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An Examination of the Free Cash Flow Coverage of Dividends and Stock Buybacks Executive Summary

Firms are only capable of sustainably maintaining their dividend payouts provided they are generating sufficient free cash flow. Our objective is to examine the capacity of firms in the S&P 500 to generate sufficient free cash flow to cover dividends and stock buybacks. Our sample consists of the non-financial and non-real estate firms in the S&P 500 for the period 2012 through 2016, excluding those firms that do not pay a dividend.

We find that firms in the telecommunications services, information technology, and health care sectors have produced sufficient cumulative free cash flow to cover their dividend payouts and stock buybacks over the 2012 through 2016 timeframe. While firms in the consumer staples, materials, industrials and consumer discretionary sectors did not cover their dividends and buybacks with free cash flow, they were able to cover their dividends. Companies in the energy and utilities sectors generated the least free cash flow relative to their dividend payouts and stock repurchases and were unable to cover their dividends over the study period.

The results include free cash flow, dividends and buybacks for the nine sectors studied for each year, 2012 through 2016, as well as the top three and bottom three performers in each sector across the five-year study period and individual results for each dividend paying firm in the S&P 500 for 2016.

Data for this research was provided by S&P's Capital IQ's Computstat database.

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Georgia Tech Financial Analysis Lab

The Georgia Tech Financial Analysis Lab conducts unbiased research on issues of financial reporting and analysis. Unbiased information is vital to effective investment decision-making. Accordingly, we think that independent research organizations, such as our own, have an important role to play in providing information to market participants.

Because our Lab is housed within a university, all of our research reports have an educational quality, as they are designed to impart knowledge and understanding to those who read them. Our focus is on issues that we believe will be of interest to a large segment of stock market participants. Depending on the issue, we may focus our attention on individual companies, groups of companies, or on large segments of the market at large.

A recurring theme in our work is the identification of reporting practices that give investors a misleading signal, whether positive or negative, of corporate earning power. We define earning power as the ability to generate a sustainable stream of earnings that is backed by cash flow. Accordingly, our research may look into reporting practices that affect either earnings or cash flow, or both. At times, our research may look at stock prices generally, though from a fundamental and not technical point of view.

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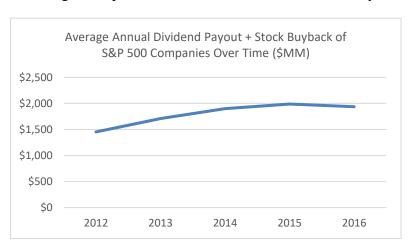
An Examination of Sector-level Cash Flow Affecting Dividend Risk

Introduction

Earlier this year in May, Deutsche Bank downgraded General Electric's stock from hold to sell, citing GE's weak cash flow as putting its dividend at risk. At the time of this downgrade, GE's stock was down 9% for the year. On October 11, CNBC reported that JPMorgan is predicting that a dividend cut for GE is 'increasingly likely' due to a continued poor outlook for the industrial company's earnings and cash flow. On November 13, GE finally announced the inevitable by stating that they would indeed be reduced. GE cut its dividend in half, bringing about only its second dividend reduction since the Great Depression.

Meager cash flow relative to its dividend payout is certainly an issue that is not unique to GE. In this study, we examine the S&P 500 in search of companies and industries whose dividend payouts may be at risk of being cut. On average, companies in the S&P 500 have been steadily

increasing their dividend payouts over the last five years. The graph to the right shows that the sum of dividend payouts and stock buybacks for S&P 500 companies has generally been increasing over the past five years. The question at hand is whether these payouts and buybacks are supported by the cash flow that is needed for them to be maintained.



Purpose and Design

The purpose of this study is to examine whether companies comprising the S&P 500 are generating sufficient cash flow to cover their dividends and stock buybacks. The study measures company cash flow performance based on the cumulative free cash flow that a firm has generated over the five-year period 2012 through 2016 relative to the amount of cash it has distributed on dividends and stock buybacks during that same period. The companies in our study include all S&P 500 firms, excluding financial services or real estate companies, that have paid dividends in any of the five years examined. We define free cash flow as operating cash flow less capital expenditures and preferred dividends. Cumulative free cash flow, cumulative dividends and cumulative stock buybacks are calculated by summing the amounts for each firm, for each year, over the five-year period of interest. We then calculate the ratios of cumulative free cash flow divided by cumulative dividends and cumulative free cash flow divided by the sum of cumulative dividends and cumulative buybacks. In effect, these ratios are coverage ratios that measure the extent to which free cash flow covers dividends alone and dividends together with buybacks. A ratio of 1 or higher indicates that a disbursement is covered by free cash flow. A ratio less than 1 indicates that the disbursement is not covered.

Sector results are obtained by determining cumulative free cash flow and cumulative dividends and buybacks across all firms in each of the nine non-financial sectors in the S&P 500. Data for this study was obtained through S&P's Capital IQ Compustat database and through Wharton Research Data Services.

Results

Table 1 presents the findings for each of the 9 non-financial sectors over the 2012 through 2016 period. The table includes cumulative free cash flow data as well as cumulative dividends and cumulative stock buybacks, together with the related coverage ratios. For the free cash flow to dividends and buybacks metrics, color coding has been added, where green indicates a ratio of 1 or higher, yellow indicates a ratio that is below 1 for sectors that do generate sufficient free cash flow to cover dividends alone, while red indicates a ratio that is well below 1 for sectors where cash flow is insufficient to cover dividends alone.

Та	Table 1: Free Cash Flow, Dividend Payouts and Stock Repurchases for S&P 500 Companies, for Fiscal Years 2012-2016 (Amounts in Millions)									
Count	Cumulative Cumulative Cumulative Free Cash Cumulative Cash / Free Cash Cumulative Stock Flow / Cumulative Cumulative Dividends + Count Sector Flow Dividends Buybacks Dividends Cumulative Buybacks)									
3	Telecommunication Services	\$55,068	\$32,642	\$12,191	1.69	1.23				
64	Information Technology	\$17,445	\$4,290	\$9,566	4.07	1.26				
57	Health Care	\$11,608	\$3,514	\$6,014	3.30	1.22				
35	Consumer Staples	\$13,735	\$7,489	\$7,044	1.83	0.95				
25	Materials	\$3,781	\$2,125	\$2,674	1.78	0.79				
68	Industrials	\$6,329	\$2,988	\$4,593	2.12	0.83				
76	Consumer Discretionary	\$6,092	\$2,284	\$5,340	2.67	0.80				
28	Utilities	-\$483	\$3,510	\$306	-0.14	-0.13				
31	Energy	\$507	\$5,824	\$4,248	0.09	0.05				

As presented in Table 1, firms in the telecommunications, information technology, and health care sectors are generating adequate cumulative free cash flow to cover their dividend payouts and stock repurchases. Firms in the consumer staples, materials, industrials, and consumer discretionary spaces are generating cash flow that fell slightly short of their cumulative dividend payouts and stock repurchases. However, firms in these sectors generated more than enough cash to cover their dividends were they to cease stock repurchases. As such, the dividends would appear to be safe. The energy and utilities sectors have reported significantly larger dividend payouts over the last five years than cumulative free cash flow. For the energy firms, falling global energy prices have undoubtedly been a formidable headwind during this timeframe. For the utilities, capital expenditures consume more cash flow than the operating cash flow generated in the sector. While such a development would not appear to be a recipe for long-term stability, the regulated nature of this sector provides investors with assurances that are not present with unregulated industries.

Table 2 compares free cash flow by sector and dividends plus buybacks by sector for each of the five years studied. The results are generally consistent with the cumulative results presented in Table 1. There are some exceptions. For example, while they fell short on a cumulative basis across the five-year sample period, the materials and industrials sectors generated sufficient free cash flow to cover dividends and buybacks in two of the five years studied.

Table	Table 2: Free Cash Flow, Dividend Payout & Stock Repurchases Over Time by Sector							
Sector	Financial Metric	2012	2013	2014	2015	2016		
Information Technology	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	\$3,100.65 \$1,692.65 1.83		\$3,422.97 \$3,361.97 1.02	\$3,250.67	\$3,661.83 \$2,861.74 1.28		
Health Care	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	\$2,114.98 \$1,811.43 1.17		\$2,369.59 \$1,822.73 1.30	\$2,103.35	\$2,724.41 \$2,344.74 1.16		
Consumer Discretionary	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	\$1,109.11 \$1,246.85 0.89	\$1,273.34 0.89	\$1,215.36 \$1,566.67 0.78	\$1,824.73 0.68			
Materials	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	\$768.23 \$593.12 1.30	\$894.20 0.81	\$1,425.48 0.51	\$1,032.69 0.66	\$838.29 1.03		
Consumer Staples	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	\$2,347.46 \$2,550.50 0.92	\$2,758.99 0.94		\$2,757.11 0.97			
Industrials	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	\$1,159.51 \$1,036.64 1.12		\$1,375.45 \$1,607.22 0.86	\$1,932.83	\$1,159.13 \$1,876.60 0.62		
Telecommunications	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)		\$12,764.33 \$10,546.00 1.21		\$9,085.33	\$7,644.33		
Energy	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	\$432.95 \$2,080.79 0.21		\$34.41 \$2,517.86 0.01		\$1,331.14		
Utilities	Free Cash Flow Dividends Paid + Stock Buybacks Free Cash Flow / (Dividends + Buybacks)	-\$120.56 \$689.53 -0.17	\$717.37	-\$120.59 \$733.11 -0.16	\$855.64	\$819.98		

Table 3 presents the three top and three bottom firms in each non-financial sector based on the ratio of cumulative free cash flow to cumulative dividends over the period 2012 through 2016. While each group of three firms is ranked using cumulative free cash flow to cumulative dividends, ratios for cumulative free cash flow to cumulative dividends and buybacks are also presented.

		Table 3:	Γop 3 and Bottom 3 Firms by Sec	ctor at Covering I	Dividend Payouts	and Stock Repure		G 14 G 14
Cartan	Develo	TV -1	Common Norma	Cumulative Free		Cumulative	Cumulative	Cumulative Cash / (Cumulative Dividends +
Sector	Rank	Ticker VZ	Company Name	Cash Flow	Dividends	Stock Buybacks		Cumulative Buybacks)
T-1	Top - 1		VERIZON COMMUNICATIONS					1.75
Telecommunications*	Top - 2	CTL	CENTURYLINK INC	\$11,705.00		\$3,108.00	1.74	1.19
	Top - 3	T	AT&T INC	\$75,722.00		\$28,178.00		0.94
	Top - 1	ADS	ALLIANCE DATA SYSTEMS CO			\$2,393.89		2.67
T 0	Top - 2	GPN	GLOBAL PAYMENTS INC	\$796.85		\$1,279.26		0.61
Information	Top - 3	LRCX	LAM RESEARCH CORP	\$5,156.49				1.25
Technology	Bottom - 3	SYMC	SYMANTEC CORP	\$5,058.00		\$5,087.00		0.55
	Bottom - 2	KLAC	KLA-TENCOR CORP	\$4,763.16		\$1,587.56		0.78
	Bottom - 1	CSRA	CSRA INC	\$773.10		\$79.00		0.58
	Top - 1	CI	CIGNA CORP	\$9,427.00		\$3,633.00		2.56
	Top - 2	COO	COOPER COMPANIES INC	\$1,174.84		\$386.38		2.93
Health Care	Top - 3	EVHC	ENVISION HEALTHCARE CORP					17.88
	Bottom - 3	LLY	LILLY (ELI) & CO	\$17,847.40				1.17
	Bottom - 2	BAX	BAXTER INTERNATIONAL INC	\$6,606.00		\$3,235.00		0.91
	Bottom - 1	BMY	BRISTOL-MYERS SQUIBB CO	\$14,670.00	_	\$3,067.00		0.97
	Top - 1	TSN	TYSON FOODS INC -CL A	\$5,536.00		\$3,612.00		1.29
	Top - 2	STZ	CONSTELLATION BRANDS	\$2,520.90	\$557.50	\$1,953.20		1.00
Consumer Staples	Top - 3	CVS	CVS HEALTH CORP	\$28,331.00	\$6,630.00	\$21,769.00	4.27	1.00
	Bottom - 3	MO	ALTRIA GROUP INC	\$21,706.00	\$19,942.00	\$4,239.00	1.09	0.90
	Bottom - 2	KHC	KRAFT HEINZ CO	\$8,537.54		\$8,660.97	1.09	0.52
	Bottom - 1	COST	COSTCO WHOLESALE CORP	\$7,457.00	\$8,201.00	\$1,969.00	0.91	0.73
	Top - 1	BLL	BALL CORP	\$1,697.40	\$356.20	\$1,618.70	4.77	0.86
	Top - 2	SHW	SHERWIN-WILLIAMS CO	\$4,811.51	\$1,142.91	\$3,850.99	4.21	0.96
Materials	Top - 3	VMC	VULCAN MATERIALS CO	\$770.28	\$198.81	\$182.94	3.87	2.02
Materials	Bottom - 3	FMC	FMC CORP	\$309.70	\$386.40	\$537.40	0.80	0.34
	Bottom - 2	FCX	FREEPORT-MCMORAN INC	-\$2,713.00	\$5,088.00	\$10.00	-0.53	-0.53
	Bottom - 1	CF	CF INDUSTRIES HOLDINGS INC	-\$764.40	\$1,049.80	\$4,400.30	-0.73	-0.14
	Top - 1	SRCL	STERICYCLE INC	\$1,651.71	\$49.52	\$608.09	33.35	2.51
	Top - 2	TXT	TEXTRON INC	\$2,828.00	\$110.00	\$1,072.00	25.71	2.39
Industrials	Top - 3	DAL	DELTA AIR LINES INC	\$13,430.00	\$1,222.00	\$6,151.00	10.99	1.82
industriais	Bottom - 3	TDG	TRANSDIGM GROUP INC	\$1,955.33	\$3,385.84	\$368.45	0.58	0.52
	Bottom - 2	FTV	FORTIVE CORP	\$1,007.30	\$3,048.40	\$0.00	0.33	0.33
	Bottom - 1	AAL	AMERICAN AIRLINES GROUP I	-\$1,340.00	\$650.00	\$9,408.00	-2.06	-0.13
	Top - 1	PVH	PVH CORP	\$2,731.88	\$71.35	\$552.29	38.29	4.38
	Top - 2	AAP	ADVANCE AUTO PARTS INC	\$1,940.35	\$88.20	\$138.10	22.00	8.57
Consumer	Top - 3	ULTA	ULTA BEAUTY INC	\$729.55	\$62.48	\$599.28	11.68	1.10
Discretionary	Bottom - 3	DHI	D R HORTON INC	-\$1,206.20	\$366.90	\$0.00	-3.29	-3.29
-	Bottom - 2	LEN	LENNAR CORP	-\$2,134.03	\$162.60	\$92.98	-13.12	-8.35
	Bottom - 1	UAA	UNDER ARMOUR INC	-\$82.26	\$2.93	\$0.00	-28.10	-28.10
	Top - 1	AES	AES CORP	\$1,723.00	\$912.00	\$1,492.00	1.89	0.72
	Top - 2	NEE	NEXTERA ENERGY INC	\$7,333.00		\$19.00	1.15	1.15
	Top - 3	WEC	WEC ENERGY GROUP INC	\$2,218.60				0.80
Utilities	Bottom - 3	NI	NISOURCE INC	-\$1,951.10		\$58.10	-1.42	-1.37
	Bottom - 2	SRE	SEMPRA ENERGY	-\$4,851.00		\$229.00		-1.37
	Bottom - 1	NRG	NRG ENERGY INC	-\$1,608.00				-1.26
	Top - 1	VLO	VALERO ENERGY CORP	\$15,405.00				1.54
	Top - 2	MPC	MARATHON PETROLEUM COR			\$7,436.00	3.67	0.99
	Top - 3	NOV	NATIONAL OILWELL VARCO IN					1.19
Energy	Bottom - 3	EQT	EQT CORP	-\$3,714.49		\$35.77	-17.98	-15.33
	Bottom - 2	RRC	RANGE RESOURCES CORP	-\$2,623.24		\$0.00		-13.33
	Bottom - 1	PXD	PIONEER NATURAL RESOURCE					-21.42

*Only three Telecommunication companies are listed in the S&P 500

Table 3 provides company-specific detail to accompany Table 1. It is noteworthy that the top three firms in all nine sectors, including energy and utilities, can cover their dividends with free cash flow. In terms of the bottom performers, there are some individual names on the list, even outside of the energy and utilities sectors, where free cash flow has not been sufficient to cover dividends, even excluding buybacks. If such payouts are maintained, additional capital, likely in the form of debt financing, would be needed, if it has not already been raised.

Table 4 presents free cash flow and dividends paid in 2016 for each non-financial firm in the S&P 500 that paid a dividend during the 2012 through 2016 period. The table also presents the ratio of free cash flow to dividends. Because stock buybacks are inherently more

discretionary than dividends, Table 4 presents only dividend payout information and excludes buybacks. The table indicates that during 2016, the vast majority of the firms in the nine sectors studied were able to cover dividends with free cash flow. In fact, during 2016, 81% of the dividend-paying firms in the S&P 500 were able to cover their dividends with free cash flow. If the energy and utilities sectors are excluded, the percent of firms able to cover their dividends with free cash flow increases to 90%. Please refer to Table 4 for specifics.

	Table 4	: Free Cash Flow and Dividend Payouts	s for all Qualifying S&P	_		ta
Year	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	MMM	3M CO	Industrials	5242.00	2678.00	1.96
2016	ABT	ABBOTT LABORATORIES	Health Care	2082.00	1547.00	1.35
2016	ABBV	ABBVIE INC	Health Care	6562.00	3823.00	1.72
2016	ACN	ACCENTURE PLC	Information Technology	4078.55	1423.32	2.87
2016	ATVI	ACTIVISION BLIZZARD INC	Information Technology	2019.00	193.00	10.46
2016	AYI	ACUITY BRANDS INC	Industrials	262.00	22.90	11.44
2016	AAP	ADVANCE AUTO PARTS INC	Consumer Discretionary	241.32	17.76	13.58
2016	AES	AES CORP	Utilities	549.00	297.00	1.85
2016	AET	AETNA INC	Health Care	3449.00	351.00	9.83
2016	A	AGILENT TECHNOLOGIES INC	Health Care	654.00	150.00	4.36
2016	APD	AIR PRODUCTS & CHEMICALS INC	Materials	1571.70	733.70	2.14
2016	ALK	ALASKA AIR GROUP INC	Industrials	708.00	136.00	5.21
2016	ALB	ALBEMARLE CORP	Materials	536.75	137.15	3.91
2016	ALLE	ALLEGION PLC	Industrials	335.00	46.00	7.28
2016	AGN	ALLERGAN PLC	Health Care	815.50	556.80	1.46
2016	ADS	ALLIANCE DATA SYSTEMS CORP	Information Technology	1881.40	30.00	62.71
2016	LNT	ALLIANT ENERGY CORP	Utilities	-347.40	276.70	-1.26
2016	MO	ALTRIA GROUP INC	Consumer Staples	3602.00	4590.00	0.78
2016	AEE	AMEREN CORP	Utilities	-8.00	416.00	-0.02
2016	AAL	AMERICAN AIRLINES GROUP INC	Industrials	793.00	224.00	3.54
2016	AEP	AMERICAN ELECTRIC POWER CO	Utilities	-390.30	1121.00	-0.35
2016	AWK	AMERICAN WATER WORKS CO INC	Utilities	-35.00	267.00	-0.13
2016	ABC	AMERISOURCEBERGEN CORP	Health Care	2713.88	288.48	9.41
2016	AME	AMETEK INC	Industrials	693.56	83.27	8.33
2016	AMGN	AMGEN INC	Health Care	9616.00	3120.00	3.08
2016	APH	AMPHENOL CORP	Information Technology	886.80	178.80	4.96
2016	APC	ANADARKO PETROLEUM CORP	Energy	-505.00	105.00	-4.81
2016	ADI	ANALOG DEVICES	Information Technology	1153.50	513.18	2.25
2016	ANDV	ANDEAVOR	Energy	410.00	249.00	1.65
2016	ANTM	ANTHEM INC	Health Care	2620.90	687.70	3.81
2016	APA	APACHE CORP	Energy	481.00	379.00	1.27
2016	AAPL	APPLE INC	Information Technology	53090.00	12188.00	4.36
2016	AMAT	APPLIED MATERIALS INC	Information Technology	2213.00	436.00	5.08
2016	ADM	ARCHER-DANIELS-MIDLAND CO	Consumer Staples	593.00	701.00	0.85
2016	ARNC	ARCONIC INC	Industrials	-26.00	228.00	-0.11
2016	T	AT&T INC	Telecommunication	16936.00	11913.00	1.42
2016	ADP	AUTOMATIC DATA PROCESSING	Information Technology	1691.40	955.70	1.77
2016	AVY	AVERY DENNISON CORP	Materials	408.40	142.50	2.87
2016	BLL	BALL CORP	Materials	-412.00	81.00	-5.09
2016	BCR	BARD (C.R.) INC	Health Care	446.30	75.90	5.88
2016	BAX	BAXTER INTERNATIONAL INC	Health Care	935.00	276.00	3.39
2016	BDX	BECTON DICKINSON & CO	Health Care	1866.00	562.00	3.32
2016	BBY	BEST BUY CO INC	Consumer Discretionary	1963.00	505.00	3.89
2016	HRB	BLOCK H & R INC	Consumer Discretionary	460.84	187.12	2.46

Table	e 4: Free (Cash Flow and Dividend Payouts for a	all Qualifying S&P 500 Co	ompanies - 20	016 Data (Cor	ntinued)
Year	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	BA	BOEING CO	Industrials	7886.00	2902.00	2.72
2016	BWA	BORGWARNER INC	Consumer Discretionary	535.10	113.40	4.72
2016	BMY	BRISTOL-MYERS SQUIBB CO	Health Care	1635.00	2557.00	0.64
2016	AVGO	BROADCOM LTD	Information Technology	2688.00	716.00	3.75
2016	BF.B	BROWN FORMAN CORP	Consumer Staples	524.00	274.00	1.91
2016	CHRW	C H ROBINSON WORLDWIDE INC	Industrials	455.96	245.43	1.86
2016	CA	CA INC	Information Technology	992.00	428.00	2.32
2016	COG	CABOT OIL & GAS CORP	Energy	17.22	36.19	0.48
2016	CPB	CAMPBELL SOUP CO	Consumer Staples	1122.00	390.00	2.88
2016	CAH	CARDINAL HEALTH INC	Health Care	2506.00	529.00	4.74
2016	CCL	CARNIVAL CORP/PLC (USA)	Consumer Discretionary	2072.00	996.00	2.08
2016	CAT	CATERPILLAR INC	Industrials	2680.00	1802.00	1.49
2016	CBS	CBS CORP	Consumer Discretionary	1489.00	294.00	5.06
2016	CNP	CENTERPOINT ENERGY INC	Utilities	514.00	443.00	1.16
2016	CTL	CENTURYLINK INC	Telecommunication	1627.00	1178.00	1.38
2016	CF	CF INDUSTRIES HOLDINGS INC	Materials	-1594.00	280.00	-5.69
2016	CHK	CHESAPEAKE ENERGY CORP	Energy	-2421.00	97.00	-24.96
2016	CVX	CHEVRON CORP	Energy	-5263.00	8032.00	-0.66
2016	CHD	CHURCH & DWIGHT INC	Consumer Staples	605.50	183.00	3.31
2016	CI	CIGNA CORP	Health Care	3565.00	10.00	356.50
2016	XEC	CIMAREX ENERGY CO	Energy	-122.56	7.55	-16.24
2016	CTAS	CINTAS CORP	Industrials	490.57	142.43	3.44
2016	CSCO	CISCO SYSTEMS INC	Information Technology	12424.00	4750.00	2.62
2016	CLX	CLOROX CO/DE	Consumer Staples	606.00	406.00	1.49
2016	CMS	CMS ENERGY CORP	Utilities	-43.00	345.00	-0.12
2016	COH	COACH INC	Consumer Discretionary	362.20	375.00	0.97
2016	KO	COCA-COLA CO	Consumer Staples	6534.00	6043.00	1.08
2016	CL	COLGATE-PALMOLIVE CO	Consumer Staples	2548.00	1380.00	1.85
2016	CMCSA	COMCAST CORP	Consumer Discretionary	9677.00	2656.00	3.64
2016	CAG	CONAGRA BRANDS INC	Consumer Staples	933.40	388.70	2.40
2016	COP	CONOCOPHILLIPS	Energy	-466.00	1253.00	-0.37
2016	ED	CONSOLIDATED EDISON INC	Utilities	624.00	809.00	0.77
2016	STZ	CONSTELLATION BRANDS	Consumer Staples	788.60	315.60	2.50
2016	COO	COOPER COMPANIES INC	Health Care	357.00	2.91	122.51
2016	GLW	CORNING INC	Information Technology	1293.00	745.00	1.74
2016	COST	COSTCO WHOLESALE CORP	Consumer Staples	643.00	746.00	0.86
2016	COTY	COTY INC	Consumer Staples	351.30	89.80	3.91
2016	CSRA	CSRA INC	Information Technology	359.00	66.00	5.44
2016	CSX	CSX CORP	Industrials	643.00	680.00	0.95
2016	CMI	CUMMINS INC	Industrials	1404.00	676.00	2.08
2016	CVS	CVS HEALTH CORP	Consumer Staples	7845.00	1840.00	4.26
2016	DHI	D R HORTON INC	Consumer Discretionary	531.90	118.70	4.48
2016	DHR	DANAHER CORP	Health Care	2932.20	393.60	7.45
2016	DRI	DARDEN RESTAURANTS INC	Consumer Discretionary	606.90	279.60	2.17

Ta	able 4: Fr	ree Cash Flow and Dividend Payouts for	all Qualifying S&P 500	Companies -	2016 Data (Continued)
Year	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	DE	DEERE & CO	Industrials	809.20	757.10	1.07
2016	DLPH	DELPHI AUTOMOTIVE PLC	Consumer Discretionary	1113.00	317.00	3.51
2016	DAL	DELTA AIR LINES INC	Industrials	3814.00	509.00	7.49
2016	XRAY	DENTSPLY SIRONA INC	Health Care	438.40	72.30	6.06
2016	DVN	DEVON ENERGY CORP	Energy	-2225.00	125.00	-17.80
2016	DISCA	DISCOVERY COMMUNICATIONS INC	Consumer Discretionary	880.00	405.00	2.17
2016	DIS	DISNEY (WALT) CO	Consumer Discretionary	8440.00	2328.00	3.63
2016	DG	DOLLAR GENERAL CORP	Consumer Discretionary	1044.75	281.15	3.72
2016	D	DOMINION ENERGY INC	Utilities	-1958.00	1727.00	-1.13
2016	DOV	DOVER CORP	Industrials	696.77	267.74	2.60
2016	DPS	DR PEPPER SNAPPLE GROUP INC	Consumer Staples	759.00	393.00	1.93
2016	DTE	DTE ENERGY CO	Utilities	39.00	548.00	0.07
2016	DD	DU PONT (E I) DE NEMOURS	Materials	2271.00	1341.00	1.69
2016	DUK	DUKE ENERGY CORP	Utilities	-1103.00	2332.00	-0.47
2016	DXC	DXC TECHNOLOGY COMPANY	Information Technology	732.00	80.00	9.15
2016	EMN	EASTMAN CHEMICAL CO	Materials	759.00	279.00	2.72
2016	ETN	EATON CORP PLC	Industrials	2055.00	1037.00	1.98
2016	ECL	ECOLAB INC	Materials	1182.90	414.90	2.85
2016	EIX	EDISON INTERNATIONAL	Utilities	-601.00	769.00	-0.78
2016	EMR	EMERSON ELECTRIC CO	Industrials	2434.00	1227.00	1.98
2016	ETR	ENTERGY CORP	Utilities	-996.33	630.95	-1.58
2016	EVHC	ENVISION HEALTHCARE CORP	Health Care	311.20	9.10	34.20
2016	EOG	EOG RESOURCES INC	Energy	-223.73	376.01	-0.60
2016	EQT	EQT CORP	Energy	-475.17	20.16	-23.57
2016	EFX	EQUIFAX INC	Industrials	622.30	158.40	3.93
2016	ES	EVERSOURCE ENERGY	Utilities	198.19	564.49	0.35
2016	EXC	EXELON CORP	Utilities	-108.00	1172.00	-0.09
2016	EXPE	EXPEDIA INC	Consumer Discretionary	814.99	149.91	5.44
2016	EXPD	EXPEDITORS INTL WASH INC	Industrials	469.78	145.12	3.24
2016	XOM	EXXON MOBIL CORP	Energy	5919.00	12453.00	0.48
2016	FAST	FASTENAL CO	Industrials	324.55	346.59	0.94
2016	FDX	FEDEX CORP	Industrials	-186.00	426.00	-0.44
2016	FIS	FIDELITY NATIONAL INFO SVCS	Information Technology	1780.00	342.00	5.20
2016	FE	FIRSTENERGY CORP	Utilities	304.00	611.00	0.50
2016	FLIR	FLIR SYSTEMS INC	Information Technology	276.34	65.92	4.19
2016	FLS	FLOWSERVE CORP	Industrials	137.90	100.03	1.38
2016	FLR	FLUOR CORP	Industrials	470.02	118.27	3.97
2016	FMC	FMC CORP	Materials	367.00	88.60	4.14
2016	FL	FOOT LOCKER INC	Consumer Discretionary	550.00	147.00	3.74
2016	F	FORD MOTOR CO	Consumer Discretionary	12800.00	3376.00	3.79
2016	FTV	FORTIVE CORP	Industrials	1007.30	3048.40	0.33
2016	FBHS	FORTUNE BRANDS HOME & SECUR	Industrials	501.20	100.20	5.00
2016	GPS	GAP INC	Consumer Discretionary	1195.00	367.00	3.26
2016	GRMN	GARMIN LTD	Consumer Discretionary	614.72	384.63	1.60

Ta	able 4: Fi	ree Cash Flow and Dividend Payouts fo	r all Qualifying S&P 500	Companies -	· 2016 Data (Continued)
Year	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	GD	GENERAL DYNAMICS CORP	Industrials	1752.00	932.00	1.88
2016	GE	GENERAL ELECTRIC CO	Industrials	-8099.00	9054.00	-0.89
2016	GIS	GENERAL MILLS INC	Consumer Staples	1628.90	1135.10	1.44
2016	GM	GENERAL MOTORS CO	Consumer Discretionary	-12621.00	2337.00	-5.40
2016	GPC	GENUINE PARTS CO	Consumer Discretionary	785.44	391.85	2.00
2016	GILD	GILEAD SCIENCES INC	Health Care	15921.00	2465.00	6.46
2016	GT	GOODYEAR TIRE & RUBBER CO	Consumer Discretionary	508.00	82.00	6.20
2016	GWW	GRAINGER (W W) INC	Industrials	718.73	294.50	2.44
2016	HAL	HALLIBURTON CO	Energy	-2501.00	425.00	-5.88
2016	HBI	HANESBRANDS INC	Consumer Discretionary	522.21	169.29	3.08
2016	HOG	HARLEY-DAVIDSON INC	Consumer Discretionary	918.08	252.32	3.64
2016	HRS	HARRIS CORP	Information Technology	772.00	252.00	3.06
2016	HAS	HASBRO INC	Consumer Discretionary	619.97	254.98	2.43
2016	HP	HELMERICH & PAYNE	Energy	496.43	301.71	1.65
2016	HSY	HERSHEY CO	Consumer Staples	714.00	501.69	1.42
2016	HES	HESS CORP	Energy	-1497.00	358.00	-4.18
2016	HPE	HEWLETT PACKARD ENTERPRISE	Information Technology	1678.00	379.00	4.43
2016	HLT	HILTON WORLDWIDE HOLDINGS	Consumer Discretionary	1033.00	279.00	3.70
2016	HD	HOME DEPOT INC	Consumer Discretionary	8162.00	3404.00	2.40
2016	HON	HONEYWELL INTERNATIONAL INC	Industrials	4403.00	1883.00	2.34
2016	HRL	HORMEL FOODS CORP	Consumer Staples	737.32	307.06	2.40
2016	HPQ	HP INC	Information Technology	2797.00	858.00	3.26
2016	HUM	HUMANA INC	Health Care	1409.00	177.00	7.96
2016	JBHT	HUNT (JB) TRANSPRT SVCS INC	Industrials	215.71	98.99	2.18
2016	ITW	ILLINOIS TOOL WORKS	Industrials	2029.00	846.00	2.40
2016	IR	INGERSOLL-RAND PLC	Industrials	1317.50	351.00	3.75
2016	INTC	INTEL CORP	Information Technology	12183.00	4925.00	2.47
2016	IPG	INTERPUBLIC GROUP OF COS	Consumer Discretionary	312.70	238.40	1.31
2016	IBM	INTL BUSINESS MACHINES CORP	Information Technology	13391.00	5256.00	2.55
2016	IFF	INTL FLAVORS & FRAGRANCES	Materials	408.99	190.75	2.14
2016	IP	INTL PAPER CO	Materials	1130.00	743.00	1.52
2016	INTU	INTUIT INC	Information Technology	879.00	319.00	2.76
2016	JNJ	JOHNSON & JOHNSON	Health Care	15541.00	8621.00	1.80
2016	JCI	JOHNSON CONTROLS INTL PLC	Industrials	646.00	752.00	0.86
2016	JNPR	JUNIPER NETWORKS INC	Information Technology	891.30	152.50	5.84
2016	KSU	KANSAS CITY SOUTHERN	Industrials	322.60	142.10	2.27
2016	K	KELLOGG CO	Consumer Staples	1121.00	716.00	1.57
2016	KMB	KIMBERLY-CLARK CORP	Consumer Staples	2461.00	1322.00	1.86
2016	KMI	KINDER MORGAN INC	Energy	1749.00	1274.00	1.37
2016	KLAC	KLA-TENCOR CORP	Information Technology	727.96	323.84	2.25
2016	KSS	KOHL'S CORP	Consumer Discretionary	1380.00	358.00	3.85
2016	KHC	KRAFT HEINZ CO	Consumer Staples	3811.00	3042.00	1.25
2016	KR	KROGER CO	Consumer Staples	573.00	443.00	1.29
2016	LB	L BRANDS INC	Consumer Discretionary	900.00	1268.00	0.71

Ta	able 4: Fı	ree Cash Flow and Dividend Payouts for	r all Qualifying S&P 500	=	2016 Data (Continued)
Year	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	LLL	L3 TECHNOLOGIES INC	Industrials	825.00	220.00	3.75
2016	LRCX	LAM RESEARCH CORP	Information Technology	1174.95	190.80	6.16
2016	EL	LAUDER (ESTEE) COS INC -CL A	Consumer Staples	1263.40	425.40	2.97
2016	LEG	LEGGETT & PLATT INC	Consumer Discretionary	428.60	184.50	2.32
2016	LEN	LENNAR CORP	Consumer Discretionary	431.37	35.32	12.21
2016	LLY	LILLY (ELI) & CO	Health Care	3814.00	2167.60	1.76
2016	LMT	LOCKHEED MARTIN CORP	Industrials	4126.00	2036.00	2.03
2016	LOW	LOWE'S COMPANIES INC	Consumer Discretionary	4450.00	1169.00	3.81
2016	LYB	LYONDELLBASELL INDUSTRIES NV	Materials	3363.00	1395.00	2.41
2016	M	MACY'S INC	Consumer Discretionary	1205.00	459.00	2.63
2016	MRO	MARATHON OIL CORP	Energy	-172.00	162.00	-1.06
2016	MPC	MARATHON PETROLEUM CORP	Energy	1094.00	720.00	1.52
2016	MAR	MARRIOTT INTL INC	Consumer Discretionary	1383.00	374.00	3.70
2016	MLM	MARTIN MARIETTA MATERIALS	Materials	291.39	105.04	2.77
2016	MAS	MASCO CORP	Industrials	546.00	128.00	4.27
2016	MA	MASTERCARD INC	Information Technology	4269.00	863.00	4.95
2016	MAT	MATTEL INC	Consumer Discretionary	332.32	518.53	0.64
2016	MKC	MCCORMICK & CO INC	Consumer Staples	504.30	222.00	2.27
2016	MCD	MCDONALD'S CORP	Consumer Discretionary	4238.50	3058.20	1.39
2016	MCK	MCKESSON CORP	Health Care	4340.00	249.00	17.43
2016	MDT	MEDTRONIC PLC	Health Care	5626.00	2376.00	2.37
2016	MRK	MERCK & CO	Health Care	8762.00	5135.00	1.71
2016	MCHP	MICROCHIP TECHNOLOGY INC	Information Technology	984.14	315.43	3.12
2016	MSFT	MICROSOFT CORP	Information Technology	24982.00	11329.00	2.21
2016	TAP	MOLSON COORS BREWING CO	Consumer Staples	785.10	352.90	2.22
2016	MDLZ	MONDELEZ INTERNATIONAL INC	Consumer Staples	1614.00	1116.00	1.45
2016	MON	MONSANTO CO	Materials	1665.00	947.00	1.76
2016	MOS	MOSAIC CO	Materials	423.00	383.70	1.10
2016	MSI	MOTOROLA SOLUTIONS INC	Information Technology	894.00	286.00	3.13
2016	NOV	NATIONAL OILWELL VARCO INC	Energy	676.00	230.00	2.94
2016	NTAP	NETAPP INC	Information Technology	811.00	208.00	3.90
2016	NWL	NEWELL BRANDS INC	Consumer Discretionary	1387.10	328.60	4.22
2016	NEM	NEWMONT MINING CORP	Materials	1653.00	67.00	24.67
2016	NWSA	NEWS CORP	Consumer Discretionary	633.00	120.00	5.28
2016	NEE	NEXTERA ENERGY INC	Utilities	2096.00	1612.00	1.30
2016	NLSN	NIELSEN HOLDINGS PLC	Industrials	1187.00	434.00	2.74
2016	NKE	NIKE INC	Consumer Discretionary	2535.00	1159.00	2.19
2016	NI	NISOURCE INC	Utilities	-671.90	205.70	-3.27
2016	NBL	NOBLE ENERGY INC	Energy	-190.00	172.00	-1.10
2016	JWN	NORDSTROM INC	Consumer Discretionary	802.00	256.00	3.13
2016	NSC	NORFOLK SOUTHERN CORP	Industrials	1147.00	695.00	1.65
2016	NOC	NORTHROP GRUMMAN CORP	Industrials	1893.00	633.00	2.99
2016	NRG	NRG ENERGY INC	Utilities	823.00	79.00	10.42
2016	NUE	NUCOR CORP	Materials	1132.69	482.27	2.35

Ta	able 4: Fr	ree Cash Flow and Dividend Payouts for	r all Qualifying S&P 500	Companies -	· 2016 Data (Continued)
Year	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	NVDA	NVIDIA CORP	Information Technology	1496.00	261.00	5.73
2016	OXY	OCCIDENTAL PETROLEUM CORP	Energy	666.00	2405.00	0.28
2016	OMC	OMNICOM GROUP	Consumer Discretionary	1765.70	513.90	3.44
2016	OKE	ONEOK INC	Energy	726.98	352.04	2.07
2016	ORCL	ORACLE CORP	Information Technology	12105.00	2631.00	4.60
2016	PCAR	PACCAR INC	Industrials	335.90	547.90	0.61
2016	PKG	PACKAGING CORP OF AMERICA	Materials	526.90	222.60	2.37
2016	PH	PARKER-HANNIFIN CORP	Industrials	1020.44	341.92	2.98
2016	PDCO	PATTERSON COMPANIES INC	Health Care	115.70	93.46	1.24
2016	PAYX	PAYCHEX INC	Information Technology	866.10	662.30	1.31
2016	PNR	PENTAIR PLC	Industrials	743.60	245.80	3.03
2016	PEP	PEPSICO INC	Consumer Staples	7363.00	4283.00	1.72
2016	PKI	PERKINELMER INC	Health Care	318.91	30.63	10.41
2016	PRGO	PERRIGO CO PLC	Health Care	548.70	83.20	6.59
2016	PFE	PFIZER INC	Health Care	14077.00	7447.00	1.89
2016	PCG	PG&E CORP	Utilities	-1314.00	986.00	-1.33
2016	PM	PHILIP MORRIS INTERNATIONAL	Consumer Staples	6905.00	6412.00	1.08
2016	PSX	PHILLIPS 66	Energy	119.00	1282.00	0.09
2016	PNW	PINNACLE WEST CAPITAL CORP	Utilities	-272.05	284.77	-0.96
2016	PXD	PIONEER NATURAL RESOURCES CO	Energy	-562.00	14.00	-40.14
2016	PPG	PPG INDUSTRIES INC	Materials	923.00	414.00	2.23
2016	PPL	PPL CORP	Utilities	-30.00	1033.00	-0.03
2016	PX	PRAXAIR INC	Materials	1308.00	856.00	1.53
2016	PG	PROCTER & GAMBLE CO	Consumer Staples	11866.00	7436.00	1.60
2016	PEG	PUBLIC SERVICE ENTRP GRP INC	Utilities	-888.00	830.00	-1.07
2016	PHM	PULTEGROUP INC	Consumer Discretionary	28.98	122.24	0.24
2016	PVH	PVH CORP	Consumer Discretionary	708.20	12.20	58.05
2016	QCOM	QUALCOMM INC	Information Technology	6861.00	3046.00	2.25
2016	DGX	QUEST DIAGNOSTICS INC	Health Care	776.00	231.00	3.36
2016	RL	RALPH LAUREN CORP	Consumer Discretionary	668.30	163.80	4.08
2016	RRC	RANGE RESOURCES CORP	Energy	-125.72	16.68	-7.54
2016	RTN	RAYTHEON CO	Industrials	2291.00	867.00	2.64
2016	RSG	REPUBLIC SERVICES INC	Industrials	920.00	423.80	2.17
2016	RMD	RESMED INC	Health Care	489.40	168.13	2.91
2016	RHI	ROBERT HALF INTL INC	Industrials	359.13	114.51	3.14
2016	ROK	ROCKWELL AUTOMATION	Industrials	830.40	378.20	2.20
2016	COL	ROCKWELL COLLINS INC	Industrials	530.00	172.00	3.08
2016	ROP	ROPER TECHNOLOGIES INC	Industrials	926.48	126.77	7.31
2016	ROST	ROSS STORES INC	Consumer Discretionary	1260.97	214.64	5.87
2016	RCL	ROYAL CARIBBEAN CRUISES LTD	Consumer Discretionary	22.33	367.91	0.06
2016	SCG	SCANA CORP	Utilities	-487.00	329.00	-1.48
2016	SLB	SCHLUMBERGER LTD	Energy	3576.00	2713.00	1.32
2016	SNI	SCRIPPS NETWORKS INTERACTIVE	Consumer Discretionary	874.42	129.73	6.74
2016	STX	SEAGATE TECHNOLOGY PLC	Information Technology	1093.00	727.00	1.50

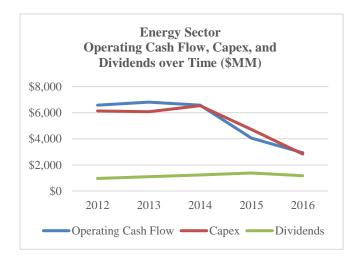
Tab	ble 4: Fre	ee Cash Flow and Dividend Payouts for	all Qualifying S&P 500	Companies -	2016 Data (Continued)
Year 7	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	SEE	SEALED AIR CORP	Materials	631.20	121.60	5.19
2016	SRE	SEMPRA ENERGY	Utilities	-1896.00	755.00	-2.51
2016	SHW	SHERWIN-WILLIAMS CO	Materials	1069.55	312.08	3.43
2016	SIG	SIGNET JEWELERS LTD	Consumer Discretionary	388.40	87.80	4.42
2016	SWKS	SKYWORKS SOLUTIONS INC	Information Technology	906.40	200.80	4.51
2016 A	AOS	SMITH (A O) CORP	Industrials	365.90	84.20	4.35
2016	SJM	SMUCKER (JM) CO	Consumer Staples	866.60	346.50	2.50
2016	SNA	SNAP-ON INC	Industrials	501.80	147.50	3.40
2016	SO	SOUTHERN CO	Utilities	-2461.00	2149.00	-1.15
2016 I	LUV	SOUTHWEST AIRLINES	Industrials	2255.00	235.00	9.60
2016	SWK	STANLEY BLACK & DECKER INC	Industrials	1138.20	330.90	3.44
2016	SPLS	STAPLES INC	Consumer Discretionary	679.00	311.00	2.18
2016 \$	SBUX	STARBUCKS CORP	Consumer Discretionary	3134.80	1246.20	2.52
2016	SRCL	STERICYCLE INC	Industrials	371.68	39.41	9.43
2016	SYK	STRYKER CORP	Health Care	1322.00	585.00	2.26
2016	SYMC	SYMANTEC CORP	Information Technology	-290.00	191.00	-1.52
2016	SYY	SYSCO CORP	Consumer Staples	1405.80	695.47	2.02
2016	TGT	TARGET CORP	Consumer Discretionary	3889.00	1359.00	2.86
2016	TEL	TE CONNECTIVITY LTD	Information Technology	1294.00	512.00	2.53
2016 H	FTI	TECHNIPFMC PLC	Energy	182.02	249.66	0.73
2016	TXN	TEXAS INSTRUMENTS INC	Information Technology	4083.00	1646.00	2.48
2016	TXT	TEXTRON INC	Industrials	566.00	22.00	25.73
2016	TMO	THERMO FISHER SCIENTIFIC INC	Health Care	2711.90	237.20	11.43
2016	TIF	TIFFANY & CO	Consumer Discretionary	479.30	218.80	2.19
2016	TWX	TIME WARNER INC	Consumer Discretionary	4234.00	1269.00	3.34
2016	TJX	TJX COMPANIES INC	Consumer Discretionary	2577.15	680.18	3.79
2016	TSS	TOTAL SYSTEM SERVICES INC	Information Technology	666.78	73.47	9.08
2016	TSCO	TRACTOR SUPPLY CO	Consumer Discretionary	413.02	122.27	3.38
2016 H	FOXA	TWENTY-FIRST CENTURY FOX INC	Consumer Discretionary	2765.00	586.00	4.72
2016	TSN	TYSON FOODS INC -CL A	Consumer Staples	2021.00	233.00	8.67
2016 U	UAA	UNDER ARMOUR INC	Consumer Discretionary	-82.26	2.93	-28.10
2016 U	UNP	UNION PACIFIC CORP	Industrials	4020.00	1879.00	2.14
2016 U	UPS	UNITED PARCEL SERVICE INC	Industrials	3508.00	2771.00	1.27
2016 U	UTX	UNITED TECHNOLOGIES CORP	Industrials	2181.00	2069.00	1.05
2016 U	UNH	UNITEDHEALTH GROUP INC	Health Care	8090.00	2261.00	3.58
2016 U	UHS	UNIVERSAL HEALTH SVCS INC	Health Care	768.54	38.88	19.77
2016 V	VLO	VALERO ENERGY CORP	Energy	3542.00	1111.00	3.19
2016 V	VZ	VERIZON COMMUNICATIONS INC	Telecommunication	5656.00	9314.00	0.61
2016 V	VFC	VF CORP	Consumer Discretionary	1302.08	635.99	2.05
2016 V	VIAB	VIACOM INC	Consumer Discretionary	1199.00	558.00	2.15
2016 V	V	VISA INC	Information Technology	5051.00	1350.00	3.74
2016 V	VMC	VULCAN MATERIALS CO	Materials	294.44	106.33	2.77
2016 V	WBA	WALGREENS BOOTS ALLIANCE INC	Consumer Staples	6522.00	1578.00	4.13
2016 V	WMT	WAL-MART STORES INC	Consumer Staples	20911.00	6216.00	3.36

Ta	able 4: Fr	ee Cash Flow and Dividend Payouts fo	or all Qualifying S&P 500	Companies -	2016 Data (Continued)
Year	Ticker	Company Name	Sector	Free Cash Flow	Dividends Paid	Free Cash / Dividends
2016	WM	WASTE MANAGEMENT INC	Industrials	1621.00	726.00	2.23
2016	WEC	WEC ENERGY GROUP INC	Utilities	678.60	626.10	1.08
2016	WDC	WESTERN DIGITAL CORP	Information Technology	1399.00	490.00	2.86
2016	WU	WESTERN UNION CO	Information Technology	973.10	312.20	3.12
2016	WRK	WESTROCK CO	Materials	891.70	384.20	2.32
2016	WHR	WHIRLPOOL CORP	Consumer Discretionary	543.00	296.00	1.83
2016	WFM	WHOLE FOODS MARKET INC	Consumer Staples	400.00	174.00	2.30
2016	WMB	WILLIAMS COS INC	Energy	1613.00	1261.00	1.28
2016	WYN	WYNDHAM WORLDWIDE CORP	Consumer Discretionary	782.00	226.00	3.46
2016	WYNN	WYNN RESORTS LTD	Consumer Discretionary	-255.40	202.21	-1.26
2016	XEL	XCEL ENERGY INC	Utilities	-142.70	694.89	-0.21
2016	XRX	XEROX CORP	Information Technology	721.00	341.00	2.11
2016	XLNX	XILINX INC	Information Technology	862.08	332.54	2.59
2016	XYL	XYLEM INC	Industrials	373.00	112.00	3.33
2016	YUM	YUM BRANDS INC	Consumer Discretionary	1611.00	661.00	2.44
2016	ZBH	ZIMMER BIOMET HOLDINGS INC	Health Care	1102.00	191.90	5.74
2016	ZTS	ZOETIS INC	Health Care	497.00	193.00	2.58

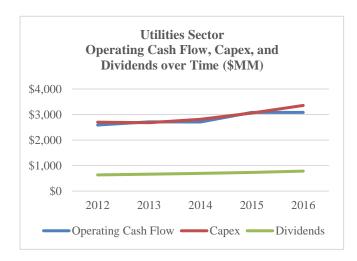
Conclusion

In the S&P 500, telecommunication services, information technology, and health care are the only sectors that have generated more free cash flow over the 2012 through 2016 timeframe than they have paid out as dividends and stock repurchases. On average, companies in the six other sectors in this analysis have a cumulative free cash flow to cumulative dividends plus stock buyback ratio of less than one, indicating that incremental capital, likely in the form of debt financing, would be needed to continue.

Given the discretionary nature of stock buybacks, however, it is important to compare free cash flow with dividends, excluding the effects of buybacks. Using this comparison, only two sectors were unable to cover their payouts over the study period, energy and utilities. For energy, the problem is likely a function of low energy prices serving as a drag on operating cash flow. That decline in operating cash flow is quite apparent in the graph below. However, also as seen in the graph, capital expenditures consume most of the operating cash flow generated in the sector, leaving little free cash flow to pay dividends. Whether free cash generation sufficient to cover dividends comes to this sector in the future remains to be seen.



For the utilities, as seen in the graph below, operating cash flow has moved higher over the study period. However, capital expenditures have increased as well, leaving very little free cash flow and certainly not enough to cover dividends. As noted, the regulated nature of this sector provides investors with assurances that are not present with unregulated industries.



Among individual companies within the S&P 500, most are able to generate the free cash flow needed to cover dividends. There are exceptions, especially among companies in the energy and utilities sectors.