kinn Spons Adr A	3/17/2000	-27.8%	-25.4%	-19.3%	-33.5%	-22.0%
KVIKB	Industriforvaltning Ab Kinn Spons Adr B	3/17/2000	-37.7%	-25.2%	-19.5%	-32.8%	-20.3%
WCOM	WorldCom Inc.	5/4/2000	-58.7%	-46.0%	-45.5%	-71.8%	N/A
FAF	First American Financial Corp.	5/22/2000	45.8%	53.4%	46.2%	79.8%	137.7%
MALL	IDEAMALL INC	6/13/2000	-63.5%	-36.2%	14.9%	30.9%	35.7%
RKH	Market Vectors Bank and Brokerage ETF	6/23/2000	36.7%	42.8%	42.7%	59.4%	60.1%
UTH	Utilities HOLDRs Trust	6/23/2000	39.0%	33.0%	23.3%	29.0%	24.6%
VZ	Verizon Communications Inc.	7/3/2000	12.3%	26.6%	23.0%	13.1%	19.2%
MKH	Market 2000+ HOLDRs Trust	8/30/2000	-9.6%	-11.1%	-12.3%	-12.4%	-13.4%
NVAL	New Valley Corporation	9/27/2000	-5.1%	16.0%	31.3%	50.7%	41.3%
WMH	Wireless Holdrs Tr Depositry Rcpt	11/1/2000	-14.9%	-16.4%	-34.5%	-25.5%	-26.7%
ADP	ALLIED PRODUCTS CORP DE	12/1/2000	-83.2%	-73.0%	-67.0%	-60.8%	-72.1%
BLC	Belo Corp. (Series A)	1/2/2001	24.5%	27.0%	66.5%	68.2%	98.0%
AOL	AOL Inc.	1/12/2001	13.3%	-23.0%	-42.0%	-38.4%	N/A
IDT	IDT Corp. Cl B	2/26/2001	2.1%	51.3%	114.2%	96.8%	195.5%
AL	ALCAN INC	3/1/2001	8.3%	19.8%	4.0%	12.1%	43.7%
VWKS	INFOCURE CORP	3/6/2001	67.7%	138.6%	326.0%	124.5%	122.0%
CEN	Ceridian Corp.	4/2/2001	8.3%	50.6%	24.4%	22.9%	40.7%
BTU	Peabody Energy Corp.	5/23/2001	-17.5%	-9.7%	0.2%	11.2%	42.9%
GR	Goodrich Corp.	6/1/2001	-30.4%	-1.2%	-25.8%	-27.9%	-10.7%
FTI	FMC Technologies Inc.	6/14/2001	-32.0%	15.0%	19.7%	13.1%	30.0%
PNX	Phoenix Cos. Inc.	6/20/2001	11.3%	14.1%	-31.3%	-21.9%	-16.1%
FRO	Frontline Ltd.	8/6/2001	-26.4%	-25.7%	-6.8%	47.9%	382.2%
LMC	LIBERTY MEDIA CORP NEW	8/10/2001	-21.5%	-35.9%	-20.8%	-26.2%	-39.3%
ABC	AmerisourceBergen Corp.	8/30/2001	6.9%	33.2%	11.4%	2.7%	-11.8%
ALOY	Alloy Inc.	9/6/2001	-12.8%	-19.6%	-44.2%	-51.8%	-79.5%
PDE	Pride International	9/17/2001	7.2%	14.2%	24.1%	25.9%	31.1%

			Stock Less S&P 500 Returns					
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	1-24	I-36	
PCX	PANCANADIAN ENERGY CORP	10/3/2001	17.5%	N/A	N/A	N/A	N/A	
KIND	Kindred Healthcare Inc.	11/8/2001	3.8%	-43.5%	-45.7%	18.6%	8.5%	
AYI	Acuity Brands Inc.	11/14/2001	26.5%	15.3%	37.8%	73.1%	129.5%	
BTY	BT Group PLC ADS	11/19/2001	8.5%	9.8%	1.3%	-10.1%	-29.8%	
SWS	SWS Group Inc.	12/3/2001	3.9%	6.7%	43.0%	21.1%	34.8%	
APPX	APP Pharmaceuticals Inc.	12/14/2001	-29.6%	8.3%	97.2%	158.7%	160.5%	
DF	Dean Foods Co.	12/26/2001	22.7%	31.5%	49.1%	47.6%	37.1%	
L	LIBERTY MEDIA CORP NEW	1/2/2002	18.1%	-10.6%	1.5%	-9.1%	-10.1%	
ROK	Rockwell Automation Inc.	2/26/2002	13.3%	43.2%	53.5%	61.9%	230.1%	
DVD	Dover Motorsports Inc.	4/1/2002	-20.6%	-29.6%	-38.3%	-45.9%	-33.8%	
USAI	IAC/InterActiveCorp.	5/9/2002	1.9%	23.5%	14.4%	0.7%	-32.8%	
GTN	Gray Television Inc.	8/30/2002	-14.6%	13.0%	8.6%	4.5%	-40.2%	
CNP	CenterPoint Energy Inc.	10/1/2002	-7.9%	3.2%	26.8%	12.0%	68.4%	
AWC	Alumina Ltd. ADS	12/4/2002	7.3%	79.2%	37.1%	63.4%	85.9%	
МО	Altria Group Inc.	1/27/2003	-9.8%	15.3%	2.6%	39.6%	71.6%	
MNST	Monster Beverage Corp.	5/1/2003	37.3%	32.0%	44.0%	11.1%	199.4%	
ВСО	Brink's Co.	5/5/2003	42.4%	103.7%	148.1%	131.6%	303.4%	
IACI	IAC/InterActiveCorp.	6/23/2003	-22.0%	-32.7%	-50.8%	-56.9%	-63.0%	
PLMO	Pulmo BioTech Inc.	10/29/2003	-11.9%	64.1%	12.1%	N/A	N/A	
NCRX	NeighborCare, Inc.	12/2/2003	38.3%	27.1%	32.9%	N/A	N/A	
FNB	F.N.B. Corp.	12/17/2003	13.7%	10.7%	9.2%	0.6%	-7.6%	
ACV	Alberto-Culver	1/23/2004	20.6%	19.3%	-3.5%	-4.1%	19.1%	
ACCL	Accelrys Inc.	5/14/2004	-41.8%	-51.3%	-39.4%	-46.8%	-73.1%	
LBTYA	Liberty Global Inc. Cl A	6/8/2004	21.2%	-4.4%	-7.8%	-4.4%	36.8%	
LBTYB	Liberty Global Inc. Cl B	6/8/2004	86.7%	-3.5%	-10.7%	-10.7%	23.9%	
KND	Kindred Healthcare Inc.	10/27/2004	18.0%	-0.9%	-26.2%	-18.8%	-37.1%	
ВТ	BT Group PLC ADS	11/15/2004	-4.0%	-10.3%	8.4%	31.1%	46.8%	
AMCS	Amicas	1/4/2005	5.3%	2.8%	-38.6%	-51.5%	-52.3%	
CKXE	CKX Inc.	3/29/2005	-52.0%	-57.6%	-62.8%	-74.4%	-69.1%	
DISCA	Discovery Communications Inc. Series A	7/21/2005	-1.3%	-11.5%	-3.2%	42.0%	38.0%	
SPCHB	Sport Chalet Inc. Cl B	9/21/2005	-38.8%	-36.5%	-26.9%	-49.0%	-71.0%	
CBS	CBS Corp (Cl B)	1/3/2006	16.7%	51.3%	80.6%	6.6%	-58.3%	
PDLI	PDL BioPharma Inc.	1/10/2006	-40.6%	-43.8%	-36.4%	-57.9%	-28.9%	
MS	Morgan Stanley	1/17/2006	10.3%	29.4%	19.3%	-10.0%	-33.0%	
FIS	Fidelity National Information Services Inc.	2/1/2006	-8.1%	-5.0%	13.6%	1.8%	8.1%	
PCH	Potlatch Corp.	2/3/2006	0.5%	26.2%	21.6%	18.9%	34.2%	
DUK	Duke Energy Corp.	4/3/2006	6.7%	19.1%	4.5%	14.4%	33.8%	

8.3%

6.5%

25.5%

			Stock Less S&P 500 Returns				
Ticker	Company Name	Spin-Off Date	I-6	I-12	I-18	I-24	I-36
ABBI	ABRAXIS BIOSCIENCE INC	4/19/2006	-12.0%	-18.5%	-34.6%	N/A	N/A
S	Sprint Nextel Corp.	5/24/2006	-21.3%	-19.9%	-46.0%	-69.9%	-47.0%
FSYS	Fuel Systems Solutions Inc.	8/25/2006	51.2%	13.9%	-27.8%	286.6%	151.9%
CAR	Avis Budget Group Inc.	9/5/2006	-3.7%	-27.6%	-56.2%	-63.4%	-37.2%
TMO	Thermo Fisher Scientific Inc.	11/10/2006	14.6%	26.2%	30.1%	19.2%	25.5%
TFONY	Telefonos De Mexico S A B Spon Adr A Shs	12/20/2006	30.6%	28.8%	53.1%	78.4%	40.9%
TYC	Tyco International Ltd.	7/2/2007	-20.4%	-7.6%	-16.9%	-8.7%	2.6%
PTSX	Point.360	8/14/2007	-17.0%	-24.1%	2.8%	-13.7%	-7.4%
MI	Marshall & Ilsley	11/2/2007	56.6%	43.6%	-17.2%	-37.0%	-43.6%
TT	Trane Inc.	11/28/2007	39.5%	N/A	N/A	N/A	N/A
DISH	DISH Network Corp. Cl A	1/22/2008	2.7%	-23.0%	-14.5%	-10.0%	-12.8%
HRC	Hill-Rom Holdings Inc.	4/1/2008	29.9%	-20.6%	6.3%	23.2%	56.9%
CBY	Cadbury PLC ADR	5/2/2008	3.3%	-0.7%	28.6%	N/A	N/A
WEN	The Wendy's Co.	9/30/2008	26.1%	0.5%	-3.1%	-9.4%	39.5%
MWW	Monster Worldwide Inc.	11/10/2008	3.4%	0.5%	6.7%	23.9%	-66.9%
TWX	Time Warner Inc.	12/9/2009	12.6%	0.3%	N/A	N/A	N/A

Averages

-0.2%

3.4%

#### Vita

# **Geoffrey Southmayd**

#### **Education**:

Pennsylvania State University, Smeal College of Business

Schreyer Honors College

Major: Finance Minor: Economics

# **Work Experience:**

### Johnson and Johnson, Finance Co-Op, Jan-July 2011

- Managed monthly purchase price variance process from external manufacturers
- Identified opportunity to clear out aged open purchase orders and led efforts to clear \$18.6 million in potential liabilities
- Ran a clothing drive to collect hundreds of articles of clothing for charity
- Worked with the procurement team to develop quarterly forecasts for raw material purchases, atypical of a co-op
- Created an employee transition manual and trained my replacement co-op

### The Haverford Trust Company, Research Intern, Summers 2009-10

- Prepared and summarized analyst research reports for management
- Developed allocation proposals for clients and prospects
- Updated product and performance reports
- Evaluated and analyzed data for the creation of research analytics

#### **Leadership:**

# Pennsylvania State Investment Association, Analyst, 2008 - 2011

- Calculate discounted cash flow analyses for multiple companies
- Research companies in the healthcare sector for buy/sell presentations
- Present pitches for the purchase and sale of stocks for the Nittany Lion Fund

# **THON Rules and Regulations Committee, 2010-2011**

- Raise money for Thon, the largest student-led philanthropy in the world
- Provide safety and security for the families and kids on THON weekend

#### **Honors:**

Dean's List, 5 Semesters Academic Excellence Scholarship, 2008 - Present