



# The x y and Zee Share Buyback Quarterly

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## ***Corporate Cannibalism***

Share buybacks are not about returning cash to shareholders. Repurchases continue to be influenced by many external forces but the decision to buy back shares is ultimately determined by executive managements who are very often remunerated in their own stock. Option issuance, which effectively gives management all the potential upside and none of the downside of stock ownership, means that share buybacks have become to symbolise greater wealth for an elite group in an esoteric manner. Many corporates are not even attempting to justify huge buybacks – and the debt issuance to fund them – with any reference to value, with the end game being that shareholders ultimately find themselves owning a smaller proportion of a more highly indebted company. What worries us is that cash dividends are increasingly accounting for a smaller portion of capital allocation, killing off the effects of compounding, boosting volatility and embedding too much value in the fortunes of the prevailing share price. The basics of a reinvested and compounding dividend stream for long-term returns seems lost to many and that's a real shame.

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## Corporate Cannibalism: Executive Summary

The flawed idea that a trade-off exists between dividend payments and future growth of earnings (i.e. dividend growth) means that a record number of companies are repurchasing shares due to “financial flexibility”. A study entitled, “Share Repurchases and the Flexibility Hypothesis”<sup>1</sup> finds that firms are increasingly substituting dividends with share repurchases and, using data over the recent financial crisis, finds that firms that reduce repurchases do better than those companies that cut dividend payments, indicating that the market does not penalise repurchasing-reducing firms as much as dividend-reducing firms. We continue to believe that if there is no better way to utilise excess capital within the business companies should return cash to shareholders in the form of an increased (or special) dividend and allow the market to efficiently reallocate that capital. Yes, current tax rules favour buybacks over dividends but repurchases should only be an option when accompanying a sensible and progressive dividend payout policy, if the shares of the company are selling below intrinsic value (or a sensible percentage of book value depending on the business), and not when US equity market valuations are where they stand today.

Corporate Cannibalism is a title adapted from a quote attributed to Charlie Munger, “look at the cannibals” although there is no direct record of when Mr Munger actually said this, rather a story told by the value investor Mohnish Pabrai. In this note we discuss what we feel is right and wrong with share buybacks. We all know that managements prefer to buy back shares as they are awarded huge bonuses based on targets which are quite obviously boosted by repurchases. But how does a company generate enough (domestic) cash to cover dividend payments, share repurchases, debt repayments (to fund those repurchases), capital expenditures and R&D, plus also contributing towards a (perhaps) underfunded pension plan. Whilst focusing on share buybacks, this note leads nicely into the frenzy for so-called “tax inversions”, the subsequent response from the US Treasury Department (and various runners in the forthcoming Presidential election) to the off-shore cash debacle and buybacks making a handful of executives extremely rich. We have included references to recent academic articles on the subject and give some specific stock examples for each point raised. We are big fans of equity income investing and whilst much has been written on the subject of share buybacks, one thing that is hardly ever mentioned is the vital importance of the long-term compounding effect of a re-invested dividend stream.

In summary, share buybacks are not about returning cash to shareholders. Repurchases continue to be influenced by many external forces but the decision to buy back shares is ultimately determined by executive managements who are very often remunerated in their own stock. Option issuance, which effectively gives management all the potential upside and none of the downside of stock ownership, means that share buybacks have become to symbolise greater wealth for an elite group in an esoteric manner.

**Many corporates are not even attempting to justify huge buybacks – and the debt issuance to fund them – with any reference to value, with the end game being that shareholders ultimately find themselves owning a smaller portion of a more highly indebted company.** What worries us is that cash dividends are increasingly accounting for a smaller proportion of capital allocation, killing off the effects of compounding, boosting volatility and embedding too much value in the fortunes of the prevailing share price. The basics of a reinvested and compounding dividend stream for long-term returns seems lost to many and that’s a real shame.

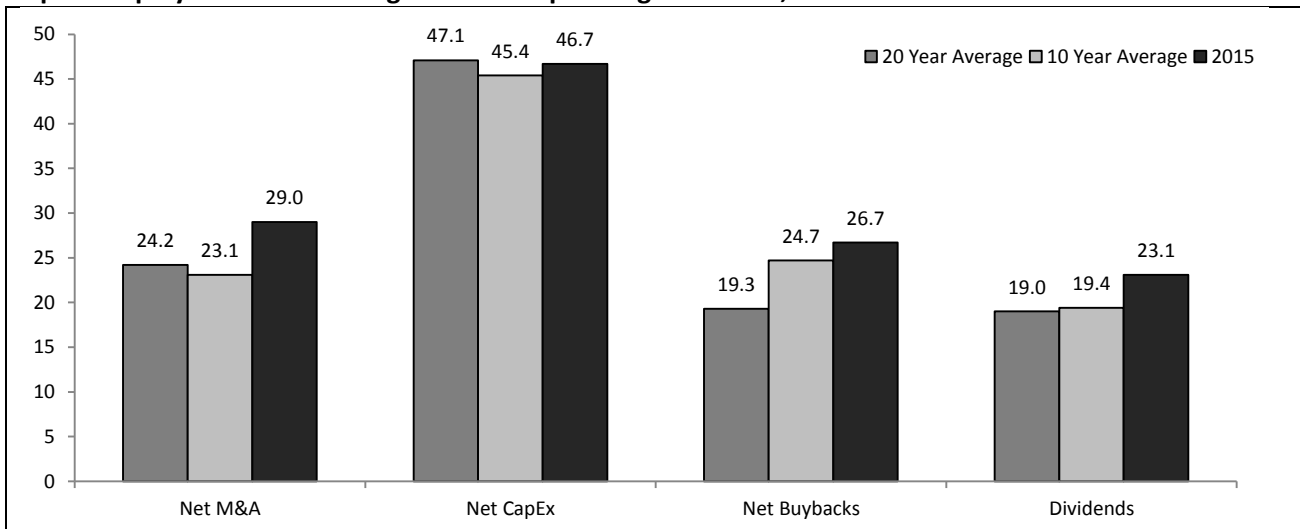
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<sup>1</sup> Share Repurchases and the Flexibility Hypothesis, January 2015, Iyer & Rao,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2554151](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2554151)

## Buybacks, Capital Allocation and Equity Market Valuation

The capital allocation shift during 2015 has been quite remarkable. One might expect that capital deployment towards so-called “shareholder returns” by increasing dividends – albeit from a very low base – and ramping up share buybacks would mean that CapEx investment would have suffered. Over the last 20 years, companies have deployed an average 47% of operating cash flow on net CapEx and 47% on net M&A. For 2015, M&A has jumped to 29% but net CapEx was similar at 46.7%. Dividends paid as a percentage of operating cash flow has averaged 19% over the last 20 years and net buybacks a similar amount at 19.3%. For 2015, dividends accounted for 23.1% but net buybacks jumped to 26.7%.

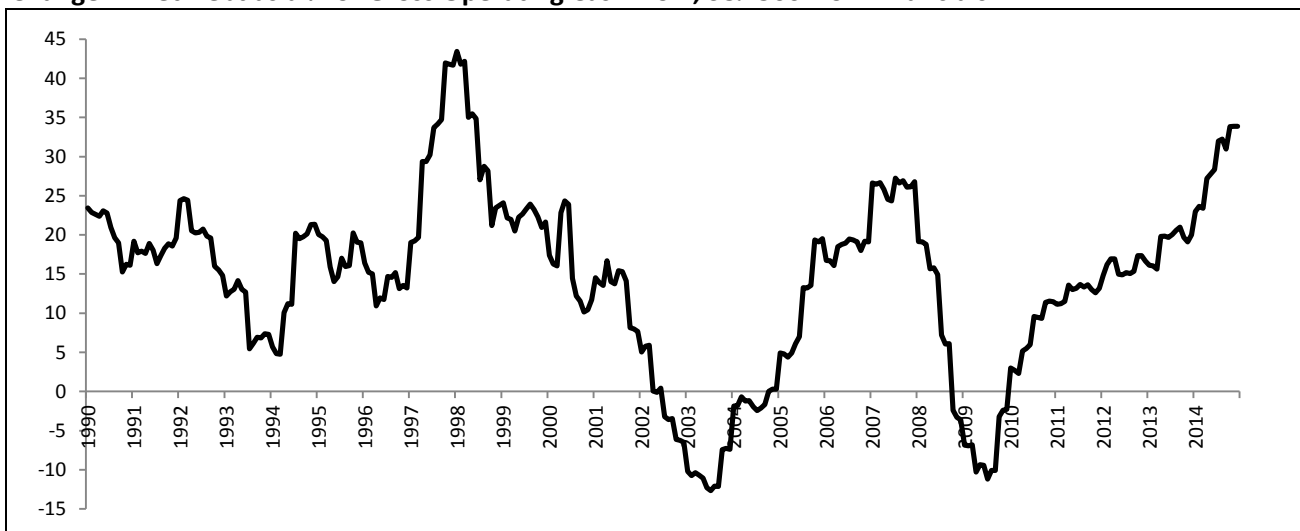
### Capital Deployed as a Percentage of Gross Operating Cash Flow, S&P500 Non-Financials



Source: xyandZee Note: 2015 YTD includes January to end-November

But how can capital allocation be increasing across the board? Corporates have been piling on cheap debt to finance not only buybacks but also capital investment within the business.

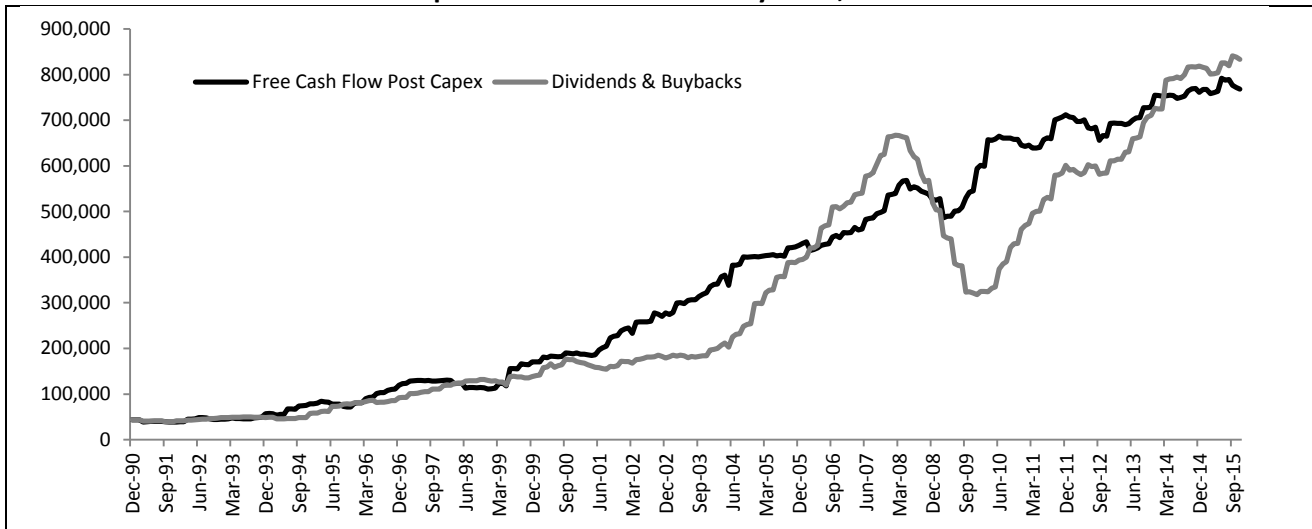
### Change in Net Debt as a % of Gross Operating Cash Flow, S&P500 Non-Financials



Source: xyandzee

Indeed, companies spent more on buybacks during the second quarter of 2015 on a trailing twelve month basis than they actually generated in free cash flow, exceeding 100% for the first time since October 2009<sup>2</sup>. For the third quarter, the buyback to free cash flow ratio declined 14.4% to 90.7% due to quarter-over-quarter increases for both buybacks and free cash flow, which grew 19% in 2015Q3 as a result of decreases in CapEx spending, mainly by companies in the energy sector.

## Free Cash Flow Generation Post Capex versus Dividends & Buybacks, S&P Non-Financials



Source: xyandZee

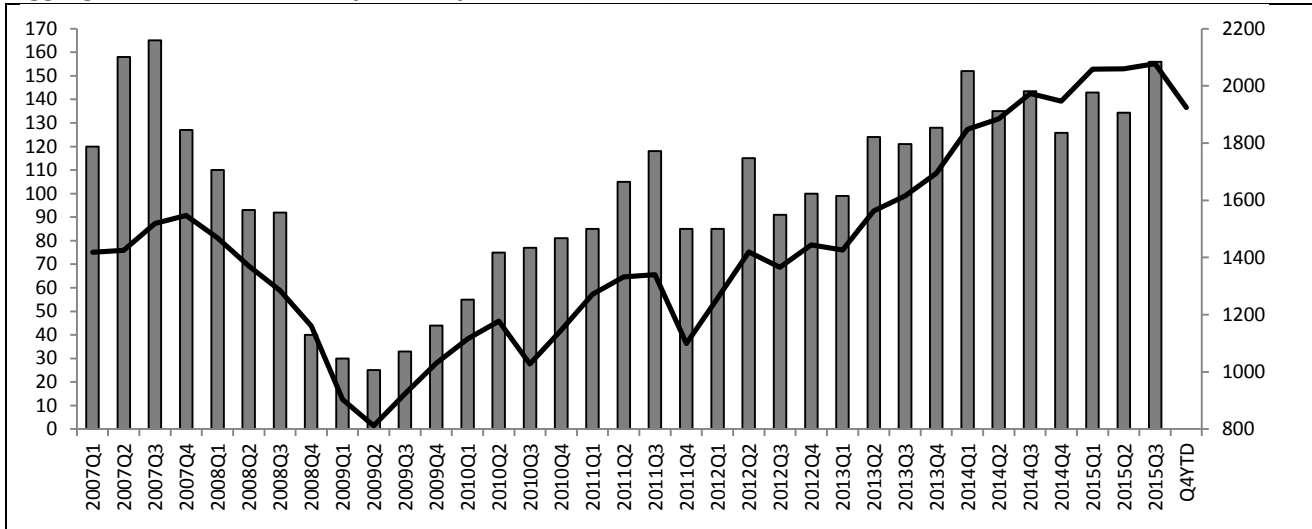
Some were wondering if this year's rush of major M&A deals might mean we would see a decline in buyback spending? Whilst most large caps had already disclosed their buyback activity for the third quarter, aggregate data has only just been released showing that **share buybacks amounted to US\$156bn during 2015Q3, a 16% increase over the second quarter and a 6.4% increase year-on-year**. On a trailing twelve month basis, the amount spent on share buybacks equalled 64.6% of net income, the largest percentage since October 2009. That said, 130 companies in the S&P500 index spent more on buybacks than they actually generated in net income<sup>3</sup> and 2015Q3 marked the first back-to-back quarter where actual earnings have declined since 2009. Of the mega-large caps, Johnson & Johnson, Pfizer, Wal-Mart and Visa all stopped buying back shares during the quarter and apart from Wal-Mart, the others were due to acquisition-related spend.

It seems to be the case that whilst some corporates took advantage of market weakness during the summer months by increasing buybacks, it also seems that many were spooked and slowed or even halted repurchase spending instead, demonstrating rather effectively that any attempt to time the market is rather futile. We know that many corporates rushed to buy back shares in late 2012 ahead of "fiscal cliff" changes to US tax laws in January 2013, which led to a slow start for buybacks in early 2013, but this was short-lived. If we look back to the peak of buyback activity which occurred in 2007Q3, when over US\$160bn was repurchased by S&P500 companies, it took just seven quarters for this to fall by 85% to US\$24bn.

<sup>2</sup> Factset, Cash & Investment Quarterly, September 2015, [http://www.factset.com/websitefiles/PDFs/cashinvestment/cashinvestment\\_9.24.15](http://www.factset.com/websitefiles/PDFs/cashinvestment/cashinvestment_9.24.15)

<sup>3</sup> Factset Buyback Quarterly, December 2015, [http://www.factset.com/websitefiles/PDFs/buyback/buyback\\_12.15.15](http://www.factset.com/websitefiles/PDFs/buyback/buyback_12.15.15)

Aggregate S&P500 Share Buybacks by Quarter (US\$bn) and S&P500 Price Index (RH Scale)



Source: Factset Buyback Quarterlies, xyandZee

Although its buyback spending was down 17.5% year-on-year and is down 22.4% for the nine month period, Apple was again dominant in the third quarter and continues to impact overall data due to the use of ASRs in conjunction with open market repurchases, buying back US\$7bn worth of stock in 2015Q1, US\$10bn in 2015Q2 and over US\$14bn in 2015Q3<sup>4</sup>. Many other corporates have accelerated their repurchase programmes, with Biogen, Sysco and H&R Black all appearing out of nowhere, spending in excess of US\$1bn during the third quarter. Walt Disney, McDonalds and Motorola also all ramped up spending. 75% of constituents in the S&P500 index continue to buy back shares and this is when share prices were (for most) at all-time highs. As we've said before, this is totally non-sensical.

<sup>4</sup> Apple, April 2015, <https://www.apple.com/uk/pr/library/2015/04/27Apple-Expands-Capital-Return-Program-to-200-Billion.html>

# Share Buybacks: Corporate Cannibalism | December 2015

## Largest Share Buybacks During 2015Q3, Those Over US\$1bn

<u>Company</u>	<u>Market Cap</u> <u>(US\$bn)</u>	<u>Q3 Buybacks</u> <u>(US\$bn)</u>	<u>Y-on-Y</u> <u>% Chg.</u>	<u>% Chg.</u> <u>on 2015Q2</u>	<u>9M Buybacks</u> <u>(US\$bn)</u>	<u>Y-on-Y</u> <u>% Chg.</u>
Apple	656.829	14.025	(17.5%)	40.3%	31.025	(22.4%)
Microsoft	430.684	4.000	100.0%	(5.0%)	13.209	169.1%
AIG	79.395	3.730	154.4%	59.1%	7.473	119.6%
Walt Disney	184.208	3.274	127.4%	216.2%	4.791	(0.4%)
Gilead Sciences	156.492	3.050	79.5%	238.9%	6.950	107.5%
Biogen	65.357	2.956	12,710.4%	6,938.6%	2.998	732.9%
McDonald's	104.889	2.346	155.4%	40.0%	4.646	114.9%
Qualcomm	72.960	2.230	86.6%	(58.7%)	9.584	166.7%
Comcast	152.504	2.184	191.3%	37.9%	5.769	156.4%
Wells Fargo	282.958	2.131	(14.4%)	6.9%	6.717	14.5%
Motorola Solutions	12.715	2.058	217.0%	621.6%	2.996	166.9%
Du Pont	58.791	2.000	121.5%	2,716.9%	2.353	17.7%
Twenty-First Century Fox	60.950	1.972	54.9%	70.8%	5.181	56.5%
Home Depot	170.850	1.957	(12.7%)	(0.1%)	5.042	(12.2%)
Citigroup	161.491	1.952	943.9%	24.7%	3.814	347.7%
American Airlines	26.686	1.558	1,278.8%	106.9%	2.501	2,113.3%
IBM	134.321	1.504	(13.3%)	33.2%	3.861	(70.9%)
Boeing	98.597	1.500	49.7%	(25.0%)	6.000	20.0%
Caterpillar	41.466	1.500	(40.0%)	1,100.0%	2.025	(52.2%)
Sysco	23.455	1.500	n/a	n/a	1.500	2,181.4%
H & R Block	10.110	1.500	n/a	n/a	1.500	n/a
3M Company	97.276	1.446	12.8%	(18.9%)	4.064	(7.2%)
United Technologies	85.863	1.427	236.2%	n/a	4.427	304.4%
American Express	70.772	1.357	18.4%	9.3%	3.344	3.5%
Lyondellbasell	43.092	1.341	4.8%	68.4%	3.444	(21.8%)
Merck	151.208	1.281	(52.0%)	80.7%	3.005	(50.6%)
Intuit	26.482	1.270	1,020.2%	14,674.9%	1.847	538.5%
JP Morgan Chase	247.261	1.248	(16.2%)	2.3%	4.368	34.4%
Union Pacific	72.308	1.237	44.6%	48.3%	2.884	23.1%
Honeywell	80.198	1.235	794.9%	904.1%	1.721	149.8%
Cisco Systems	138.840	1.207	19.2%	20.1%	3.220	(28.9%)
Time Warner	56.033	1.198	(20.1%)	33.2%	2.998	(33.4%)
Priceline Group	62.472	1.166	692.2%	36.3%	2.258	1,433.2%
PepsiCo	146.763	1.093	9.1%	7.8%	3.273	0.3%
Valero Energy	35.231	1.067	240.7%	68.6%	2.000	188.7%
Goldman Sachs Group	81.502	1.046	(16.2%)	327.4%	2.541	(39.8%)
General Dynamics	46.015	1.035	121.0%	(2.2%)	2.728	(13.6%)
Seagate Technology	10.350	1.035	465.6%	471.8%	1.922	389.1%
AmerisourceBergen	20.480	1.010	367.0%	90.1%	1.558	102.4%
Intel	162.616	1.001	(75.6%)	33.5%	2.500	(63.2%)
Baidu	71.054	1.000	n/a	n/a	1.000	n/a

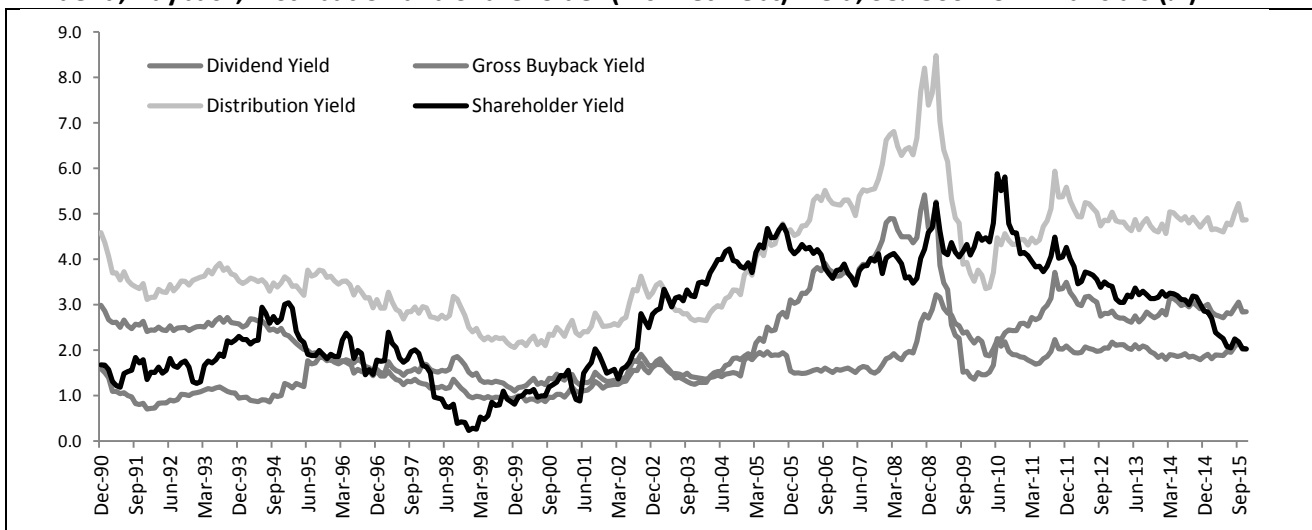
Source: Company Report & Accounts, xyandZee

## The Fallacy of Shareholder Yield

The dividend yield for S&P500 companies last year was 1.9% but the buyback yield - most commonly known as the proportion of net share buybacks as a percentage of market capitalisation - was 2.9%. Putting these two together a “shareholder yield” of 4.8% looks extremely attractive given such miserly returns available elsewhere. S&P500 companies bought back US\$521bn worth of stock last year and the top five alone spent over US\$82bn. Looking at those companies that have been part of the index over the last 10 years, more than 54% of earnings generated has been spent on buying back stock against 37% spent paying dividends to shareholders<sup>5</sup>. In other words, if all the money spent on buybacks had been distributed as dividends, the yield on the S&P500 would have more than doubled to around 4.5%. One must also bear in mind that 82 companies in the index bought back shares last year but didn’t pay a dividend!

The chart below is fairly self explanatory but there is sometimes confusion about what shareholder yield actually is. We calculate it as dividends paid plus cash spent on buybacks **plus the change in net debt** - where an increase in debt is a negative factor and a decrease in debt a positive factor. A book simply entitled “Shareholder Yield”<sup>6</sup> analyses portfolios based on various metrics and finds, “*portfolios of companies with high shareholder yields outperform both broad market indices and high dividend yield portfolios by a substantial margin.*” The book referenced a notable earlier study, “Enhancing the Investment Performance of Yield-Based Strategies”<sup>7</sup> which found that “*high dividend yield stocks do not reliably earn above-average risk-adjusted returns . . . (with) more complete measures of shareholder yield, which account for net share repurchases, perform(ing) better.*” This study was partially responsible for spawning a raft of new indices focused entirely on shareholder yield, most of which don’t consider the change in a company’s debt in order to finance the share buyback in the first place (or perhaps to pay dividends, for that matter). The chart below shows quite nicely the increase in debt and its effect on the so-called shareholder yield.

**Dividend, Buyback, Distribution and Shareholder (Inc. Net Debt) Yield, S&P500 Non-Financials (%)**



Source: Faber, xyandZee

<sup>5</sup> Harvard Business Review, September 2014, <http://hbr.org/2014/09/profits-without-prosperity/ar/1>

<sup>6</sup> Shareholder Yield, Mebane Faber, <http://www.shareholderyield.com/>

<sup>7</sup> Enhancing the Investment Performance of Yield-Based Strategies, Gray & Vogel, November 2012, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2051101](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2051101)



Whilst some might like to add buybacks to the dividend yield, what if we also deduct net issuance from the yield? We all know that as economies grow, equity issuance does not remain static. New companies IPO and existing ones issue more shares. In a paper published back in 2003, this was described as the “2% dilution effect”<sup>8</sup>. The paper took the ratio of the proportionate increase in market capitalisation to the proportionate increase in the market’s price index, giving a simple proxy for the change in shares outstanding by factoring out valuation changes and ignoring those cases where one public company acquires or merges with another. Buybacks in the US last year totalled US\$696bn - a whopping 4% of GDP - but this number was dwarfed by new share issuance which totalled US\$1.2 trillion<sup>9</sup>. In other words, the dividend yield in 2014 of 1.9% was nearly wiped out by a dilution rate of 1.8% (not too dissimilar to the dilution rate of 1.7% when measured over an 80 year period from 1935 to 2014).

Note from the table below that five companies were in the top 15 for both buybacks and share issuance last year. Responsible for this overlap is employee compensation, and in particular, stock option issuance (see Governance, Inside Information and Buybacks to Fund Option Issuance later in this report).

## Top 15 Largest Companies by Buybacks and by Issuance, S&P Companies, 2014

Rank	Company	Buyback (US\$bn)	Rank	Company	Issuance (US\$bn)
1	Apple	45.0	1	Williams	3.4
2	IBM	13.7	2	Thermo Fisher Scientific	3.1
3	ExxonMobil	13.2	3	General Electric	2.8
4	Intel	10.8	4	Synchrony Financial	2.8
5	Cisco	9.8	5	Tyson Foods	2.2
6	Wells Fargo	9.4	6	Investors Bancorp	2.2
7	Oracle	8.1	7	Kennedy Wilson Holdings	2.0
8	Merck	7.7	8	Cisco	1.9
9	Microsoft	7.3	9	Oracle	1.8
10	Johnson & Johnson	7.1	10	Johnson & Johnson	1.8
11	Monsanto	7.1	11	Wells Fargo	1.7
12	Goldman Sachs	7.1	12	Merck	1.6
13	Home Depot	7.0	13	Coca Cola	1.5
14	Walt Disney	6.5	14	Platform Speciality Products	1.5
15	Boeing	6.0	15	Overseas Shipholding Group	1.5

Source: Research Affiliates

However, if one adjusts for stock issuance by market capitalisation (i.e. if the market cap of a company rises by 10% and the share price remains unchanged over the year, then there must have been 10% of new share issuance), then the picture looks markedly different. In other words, in addition to issuance in order to fund management stock options, a huge amount of stock is being issued to fund M&A activity. However, these transactions might not be individually reported in the cash flow statement and neither are they necessarily dilutive. For example, Kinder Morgan retiring the stock of a subsidiary company and then issuing parent company stock meant that the net effect was that no new stock was added. Verizon acquiring Vodafone’s US operations was also not dilutive but Facebook’s acquisition of WhatsApp was, given that WhatsApp had been a private entity and its acquisition funded by “true” new issuance.

<sup>8</sup> Bernstein & Arnott, September 2003,

<http://portfolioconstruction.com.au/obj/articles/Real%20long%20term%20earnings%20growth.pdf>

<sup>9</sup> Research Affiliates, October 2015,

[https://www.researchaffiliates.com/Production%20content%20library/Are%20Buybacks%20an%20Oasis%20or%20a%20Mirage\\_pdf.pdf](https://www.researchaffiliates.com/Production%20content%20library/Are%20Buybacks%20an%20Oasis%20or%20a%20Mirage_pdf.pdf)

## Top 15 Largest Companies by Stock Issuance Adjusted by Market Capitalisation, 2014

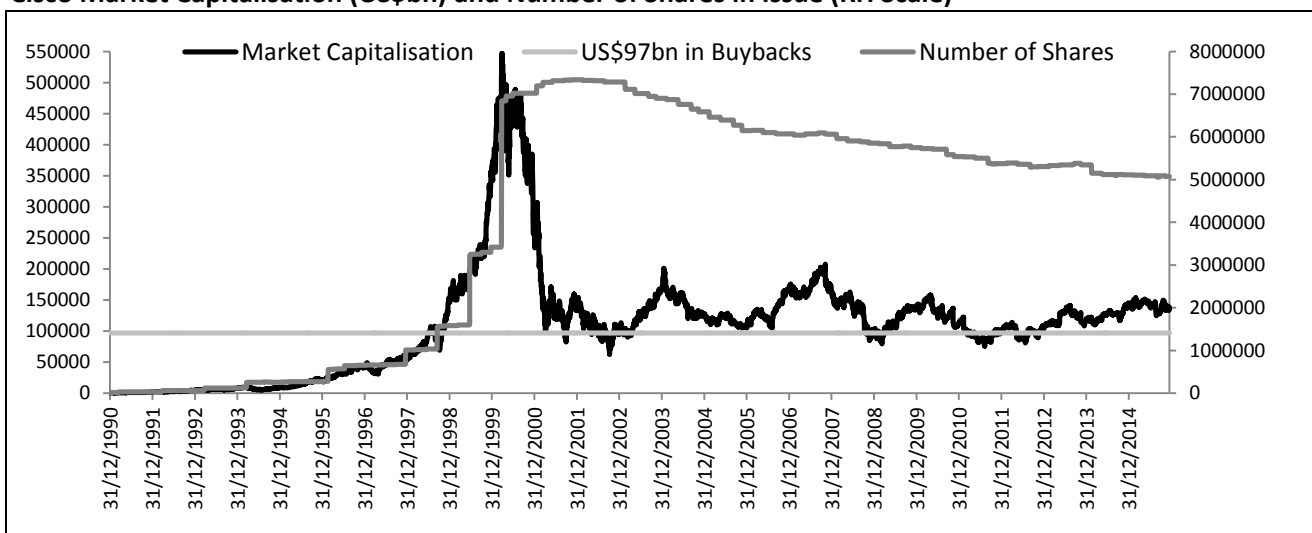
Rank	Company	Issuance (US\$bn)
1	Kinder Morgan	118.5
2	Verizon	87.5
3	Facebook	22.1
4	RCS Capital	21.8
5	Walgreens	12.9
6	Tri Pointe Homes	10.1
7	Level 3 Communications	8.3
8	General Motors	8.2
9	Comcast	7.9
10	Berkshire Hathaway *	7.2
11	Tableau Software	6.1
12	Alliance Data Systems	6.0
13	Pacwest Bancorp	5.9
14	Thermo Fisher Scientific	5.4
15	Zulily	5.2

Source: Research Affiliates \* Note: The issuance for Berkshire Hathaway is due to the change in shares outstanding for their Class B shares only. Most of this change was due to the conversion of Class A shares into Class B shares and this reduction would mostly offset issuance to zero for BH as a whole. Note that this would also be true for the aggregate market provided all share classes were included in the market measure.

## Cisco: An Example of Issuing New Stock Whilst Also Executing a Buyback

We have previously used AT&T as an example of the fallacy of shareholder yield but due to its acquisition of DirectTV, the company has completely stopped buying back stock during 2015. So we have instead chosen Cisco as an example of issuing new stock whilst also executing a massive buyback programme. Management first authorised a US\$3bn share repurchase programme back in September 2001<sup>10</sup> and since then Cisco has bought back a massive US\$92.7bn worth of stock. The company has US\$4.3bn remaining on its current authorisation, so that's a total of US\$97bn worth of buybacks. No, that's not a typo! So what happened? The dot-com bubble burst and after nine (yes, nine) stock splits during the ten years leading up to March 2000, Cisco's market cap fell from a peak of US\$547.8bn to US\$106.1bn in September 2001, when it launched its first buyback. Note that Cisco's market cap today is US\$138.25bn.

## Cisco Market Capitalisation (US\$bn) and Number of Shares in Issue (RH Scale)

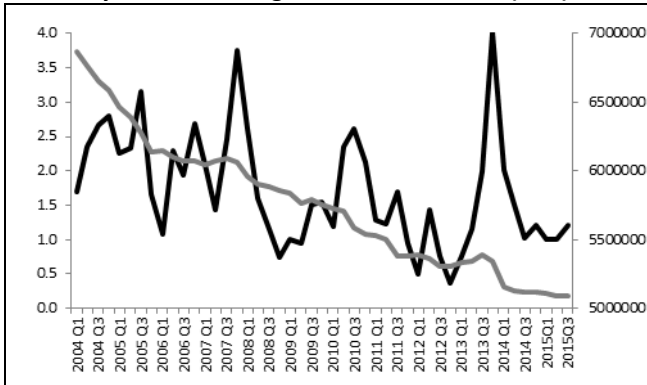


Source: Cisco

<sup>10</sup> Cisco, September 2001, <http://www.cisco.com/cisco/web/UK/news/pdfs/2001/12.pdf>

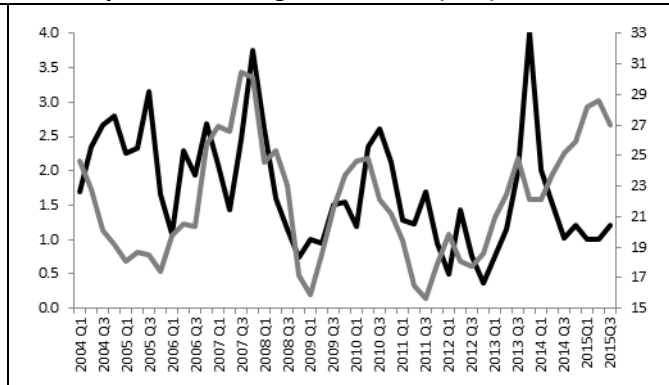
Cisco has a July year-end and most recent fiscal results<sup>11</sup> saw cash flow from operating activities total US\$12.6bn, the company increased net debt by US\$4.5bn and issued US\$1.5bn of stock “pursuant to employee stock incentive and purchase plans.” This was partially offset by US\$4.3bn of buybacks (down 56% year-on-year) and US\$4.1bn paid out as dividends, US\$1.2bn spent on CapEx and US\$0.3bn on acquisitions. In other words, 73% of US\$11.3bn in free cash flow was spent on dividends and buybacks.

**Cisco Buybacks & Average Number of Shares (RHS)**



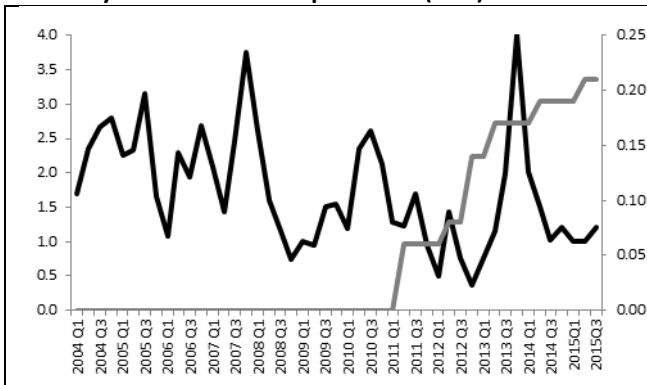
Source: Company Report & Accounts

**Cisco Buybacks & Average Share Price (RHS)**



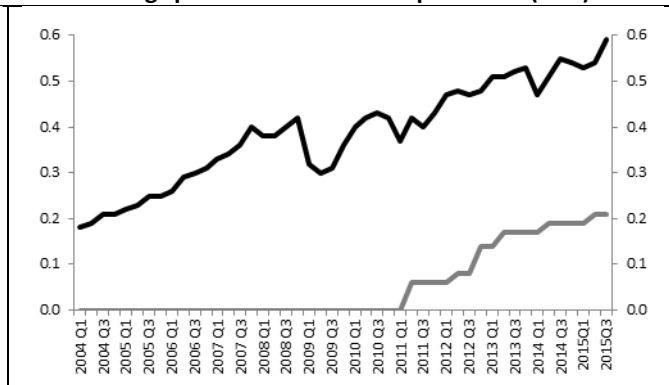
Source: Company Report & Accounts

**Cisco Buybacks & Dividend per Share (RHS)**



Source: Company Report & Accounts

**Cisco Earnings per Share & Dividend per Share (RHS)**



Source: Company Report & Accounts

## Dividends Do Matter

Central bankers' QE experiments have made it difficult to hold cash, bonds are expensive (with some now negative yielding) and whilst many favour equities on the basis that there's no alternative offering a sensible yield, some cannot stomach the risk. By focusing on solid dividend-yielding stocks, any investor should outperform the market on a total return basis over the long-term but will have to suffer periods of capital return losses as a result of their buy-and-hold strategy. Indeed, one should always remember that the downside risk of owning an equity is huge. The average peak-to-trough drawdown of holding equities over a three year rolling period since 1935 is around 20% (compared to 7% for bonds) but in a crisis this increases markedly. Ranking the most overvalued extreme valuations historically in the US in order of severity; 2000, 1929, 2007, 1937, 1907, 1968 and 1972, (with the exception of 1969-1970, a period which was down by *just* one-third), all periods subsequently experienced losses of 50% or more<sup>12</sup>. So faced with miserly (or even negative) long-term returns, with deep interim losses on the way, the choice is whether to invest in the first place or not.

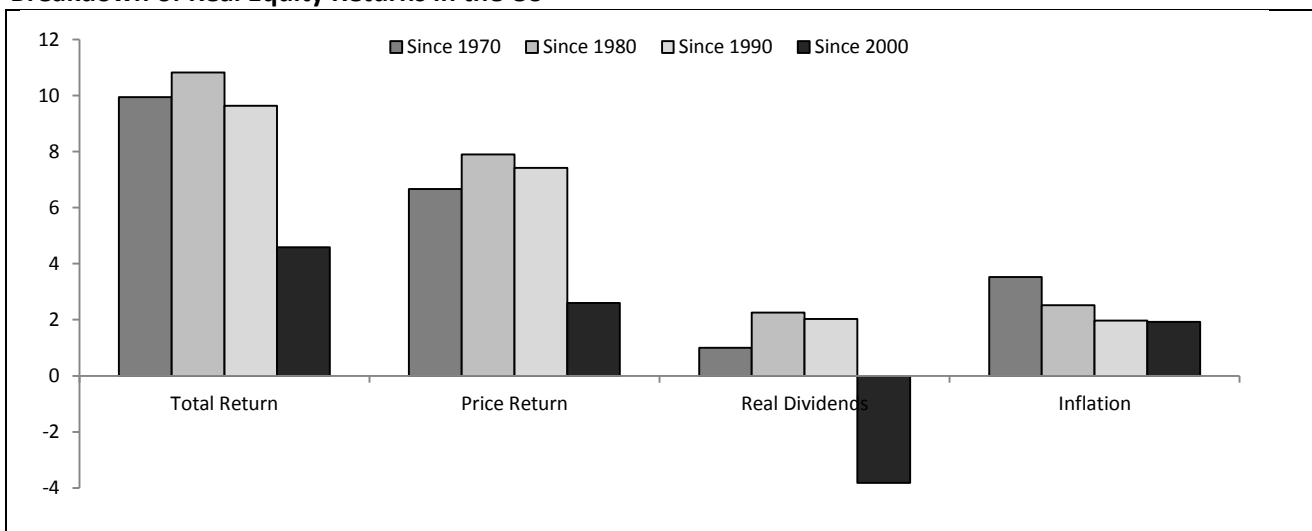
<sup>11</sup> Cisco 10-K, September 2015, <http://d1lge852tjjqow.cloudfront.net/CIK-0000858877/f0c5c834-4ac6-42d4-89f3-596b952a3e5b.pdf?noexit=true>

<sup>12</sup> Hussman Funds, <http://www.hussmanfunds.com/>

Many academic studies have examined the historical returns of equities and their relationship to bond yields, thus attempting to derive the equity risk premium. Ibbotson and Chen's seminal study<sup>13</sup> decomposed equity returns into supply factors and found that the bulk of historical returns are due to dividend payments and nominal earnings growth, i.e. real earnings plus inflation. However, this theory doesn't seem to hold true in the US.

To calculate the chart below we break down the total return obtained into its dividend and capital return components. The dividend component is the annualised difference between the total and capital return so (assuming that dividend growth is positive), one would expect the higher the dividend yield of the market, the greater long term return. The capital return component can be split into dividend growth and the difference between the starting valuation and that at the end of the period (i.e. multiple expansion). If dividend growth and price returns are the same, then the starting and ending dividend yield will be equal. We can then split the dividend growth component into real dividend growth and inflation. It makes sense to remove inflation from the growth component as in a higher inflationary environment dividend growth will be higher in nominal quantities. Contrary to other markets (including the UK, Australia, Japan, France and Germany), capital appreciation – or multiple expansion – has made up the bulk of equity returns in the US since 1970. What's startling is that real dividends have not grown since 2000 as cash is now being diverted towards share buybacks.

## Breakdown of Real Equity Returns in the US



Source: xyandZee

Whilst this note is about share buybacks, we cannot ignore those companies that pay a solidly long-term progressive dividend whilst also committing to a timely share buyback programme. The table below shoes the top 20 dividend paying stocks in the US (by total dividend payment), with those also in the top 20 share repurchasers last year shaded.

<sup>13</sup> Long-Run Stock Returns: Participating in the Real Economy, Ibbotson & Chen, April 2006, <http://dx.doi.org/10.2469/faj.v59.n1.2505>

## Top 20 Companies by Total Cost of Dividend Payment, 2015

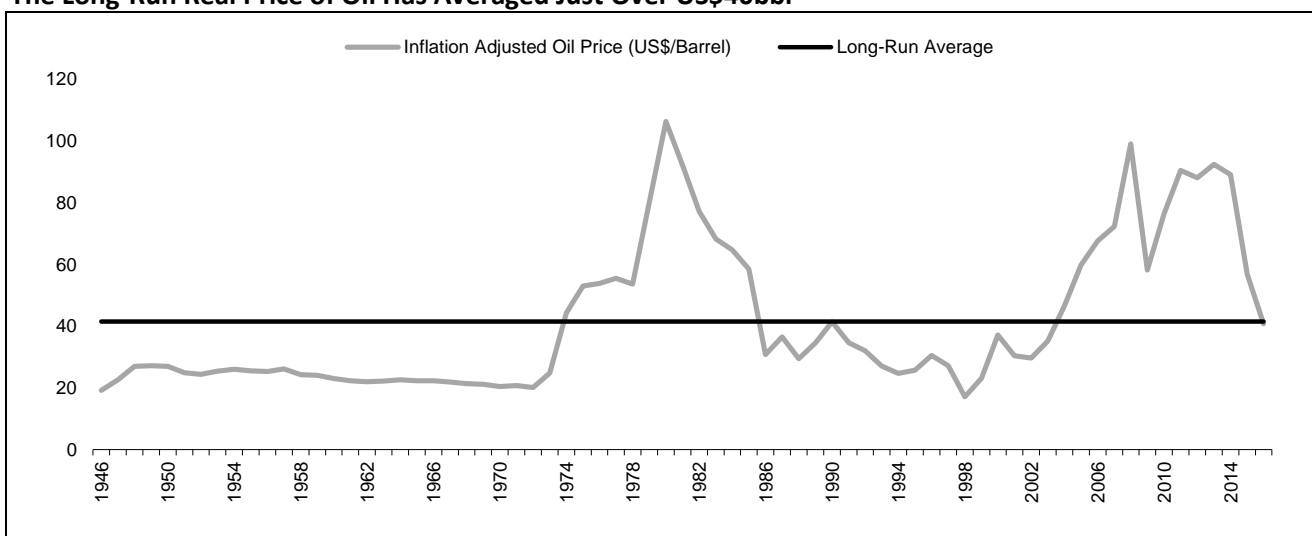
Rank	Largest Dividend Payers	Dividend Cost (US\$m)	Yield (%)	Dividend (US\$)
1	ExxonMobil	11,976.77	3.87	2.88
2	Apple	11,964.66	1.90	2.15
3	AT&T	11,584.22	5.68	1.88
4	Microsoft	10,975.39	2.54	1.37
5	General Electric	9,270.173	3.03	0.92
6	Verizon Communications	9,012.554	4.94	2.22
7	Johnson & Johnson	8,082.243	2.87	2.92
8	Chevron	8,060.764	4.95	4.28
9	Wells Fargo	7,549.348	2.77	1.48
10	Procter & Gamble	7,307.459	3.45	2.69
11	Pfizer	6,543.384	3.31	1.06
12	Wal Mart	6,275.710	3.30	1.96
13	Philip Morris	6,248.311	4.67	4.03
14	JPMorgan Chase	6,246.878	2.65	1.70
15	Coca-Cola	5,753.706	3.13	1.32
16	Merck	5,039.552	3.46	1.80
17	IBM	4,738.987	3.63	4.89
18	Intel	4,530.240	2.80	0.96
19	Kraft Heinz	4,435.182	5.24	3.66
20	Altria	4,295.848	3.88	2.19

Source: Company Report & Accounts, xyandZee, Note: Companies shaded were also in the top 20 share repurchasers during 2014

## ExxonMobil: Might this be an Example of a Progressive Dividend Coupled with Regular Buybacks?

The influence of a continued low oil price (and many other commodities) on inflation figures is perhaps one reason why there had been a delayed decision with regards interest rate policy changes by the Fed. Whilst some may seem oversold, some real commodity prices remain high when looked at in an historical context, with the long-term real (adjusted for inflation) price of oil averaging US\$40bbl<sup>14</sup>. The following chart doesn't really belong in this note but quite effectively shows that if one believes in mean reversion, then an oil price of US\$40bbl over the next decade is a real possibility. Indeed, as we write, OPEC has pledged to maintain production levels and the price of oil (WTI benchmark) fell below US\$35bbl, its lowest level since July 2004. Oil at these levels for a prolonged period of time will likely be a serious game-changer for many in 2016.

## The Long-Run Real Price of Oil Has Averaged Just Over US\$40bbl



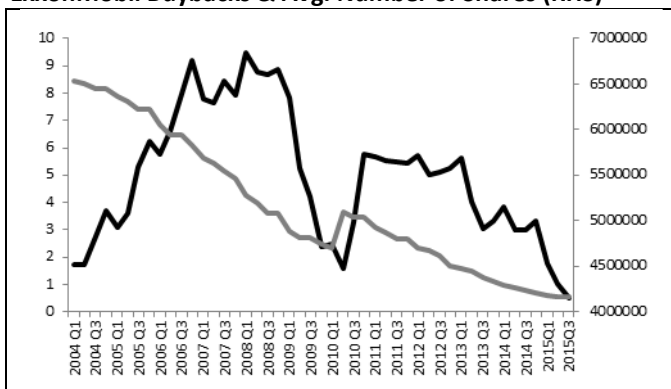
Source: www.inflationdata.com

<sup>14</sup> inflationdata.com, [http://inflationdata.com/Inflation/Inflation\\_Rate/Historical\\_Oil\\_Prices\\_Table.asp](http://inflationdata.com/Inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp)

We have in the past used ExxonMobil as a “poster-child” company that has increased its cash dividend each and every year (for the last 30 years at a compound annual rate of 6.4% and by 9.8% over the last 10 years), promoting a progressive dividend strategy coupled with a consistent share buyback programme. Whilst ExxonMobil has dramatically slowed buyback activity this year, it has not entirely stopped repurchasing shares having bought back around US\$500mn worth during 2015Q3. This compares to US\$13bn spent in 2014, US\$16bn in 2013 and US\$21bn in 2012.

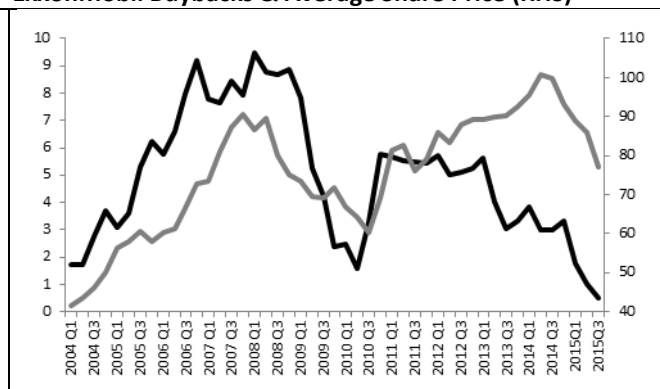
Most recent 2015Q3 results were announced at the end of October. The company earned US\$26bn in cash flow from operations during the first nine months of 2015, realised US\$1.1bn in asset sales but spent over US\$20bn on CapEx, leaving just over US\$5.5bn in free cash flow. However, dividend payments cost US\$8.2bn and US\$3.3bn was spent on share buybacks, with US\$800mn spent “to acquire shares in conjunction with the company’s benefit plans and programs.” ExxonMobil pre-announces dividend payments and has established a pattern of an increased second quarter dividend going through to year end. Payments so far this year were US\$0.69, rising to US\$0.73 for the second and third quarters. If we assume a further US\$0.73 is paid for the fourth quarter (as is the norm), the dividend payment should cost just under US\$12bn, meaning that ExxonMobil remains the largest dividend payer in the US.

**ExxonMobil Buybacks & Avg. Number of Shares (RHS)**



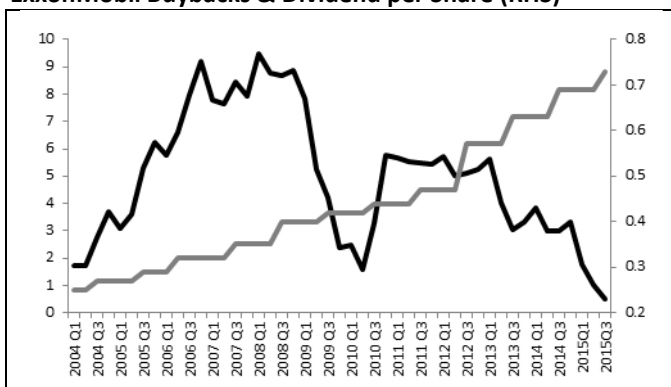
Source: Company Report & Accounts

**ExxonMobil Buybacks & Average Share Price (RHS)**



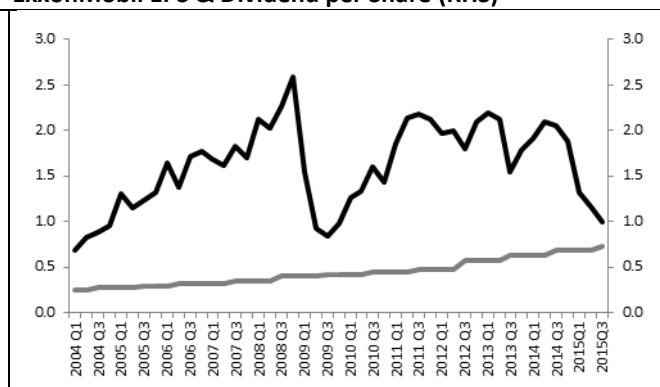
Source: Company Report & Accounts

**ExxonMobil Buybacks & Dividend per Share (RHS)**



Source: Company Report & Accounts

**ExxonMobil EPS & Dividend per Share (RHS)**

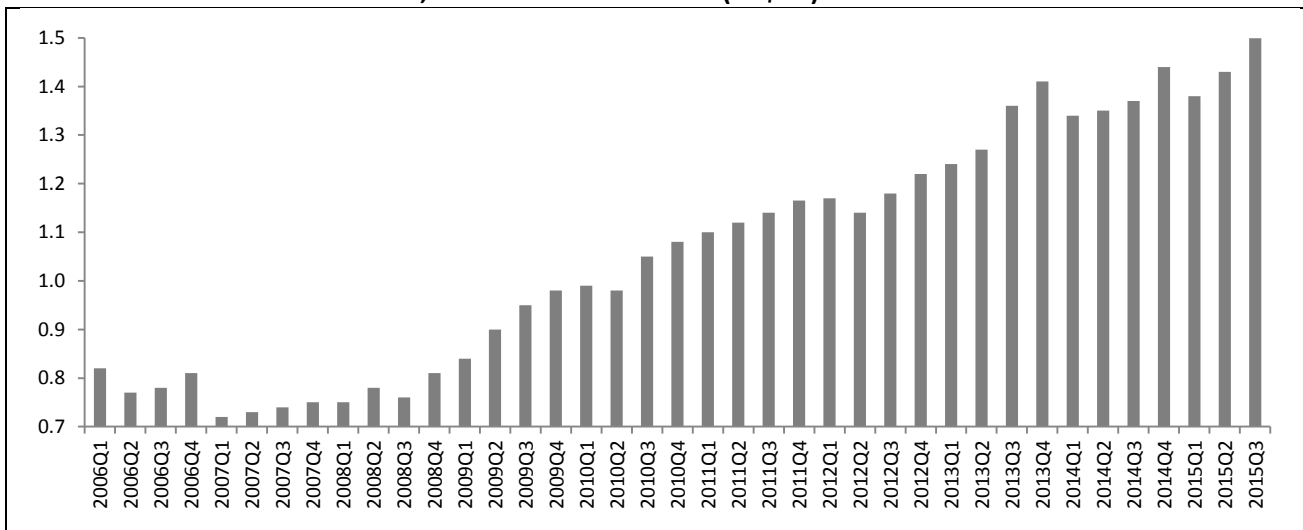


Source: Company Report & Accounts

## Cash and the Restrictive US Corporate Tax Regime

Many corporates find themselves in a position of generating an embarrassing amount of cash which, in today's low yield environment, looks increasingly unlikely to generate any decent future rate of return. At the end of the third quarter, S&P500 non-financial companies held just under US\$1.5 trillion of cash and short-term investments<sup>15</sup>. Unsurprisingly, the IT sector has the largest cash balances and the Utilities sector the smallest.

### Cash and Short Term Investments, S&P500 Non-Financials (US\$bn)



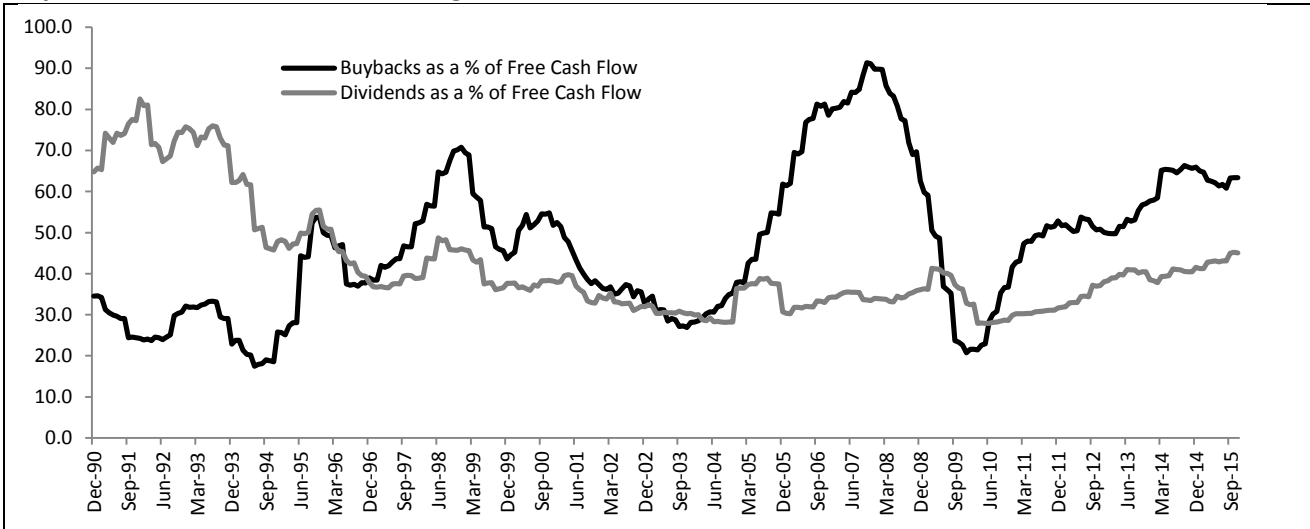
Source: Factset Cash & Investment Quarterly, xyandZee

A study entitled, "Free Cash Flow or Market Timing: What Really Drives Share Repurchases"<sup>16</sup> found that, *"Although market timing is empirically important, free-cash-flow (FCF) considerations have much stronger effects on managers' share repurchase decisions . . . that variation in FCF induces a large change in the repurchase probability regardless of whether market-timing opportunities are favorable or unfavorable. This FCF effect strongly dominates market-timing considerations. Firms with poor market-timing opportunities and high FCF are more than twelve times as likely to buy back shares as firms with good market-timing opportunities and low FCF. Although employee-stock-option and leverage-rebalancing motives are at least as important as market timing in explaining managers' share repurchase decisions, neither is as strong as FCF."*

<sup>15</sup> Factset, Cash & Investment Quarterly, September 2015,  
[http://www.factset.com/websitefiles/PDFs/cashinvestment/cashinvestment\\_9.24.15](http://www.factset.com/websitefiles/PDFs/cashinvestment/cashinvestment_9.24.15)

<sup>16</sup> Free Cash Flow or Market Timing: What Really Drives Share Repurchases, March 2014, Zhuang,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2339619](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2339619)

Buybacks and Dividends as Percentage of Free Cash Flow



Source: xyandZee

An excellent paper entitled, “Competitiveness Has Nothing to Do With It”<sup>17</sup> looks at the apparently “restrictive” US corporate tax regime in relation to the recent wave of corporate “inversions”. The study quotes a report by the Government Accountability Office from May 2013 which states, “For tax year 2010 (the most recent information available), profitable US corporates . . . paid US federal income taxes amounting to 13% of (the) pretax worldwide income reported . . . when foreign state and local income taxes are included, the effective tax rate (ETR) for profitable filers increases to 17%. The inclusion of unprofitable firms . . . raises the ETR to 22.7%, all well below the top statutory tax rate of 35%.”

Current US tax laws effectively require companies to keep their surplus low-taxed foreign profits in their foreign subsidiaries as the US parent would be required to pay full US tax on the “repatriation” of those earnings (less any credit for any foreign income taxes already paid). **As a result, S&P500 companies now hold US\$2.1trn in “permanently reinvested” offshore earnings, of which around US\$1trn is held in “cash”.**<sup>18</sup> However, this cash is commonly held in the form of US\$ denominated short-term debt (not just sitting in some dormant account) so the claim that overseas cash is “locked” abroad is rather false as the money will likely be invested in some way in the US economy. Indeed, a US Senate report found that “46% of funds that the surveyed corporations identified as offshore and for which US taxes had been deferred, were actually in the US at US financial institutions.”<sup>19</sup>

In other words, **companies are earning interest on investments** (overseas cash in the form of US government bonds) **which can be included in the US parent company’s income. So by borrowing in the US, a company can pay the interest costs on that debt from the interest gains on its foreign cash.** However, one must point out that using cash in this way cannot possibly absorb all that is available as ultimately a firm will find itself massively overleveraged.

<sup>17</sup> Competitiveness Has Nothing to Do With It, August 2014, Kleinbard,

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2476453](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2476453)

<sup>18</sup> Offshore Shell Games, October 2015, US PIRG / CTJ, <http://ctj.org/pdf/offshoreshell2015.pdf>

<sup>19</sup> US Senate, Offshore Funds Located Onshore: Majority Staff Report Addendum”, December 14, 2011, [http://www.hsgac.senate.gov/download/report-addendum\\_-psi-majority-staff-report-offshore-funds-located-onshore](http://www.hsgac.senate.gov/download/report-addendum_-psi-majority-staff-report-offshore-funds-located-onshore)



## Top 15 Companies by Total Offshore Cash Balances

<u>Company</u>	<u>Off Shore Cash (US\$bn)</u>	<u>Number of Tax Haven Subsidiaries</u>
Apple	181.1	3
General Electric	119.0	18
Microsoft	108.3	5
Pfizer	74.0	151
IBM	61.4	15
Merck	60.0	121
Johnson & Johnson	53.4	58
Cisco	52.7	59
Exxon Mobil	51.0	37
Google	47.4	2
Procter & Gamble	45.0	38
Citigroup	43.8	41
Hewlett-Packard	42.9	25
Oracle	38.0	5
PepsiCo	37.8	132

Source: Offshore Shell Games, Note data as at end of 2015Q2

Obama's fiscal 2016 budget is to seek new taxes on the cash held overseas by US corporates and proposes a one-time 14% tax on that cash held abroad (plus a 19% tax on future foreign earnings, whilst continuing to earn tax credits for foreign taxes paid), which could raise around US\$238bn earmarked to fund "improvements to infrastructure". That said, 19% is still far less than the 28% corporate tax rate that Obama is also proposing for domestic earnings. Unlike a repatriation holiday, this proposed "transition tax" would be a one-time, mandatory tax on previously untaxed overseas earnings, regardless of whether the cash is subsequently repatriated. Note that the "once-off-and-never-to-be-repeated" offshore cash tax amnesty of 2004, which saw a temporary cut in the tax rate to 5.25%, was wholly expected to be followed by other amnesties. This created a huge incentive for US corporates to accumulate as much permanently reinvested earnings in the form of overseas cash as possible. Further amnesties have, however, not yet occurred.

## Microsoft: An Example of Free Cash Flow Generation, Tax and Offshore Cash

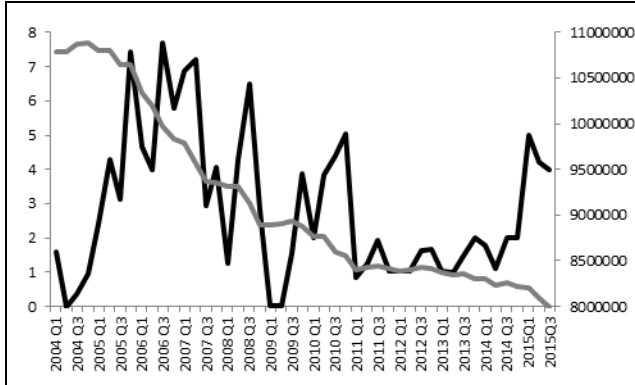
Cash flow generated by Microsoft has been incredible. Free cash flow has been around US\$25bn for each of the last five years, although it fell slightly to US\$23.1bn for fiscal 2015 (note Microsoft has a June year end). Apart from Apple, Microsoft earns more than any other company in the S&P500 and, for example, when we compare free cash flow to revenues, the ratio this year is roughly one quarter. For fiscal 2015, the company spent over US\$13bn on buybacks and US\$10bn on the dividend payment, **i.e. 100% of free cash flow generated was returned to shareholders**. That said, Microsoft has also been tapping the bond markets, most recently offering US\$13bn of debt in seven tranches with coupons as low as 1.3% saying, "*Microsoft intends to use the net proceeds from the offering for general corporate purposes, which may include, among other things, funding for working capital, capital expenditures, repurchases of capital stock, acquisitions, and repayment of existing debt.*" Microsoft's most recent US\$40bn share buyback programme, announced in October 2013, took over from a completed US\$40bn programme announced back in 2008. Microsoft has bought back over US\$135bn worth of shares since the beginning of 2004, reducing the share count by 26%.

Just 30 large US corporations hold over US\$1.4trn in overseas cash - or two-thirds of the total for S&P500 companies - with Microsoft being the third largest<sup>20</sup>. Some (but not all) US corporates disclose what they might owe if they repatriated overseas cash, which provides an insight into how little domestic and foreign taxes they actually pay.

<sup>20</sup> S&P 2014 Cash Update: Corporate America's Richest 1% Keep Getting Richer, June 2014, <http://twitdoc.com/upload/standardpoors/cash-update-corporate-america-s-richest-1-keep-getting-richer.pdf>

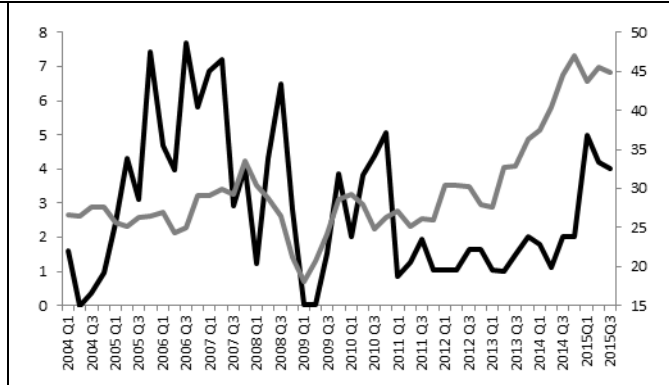
Microsoft's latest annual results ending June 2015 shows that the company held US\$96.5bn in cash, of which US\$94.4bn was offshore. To repatriate this, the company would have to pay nearly US\$30bn in taxes<sup>21</sup>. Microsoft also says that 79% of the amount held offshore is invested in US government securities, 5% in corporate bonds and 5% in US mortgage and asset-backed securities. This is all very interesting but what's it to do with share buybacks when a company's overseas cash balance cannot be used to pay dividends or buy back shares? Well, it's with reference to the recent re-emergence of corporate "inversion".

Microsoft Buybacks & Avg. Number of Shares (RHS)



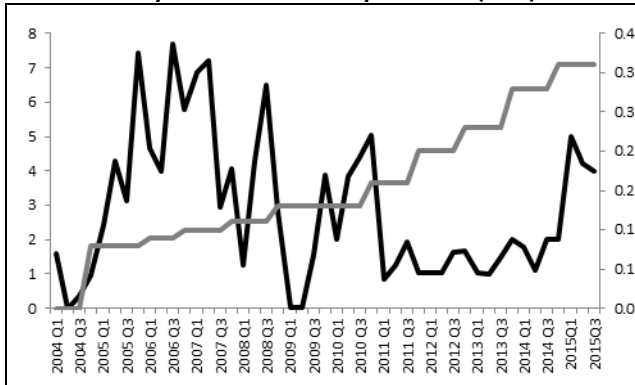
Source: Company Report & Accounts

Microsoft Buybacks & Average Share Price (RHS)



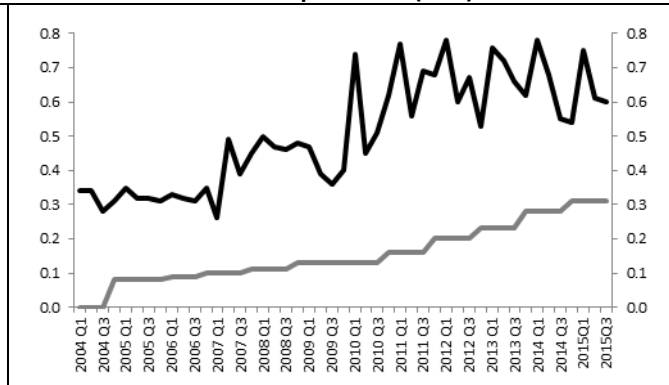
Source: Company Report & Accounts

Microsoft Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts

Microsoft EPS & Dividend per Share (RHS)



Source: Company Report & Accounts

## The Crackdown on Corporate Inversion

Inversion is basically a large firm acquiring a much smaller target company domiciled in a tax-friendly country that has a comprehensive treaty with the US (e.g. Ireland with corporation tax rates of 12.5% vs. US at 35%). However, the deal is structured as the smaller foreign company swallowing the US domestic whale. The downside is that the US company must pay capital gains tax but then re-emerges as a subsidiary of a publicly-held foreign corporation. By inverting into a smaller foreign firm, the new foreign public parent is not a US shareholder (quite obviously) and, as a result, the subsidiary holding offshore cash can then give it to the new foreign parent (an issue that the US Treasury Department is focusing on). The cash can then be used to buy back stock and pay dividends but also to repay debt which may have been incurred to finance the inversion in the first place. Thumbs up all round then!

<sup>21</sup> Microsoft 10-K, June 2015,  
<http://apps.shareholder.com/sec/viewerContent.aspx?companyid=MSFT&docid=10834537>

Pfizer's proposed merger with Allergan in a massive US\$160bn deal that should see it re-domiciled in Ireland is the latest in a series of corporate inversions that have gained ground over the last 18 months. The inversion frenzy peaked in September 2014, just before the US Treasury Department made changes in legislation that slowed deal flow but did not stop it entirely. We have previously written about Medtronic's acquisition of Covidien of Ireland that was announced in June 2014 and completed in January 2015. The company said that the US\$42.9bn cash and share deal would cut its effective tax rate by 1-2 percentage points (a 1% cut in the tax bill should add US\$60m to the bottom line<sup>22</sup>) but a revised financing plan for the deal was needed, as instead of using its US\$14bn of offshore cash to fund the acquisition (which wasn't permitted by the US Treasury), Medtronic was required to raise US\$17bn via a large commercial bond offering.

More recently, the US Treasury Department has said that it will seek to further tighten rules on inversions in a letter signed by Jack Lew, Treasury Secretary, and addressed to four senior senators and representatives<sup>23</sup>. But the letter didn't say exactly how they intend to do this. Apparently the new rules will apply to all future transactions for all companies that have announced an inversion going back to September 2014. Under current revised rules, inversions are allowed as long as the US company shareholders own less than 80% of the combined entity. The new rules are expected to deal with "stuffing", whereby the US company is made artificially larger before the merger. It is also expected that "stripping", whereby US subsidiaries book the deductions but overseas subsidiaries book the profits, will also be dealt with. Indeed, a US Treasury Department paper published in 2007 stated, *"(The data) strongly suggest that these corporations are stripping substantially all of their income out of the US, primarily through interest payments . . . consequently these corporations' US operations are very unprofitable."*<sup>24</sup> That said, many US corporates believe that Congress is paralyzed and will never (in one's lifetime, at least) fully overhaul the US Tax Code, with some arguing that inversion is required to make them more competitive. The study referenced above<sup>25</sup> explains why the competitiveness narrative is largely false and recent inversion transactions are explained primarily by firms' increasingly desperate efforts to gain access to their stockpiles of offshore cash.

We have suggested many times before that corporates ought to be allowed to repatriate overseas cash without paying the tax penalty but on the promise that they pay out a specific portion to shareholders in dividends. Donald Trump recently said at a Republican debate that he would propose corporation tax be cut to 15% and impose a one-time 10% tax on repatriated off-shore profits. Whilst a one-time tax amnesty would solve several problems (mounting overseas cash piles, the freeing up of capital to shareholders in the form of hard cash, resulting in an increased tax take by government and likely re-investment in the market, and a better balance of capital structure), those companies who utilised the 2004 tax amnesty were required to invest that repatriated cash but the reality was much of it was "invested" in the form of share buybacks.

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<sup>22</sup> The Rush of Firms Fleeing America for Tax Reasons is Set to Continue, June 2014, <http://www.economist.com/news/business/21604555-rush-firms-fleeing-america-tax-reasons-set-continue-inverse-logic>

<sup>23</sup> Department of the Treasury, November 2015, [http://online.wsj.com/public/resources/documents/inversionsletterNov18\\_2015.pdf](http://online.wsj.com/public/resources/documents/inversionsletterNov18_2015.pdf)

<sup>24</sup> Department of the Treasury, Report to The Congress on Earnings Stripping, Transfer Pricing and U.S. Income Tax Treaties, November 2007, <https://www.treasury.gov/resource-center/tax-policy/Documents/ajca2007.pdf>

<sup>25</sup> Competitiveness Has Nothing to Do With It, August 2014, Kleinbard, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2476453](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2476453)

The argument that the tax consequences of dividend payments should mean a preference for share repurchases should not matter if you are a long-term investor (or what some call an “eternal” investor). Much has been written about repurchases versus dividends which discriminates against dividends via “double taxation” (first at the corporate level and then again at the shareholder level). But are managements really so disincentivised to distribute cash dividends because of double taxation? We think not. We believe that compensation targets based on improving earnings numbers continues to be the primary reason why managements launch buybacks in the first place. That said, we do agree that were it not for the tax code we would likely see more distributions in the form of hard cash dividends.

For the shareholder, decreasing or eliminating the tax burden could include a buy and hold strategy (compounding those precious dividends), using companies’ dividend reinvestment schemes (which don’t incur any transaction costs) or holding an income ETF. Also, one should bear in mind that capital gains tax is triggered only when you sell the investment, so long-term investors could go for decades without owing any tax at all. Indeed, in the US, when an investor dies, any capital gains on their assets are zeroed out so heirs inherit assets without any tax liability.

## **Pfizer / Allergan: An Example of a Recent Corporate Inversion**

We have previously used Pfizer as an example of a company that lacked investment opportunities. After its thwarted attempt to acquire AstraZeneca, Ian Read CEO, made it clear that Pfizer remained actively on the hunt for an acquisition or merger opportunity. In its transition from manufacturing so-called legacy drugs where it continues to lose patent protection to focussing on new and upcoming products it identified Allergan, the leading manufacturer of Botox based in Ireland, in a potential US\$160bn all-share merger announced on 23<sup>rd</sup> November<sup>26</sup>. The deal should mean that the companies achieve US\$2bn of cost savings and significant tax benefits whereby a relocation to Ireland would see Pfizer’s effective tax rate cut to 17-18% from 25.5% currently. The combined entity should become the largest pharmaceuticals company globally with around US\$64bn of revenues, 110,000 employees and an annual R&D budget of around US\$9bn.

For each of the last seven years, Pfizer has reportedly lost at least US\$1bn in the US at the same time as earning billions abroad. Pfizer has over 150 overseas subsidiaries, holding US\$74bn of offshore cash<sup>27</sup>. What’s happening is that those drugs discovered by Pfizer in the US are manufactured abroad and sold back to the US. But group costs such as research, debt repayment and management costs are mostly borne in the US, maximising deductions so that the domestic division thereby reports a loss.

Mr Read has in the past been very vocal about the US government clamping down on tax inversions, saying that it was simply political theatre ahead of elections. Mr Read said that tax-restructuring would free up billions of dollars in offshore cash to be spent on research and other programmes domestically, *“This just enables us to invest more in the US.”* However, it is not yet clear whether the Allergan deal will actually go ahead. Whilst the US Treasury Department’s recent changes to deter inversions make the tie up more difficult, the deal has been structured in a way that Allergan is taking over the larger Pfizer, with Allergan shareholders ending up controlling 44% of the combined company. In this format, the deal might likely bypass the US Treasury Department’s existing rules.

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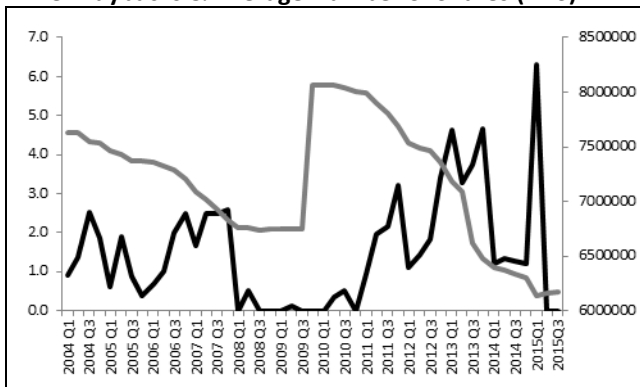
<sup>26</sup> Allergan, November 2015, <http://www.allergan.com/news/news/thomson-reuters/pfizer-and-allergan-to-combine>

<sup>27</sup> Offshore Shell Games, October 2015, US PIRG / CTJ, <http://ctj.org/pdf/offshoreshell2015.pdf>

Unsurprisingly, Pfizer management has said that it will consider splitting the combined entity in two by 2018 with one company focussed on new products (including Pfizer's drug to treat breast cancer and Allergan's Botox), and a second company consisting of older drugs that have - or are expected to lose - patent protection. Pfizer's revenues have been stagnating, declining by 5% for the first nine months of 2015, with the Global Established Pharmaceuticals (GEP) division seeing revenues fall by 13% in 2015Q3, only partially offset by revenues from its Innovative Products (IP) division growing by 21%. An obvious fit between Pfizer's IP division and Allergan makes sense. However, it is unlikely that Allergan will be keen to have Pfizer's GEP division as part of the new merged entity, having sold off its own generic business to Teva in July 2015.

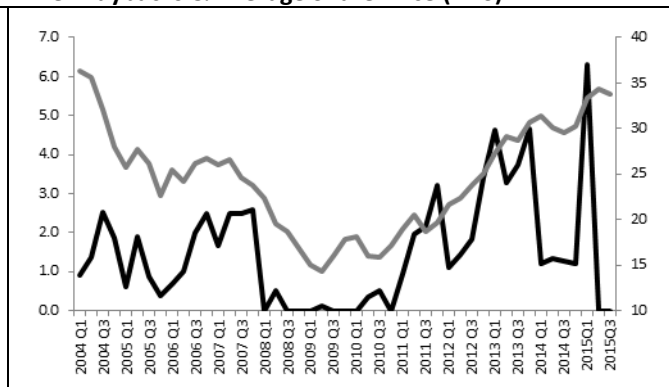
Pfizer's GEP division, whilst not growing at the top-line, continues to generate a huge amount of free cash flow which was being used to fund share buybacks. Pfizer announced a US\$11bn repurchase programme in October 2014, in addition to the US\$1.3bn remaining under the company's existing programme. It bought back US\$5bn worth of shares in 2014 (after repurchasing US\$16.3bn worth in 2013) and then completed a US\$5bn ASR with Goldman Sachs in 2015Q1, on top of US\$1.3bn in open market repurchases.

**Pfizer Buybacks & Average Number of Shares (RHS)**



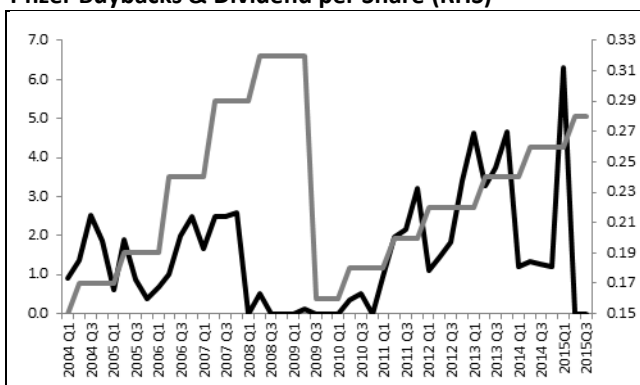
Source: Company Report & Accounts, Note the jump in shares outstanding in 2009 was due to Pfizer's acquisition of Wyeth.

**Pfizer Buybacks & Average Share Price (RHS)**



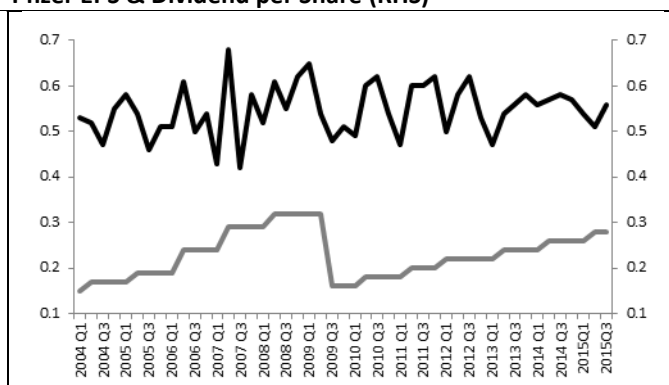
Source: Company Report and Accounts

**Pfizer Buybacks & Dividend per Share (RHS)**



Source: Company Report & Accounts, Note the dividend cut in 2009 was due to Pfizer's acquisition of Wyeth.

**Pfizer EPS & Dividend per Share (RHS)**



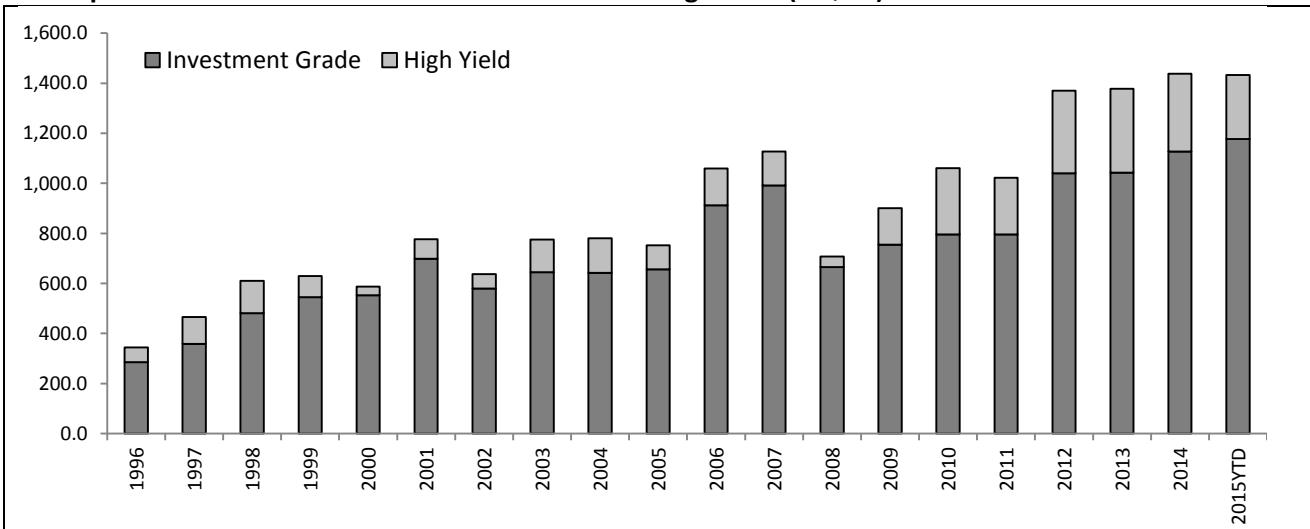
Source: Company Report & Accounts, Note the dividend cut in 2009 was due to Pfizer's acquisition of Wyeth.

## Buybacks Funded by Debt is Leverage and Not Return

US corporate bond issuance for the first nine months of 2015 reached a whopping US\$1.04trn<sup>28</sup>, just the second time that issuance has crossed the US\$1trn mark over the same period, the first being in 2013.

Interestingly, the average maturity of bond issuance during September 2015 jumped to 21.3 years, from an average of 14.7 years last year and 7.2 years back in 2000<sup>29</sup>.

### US Corporate Bond Issuance – Investment Grade and High Yield (US\$bn)



Source: SIFMA, Note 2015YTD includes January to November

Global M&A volume reached US\$3.41trn in the first nine months of 2015, the highest volume on record behind 2007, with 45 deals announced in excess of US\$10bn for a combined total of US\$1.15trn<sup>30</sup>. US M&A accounted for US\$1.68trn of global deal flow. The top ten largest M&A deals in the US thus far this year are: Pfizer's US\$160bn proposed merger with Allergan, Charter Communications US\$78.7bn merger with Time Warner Cable, Dell's US\$67bn acquisition of EMC, Anthem's US\$54.2bn acquisition of Cigna, Berkshire Hathaway's US\$37.2bn acquisition of Precision Castparts, Aetna's US\$37bn acquisition of Humana, Avago's US\$37bn acquisition of Broadcom, Energy Transfer's US\$32.6bn deal to buy Williams, ACE's US\$28.3bn deal to buy Chubb and AbbVie's US\$21bn purchase of Pharmacyclics.

An OECD report<sup>31</sup> studied more than 100,000 individual bond issues globally between 2000 and 2013 and found, *"bond investors, in their search for yield, have overall traded governance rights for higher expected returns. This shift also seems to be associated with higher risk-taking."* Indeed, some huge debt issues have been sold (and many massively oversubscribed) during 2015, the largest of which was a US\$21bn bond to help finance Actavis' acquisition of Allergan (don't get confused, Actavis changed its name to Allergan after the deal completed). Five other companies also sold debt in excess of US\$15bn, all to help fund M&A activity: AT&T US\$17.5bn (DirectTV), Abbvie US\$16.7bn, Visa US\$16.0bn (its European operations), Charter US\$15.5bn and CVS US\$15bn (Omnicare).

<sup>28</sup> International Capital Market Association, <http://www.icmagroup.org/resources/market-data/Market-Data-Deallogic/>

<sup>29</sup> SIFMA, October 2015, <https://www.sifma.org/WorkArea/DownloadAsset.aspx?id=8589942781>

<sup>30</sup> Dealogic M&A Review, July 2015, [www.dealogic.com/media/1308/dealogicglobalmareview1h2015final.pdf](http://www.dealogic.com/media/1308/dealogicglobalmareview1h2015final.pdf)

<sup>31</sup> Corporate Bonds, Bondholders and Corporate Governance, OECD, February 2015, [http://www.oecd-ilibrary.org/governance/corporate-bonds-bondholders-and-corporate-governance\\_5js69lj4hvnw-en?crawler=true](http://www.oecd-ilibrary.org/governance/corporate-bonds-bondholders-and-corporate-governance_5js69lj4hvnw-en?crawler=true)



Interestingly, in the clamour for yield, it seems that corporates are getting bond issuance away at far lower rates than initially expected. Yields are narrowing as orders flow in. Indeed, McDonald's recent five-part US\$6bn bond offering to finance an enhanced shareholder return programme was apparently massively oversubscribed with the longest-dated 20-year US\$1.75bn portion sold at 4.875%, 1.95 percentage points over government securities but lower than the 2.3 percentage points at which the debt was initially marketed at. Just three weeks after abandoning plans to create a REIT to unlock value from its property holdings (whereby its credit rating was cut by one notch by both S&P and Moody's), McDonald's announced that as part of its turnaround plan, it would return an additional US\$10bn to shareholders by the end of 2016, *"We're taking advantage of favorable conditions and rates."*

It is often claimed that companies are not investing because they are seeking to de-leverage. This is utter nonsense as in the US companies are buying back equity at around 4% of GDP each year with the result that non-financial debt relative to GDP in the US is at its post-war peak, having surpassed the level reached in 2008. Indeed, the Geneva Report 2014 aptly entitled "Deleveraging? What Deleveraging?"<sup>32</sup> warns of a *"poisonous combination of high and rising global debt and slowing nominal GDP, driven by both slowing real growth and falling inflation."* The report says interest rates will have to stay low for *"a very, very long time"* to enable everyone (governments, corporates and households) to service their increased debt levels. The report continues, *"Contrary to widely held beliefs, the world has not yet begun to de-lever and the global debt to GDP ratio is still growing, breaking new highs."*

Another report entitled, "Debt and (Not Much) Deleveraging"<sup>33</sup> finds that, *"after the 2008 financial crisis and the longest and deepest global recession since WWII, it was widely expected that the world's economies would deleverage. It has not happened. Instead, debt continues to grow in nearly all countries, in both absolute terms and relative to GDP."* A large amount of academic research exists that shows that high debt levels are associated with slower GDP growth and a higher risk of financial crises<sup>34</sup>. This year's Geneva Report entitled, "Low for Long? Causes and Consequences of Persistently Low Interest Rates"<sup>35</sup> suggests that *"real interest rates will eventually return to more normal levels, but in the meantime, deflationary traps are more likely, as are financial boom-bust cycles."*

So what's happening? With credit markets remaining wide open, corporates have unlimited access to liquidity and even after the recent 0.25% Fed rate hike, interest rates remain low. Corporates seem to be borrowing "like drunken sailors."<sup>36</sup> Bear in mind that companies are earning interest on investments (that overseas cash in the form of US government bonds, for example) which can be included in the US parent company's income. By borrowing in the US, a company can pay the interest costs on that debt from the interest gains on its cash held overseas (see The Crackdown on Corporate Inversion).

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<sup>32</sup> Geneva Report, Deleveraging? What Deleveraging?, September 2014, Buttiglione, Lane, Reichlin & Reinhart, <http://www.voxeu.org/sites/default/files/image/FromMay2014/Geneva16.pdf>

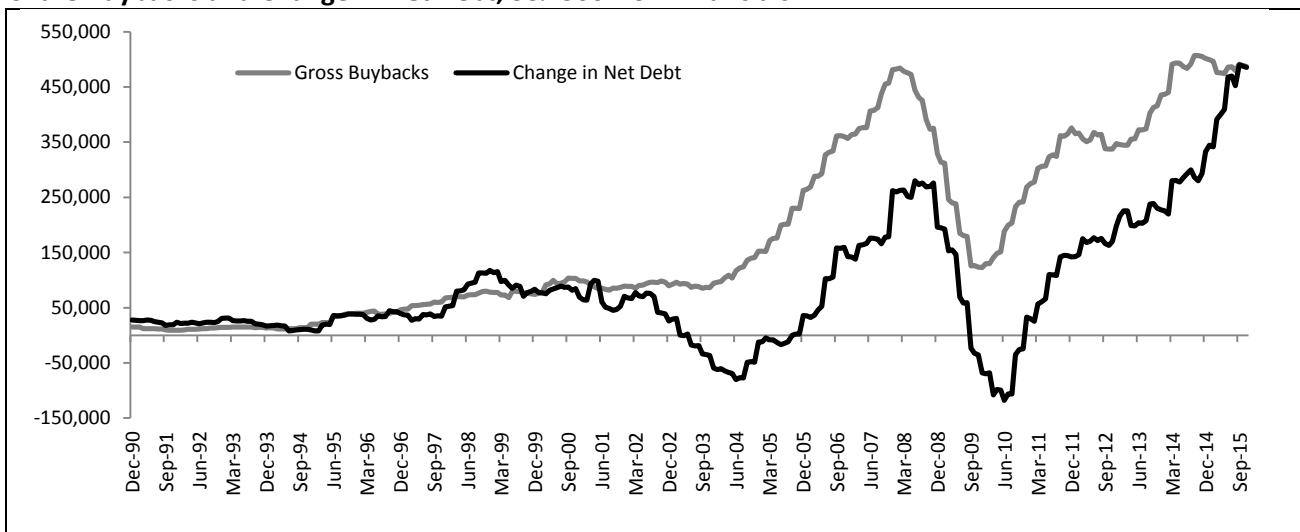
<sup>33</sup> McKinsey Global Institute, February 2015, [http://www.mckinsey.com/insights/economic\\_studies/debt\\_and\\_not\\_much\\_deleveraging](http://www.mckinsey.com/insights/economic_studies/debt_and_not_much_deleveraging)

<sup>34</sup> Public Debt Overhangs: Advanced Economy Episodes Since 1800, Journal of Economic Perspectives, Summer 2012, Reinhart, Reinhart & Rogoff, <http://online.wsj.com/public/resources/documents/JEP0413.pdf> and The Real Effects of Debt, BIS, September 2011, Cecchetti, Mohanty & Zampolli, <http://www.bis.org/publ/othp16.pdf>

<sup>35</sup> Geneva Report, Low for Long?, October 2015, Bean, Broda, Ito & Krosner, [http://www.voxeu.org/sites/default/files/file/Geneva17\\_27oct.pdf](http://www.voxeu.org/sites/default/files/file/Geneva17_27oct.pdf)

<sup>36</sup> Competitiveness Has Nothing to Do With It, August 2014, Kleinbard, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2476453](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2476453)

## Share Buybacks and Change in Net Debt, S&P500 Non-Financials



Source: BlackRock, xyandZee

US companies issued a total net US\$693bn of debt in 2014, almost the same as the gross buyback amount. **In other words, shareholders ultimately ended up owning a smaller proportion of a more highly-indebted company.** Note that six of the largest debt issuers last year were also amongst the largest repurchasers. Although Apple currently has US\$206bn of cash (as of end September 2015), in order to avoid the tax payment to repatriate that cash, Apple has been financing the bulk of its buyback programme by issuing debt, with a net debt increase equal to 41% of buybacks and share issuance another 4% during 2014. That said, over half of Apple's repurchases were "genuine" but this isn't the case for other companies: Cisco's net debt issuance was 48% and share issuance was 37%; Oracle's net debt issuance was 227% and share issuance was 42%; and Microsoft's net debt issuance was 95% of buybacks and share issuance was 48% of buybacks.<sup>37</sup>

## Top 15 Companies by Buybacks and Net Debt Issuance, 2014

Rank	Company	Buybacks (US\$bn)	Rank	Company	Net Debt Issuance (US\$bn)
1	Apple	45.0	1	Wells Fargo	34.4
2	IBM	13.7	2	JPMorgan Chase	33.4
3	ExxonMobil	13.2	3	Medtronic	18.7
4	Intel	10.8	4	Oracle	18.3
5	Cisco	9.8	5	Apple	18.3
6	Wells Fargo	9.4	6	US Bancorp	14.6
7	Oracle	8.1	7	Verizon	12.8
8	Merck	7.7	8	General Motors	12.2
9	Microsoft	7.3	9	Goldman Sachs	11.8
10	Johnson & Johnson	7.1	10	PNC Financial Services	10.5
11	Monsanto	7.1	11	Capital One	7.6
12	Goldman Sachs	7.1	12	Chevron	7.4
13	Home Depot	7.0	13	Ford Motor	7.3
14	Walt Disney	6.5	14	ExxonMobil	7.0
15	Boeing	6.0	15	Microsoft	7.0

Source: Research Affiliates

<sup>37</sup> Research Affiliates, October 2015, [https://www.researchaffiliates.com/Production%20content%20library/Are%20Buybacks%20an%20Oasis%20or%20a%20Mirage\\_pdf.pdf](https://www.researchaffiliates.com/Production%20content%20library/Are%20Buybacks%20an%20Oasis%20or%20a%20Mirage_pdf.pdf)



A paper entitled, “Leveraged Buybacks”<sup>38</sup> finds that whilst *“debt-financed share buybacks generate positive short-term and long-run abnormal stock returns, the returns are lower than those of cash-financed buybacks. Leveraged buybacks also have lower completion rates than cash-financed buybacks.”* So could US corporates now be reaching the limits of what their balance sheets might allow? Or is this simply the realisation (finally!) that gearing up the balance sheet by buying back equity at these prices is utterly foolish? The clear and obvious issue is that when all this debt is due for refinancing, rates will likely be much higher than they are today. A report from BlackRock entitled, “Corporate Bond Market Structure: The Time for Reform is Now”<sup>39</sup> did not use the word “crash” but instead said that it felt that the secondary trading environment for the corporate bond market was “broken”. The authors of the Geneva Report thought that future interest rates will be lower than market expectations because the increase in the debt burden means that borrowers will be unable to withstand faster rate rises. Surely a disaster waiting to happen?

## Apple: US\$140bn of Buybacks Funded by Debt

Everyone knows that Apple has been the biggest repurchaser of stock having bought back US\$36bn worth in fiscal 2015 or more than three times the amount paid out as dividends. In April 2014, when Apple increased its share buyback programme from US\$60bn to US\$90bn, it said, *“the company anticipates the cash used for future dividends and the share repurchase program will come primarily from its current domestic cash, cash generated from on-going US operating activities and from borrowings . . . to assist in funding the program, the Company expects to access the public debt markets . . . both domestically and internationally.”*

Carl Icahn’s letter to Tim Cook sent in October 2014<sup>40</sup> (which is a must read if you’re at all interested in Apple) was followed up with two further letters, one in February 2015<sup>41</sup> addressed “Dear Twitter Followers” (someone should tell Mr Icahn that the Tweet limit is 140 characters!) and a second to Mr Cook in May 2015<sup>42</sup>. Mr Icahn has claimed that Apple is *“dramatically undervalued”*, calling upon management to increase share repurchases. However, Mr Icahn has said that he would not tender any of his own shares if the company followed his recommendations, suggesting that his valuation of the company should see Apple trade at twice the current share price. Mr Icahn also said that he would *“see nothing wrong with them (Apple) doing a US\$100bn tender offer”*, with debt issuance a possibility if Apple cannot bring home overseas cash. The company said, *“. . . we will review the program annually and take into account the input from all of our shareholders.”*

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<sup>38</sup> Leveraged Buybacks, May 2015, Lei & Zhang, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2528478](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2528478)

<sup>39</sup> BlackRock, September 2014, <http://www.blackrock.com/corporate/en-gb/literature/whitepaper/viewpoint-corporate-bond-market-structure-september-2014.pdf>

<sup>40</sup> Carl Ichan’s letter to Tim Cook, October 2014, <http://www.shareholderssquaretable.com/sale-apple-shares-at-half-price/>

<sup>41</sup> Carl Ichan’s letter to his Twitter Followers, February 2015, <http://www.shareholderssquaretable.com/letter-to-twitter-followers-regarding-apple/>

<sup>42</sup> Carl Ichan’s letter to Tim Cook, May 2015, <http://carlicahn.com/carl-icahn-issues-open-letter-to-tim-cook/>

Apple may have listened to Mr Icahn. As part of the company's plan to return US\$200bn to shareholders via dividends and buybacks by March 2017, at the end of fiscal 2015 US\$104bn had been spent. In what was at the time the largest corporate bond deal in history, Apple sold US\$17bn of debt in six chunks in April 2013. The offer was Apple's first bond in almost 20 years and was massively oversubscribed, up to a reported US\$50bn. Debt issuance didn't stop there though. Apple borrowed a further US\$12bn in fiscal 2014 and during 2015 the company issued: US\$14.5bn US Dollar-denominated debt, EUR4.8bn Euro-denominated debt (with its most recent foray consisting of two bonds of EUR1bn each to mature in 2024 and 2027 with yields of 1.375% and 2.0%, respectively), SFr1.25bn Swiss Franc debt (SFr875mn maturing in 2024 with a coupon of 0.375% and SFR375mn due 2030 at 0.75%), Y250bn Japanese Yen debt, GB£1.25bn British Sterling debt and AU\$2.25bn of Australian Dollar debt. In total, Apple issued US\$26.7bn of debt during fiscal 2015.

Mr Icahn suggests that Apple's earnings should be calculated using a 20% tax rate, and not the 26% effective rate used by the company (which hasn't changed over the last three years). Whilst Apple's prudent accounting practice means that its tax rate is far less than the official 35% corporate rate, Mr Icahn says that as Apple does not state that it plans to "permanently reinvest international earnings", the "non-cash" tax charge should therefore be added back to earnings. Apple's most recent fiscal FY2015 results<sup>43</sup> showed that the company had US\$206bn in cash but that US\$187bn was held overseas (90% of the total) hence the need to tap bond markets to finance the buyback programme as the company can't use this cash to buy back shares or pay dividends for that matter.

## Apple - Cash Spent on Dividends & Buybacks versus Domestic & Overseas Cash Held, by Quarter (US\$bn)

Fiscal Quarter	Dividends	Buybacks	Option Issuance	Debt	Domestic Cash	Overseas Cash
FY2013Q1	2.5	2	0.5	0	43	94
FY2013Q2	2.5	0	0.1	0	42	102
FY2013Q3	2.8	16	0.4	17	41	106
FY2013Q4	2.8	5	0.1	17	35	111
FY2014Q1	2.8	5	0.4	17	34	124
FY2014Q2	2.7	18	0.1	17	18	132
FY2014Q3	2.9	5	0.4	31	27	138
FY2014Q4	2.8	17	0.3	35	18	137
FY2015Q1	2.8	5	0.5	36	20	158
FY2015Q2	2.7	7	0.1	40	22	171
FY2015Q3	3.1	10	0.7	47	22	181
FY2015Q4	3.0	14	0.2	55	19	187

Source: Apple 10-K

All that said, we were rather disappointed that the dividend payment for fiscal 2015 was increased by just 8.8% to US\$1.98 (compare this to whichever growth metric you like), costing Apple US\$11.6bn. **Because of the share count reduction, the dividend cost year-on-year was was roughly the same.** We know that buybacks clearly flatter performance metrics and below we show our quick back-of-the-envelope calculation to determine the theoretical boost to EPS from buybacks. If we simply add back those shares that Apple bought back over the last few years and take current earnings divided by the number of shares that were in issue before the buyback, then Apple's EPS has been boosted by over 14%. The obvious problem is that this earnings growth cannot be separated out from any improvement in actual operating performance.

<sup>43</sup> Apple FY2015 10-K, September 2015, [http://files.shareholder.com/downloads/AAPL/931257034x0x857225/7D58F9C1-092A-42FC-8C55-4E8B647E5FE9/2015\\_Form\\_10-K\\_As-filed\\_.pdf](http://files.shareholder.com/downloads/AAPL/931257034x0x857225/7D58F9C1-092A-42FC-8C55-4E8B647E5FE9/2015_Form_10-K_As-filed_.pdf)

## Apple - Number of Shares Outstanding and the Influence on EPS, Our “Back of the Envelope” Calculation

<u>Fiscal Year</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Number of Shares Outstanding	6,122,663	6,521,634	6,617,483	6,556,514
Bought Back during the Year	(329,594)	(398,971)	(95,849)	60,969
as a % of Total	(5.4%)	(6.1%)	(1.4%)	0.9%
Number of Shares Outstanding (at the end of the year)	5,793,069	6,122,663	6,521,634	6,617,483
Total Number of Shares in Issue (after 7-1 stock split)	12,600,000	12,600,000	12,600,000	12,600,000
EPS (US\$)	9.22	6.45	5.68	6.31
% change	42.9%	13.6%	(10.0%)	
DPS (US\$)	1.98	1.82	1.64	0.38
% change	8.8%	11.0%	331.6%	
Earnings on Number of Shares Outstanding	53,412,096	39,491,176	37,042,881	41,756,318
Earnings if Zero Buybacks Carried Out over the Period	61,013,193			
<b>Theoretical Boost to EPS from Share Buybacks (%)</b>	<b>14.2%</b>			

Source: Apple 10-K

So the question is: does spending US\$140bn on your own shares make a wise investment decision? Cynics suggest that Apple may be effectively slimming down the company to mask lower future growth prospects. But does it even matter given that Apple continues to generate massive amounts of free cash – over US\$70bn in fiscal 2015 alone.

## Apple – Cash Flow Statement, Selected Elements

<u>Fiscal Year to September (US\$bn)</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Net Operating Cash Flow	37.53	50.86	53.67	59.71	81.27
Net Investing Cash Flow	(40.42)	(48.23)	(33.77)	(22.58)	56.27
Net Financing Cash Flow	1.44	(1.70)	(16.38)	(37.55)	(17.72)
Free Cash Flow	33.27	42.56	45.50	50.14	70.02

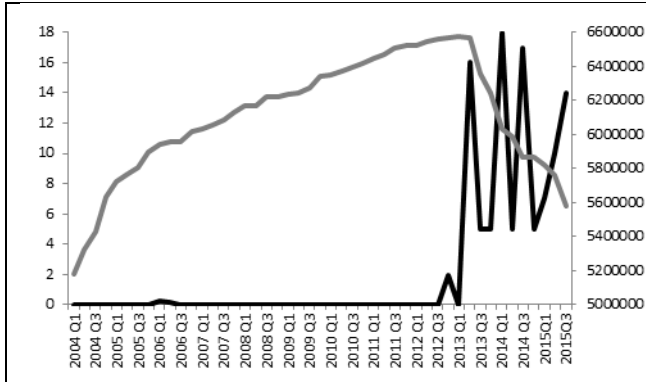
Source: Apple 10-K

*“We’re confident in Apple’s future and see tremendous value in Apple’s stock, so we’re continuing to allocate the majority of our program to share repurchases.”*<sup>44</sup> But what if Apple invested that cash instead into growing its core business - its future - or perhaps expanding outside of its comfort zone. Some question whether Apple will be at the forefront of technological innovation in 10 years time? Remember Nokia, anyone?

Total return should be the bottom line for any investment strategy whether a fund is focused on capital gains or income as, at the end of the day, an investor probably needs both. However, on a real return basis, it is the level of dividend yield first purchased that ultimately determines long-term returns. From a capital appreciation perspective, an investment in Apple has been utterly amazing but from a dividend income (and long-term compounding) perspective, it is rather less impressive as the company has only been paying dividends for the last three years. With a dividend yield roughly in line with the market, given that Apple is generating massive amounts of free cash, we wonder why shareholders are not benefitting from higher dividend payouts?

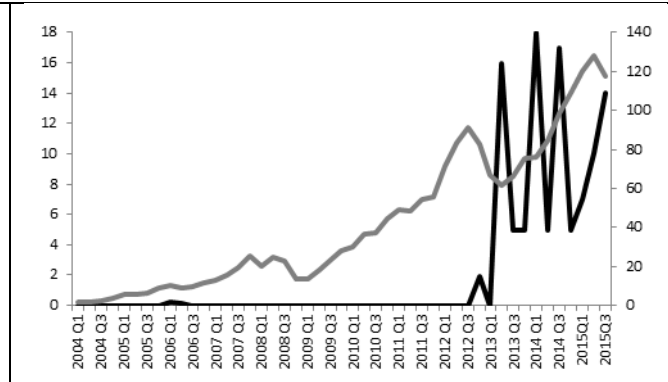
<sup>44</sup> Apple, April 2014, <https://www.apple.com/uk/pr/library/2014/04/23Apple-Expands-Capital-Return-Program-to-Over-130-Billion.html>

Apple Buybacks & Average Number of Shares (RHS)



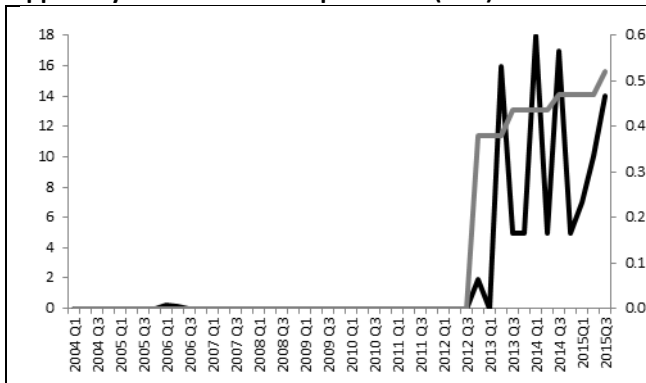
Source: Company Report & Accounts, adjusted for 2-1 split in 2005 and 7-1 split in 2014.

Apple Buybacks & Average Actual Share Price (RHS)



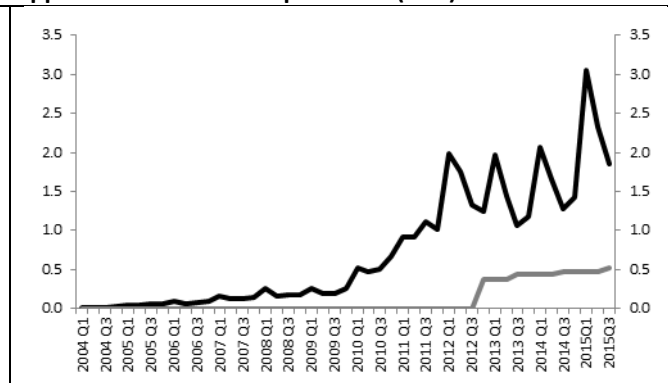
Source: Company Report & Accounts, adjusted for 2-1 split in 2005 and 7-1 split in 2014.

Apple Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts, adjusted for 2-1 split in 2005 and 7-1 split in 2014.

Apple EPS and Dividend per Share (RHS)



Source: Company Report & Accounts, adjusted for 2-1 split in 2005 and 7-1 split in 2014.

## Accelerated Share Repurchases (ASR)

A study entitled, "Accelerated Share Repurchases"<sup>45</sup> shows that an ASR "reduces the flexibility that firms have to alter an announced program in response to the subsequent changes in the price and liquidity of its shares, unexpected shocks to cash flow and/or investment." So why would any company engage in an ASR programme in the first instance? Basically, an ASR means that a corporate buys shares from an investment bank who borrows shares from their clients (and thus sells them to the corporate). The shares are then returned to the client via open market purchases, but likely bought back over a far longer period. In other words, ASRs mean that corporates can transfer some of the risk of a buyback to an investment bank and the corporate should also be able to reduce the share count much more quickly.

## Apple: An Example of Multiple ASRs

Apple bought back US\$36bn worth of stock during fiscal 2015, of which US\$6bn was repurchased via an ASR, leaving the company with 5.793bn shares outstanding at the end of fiscal 2015, i.e. a 12.5% reduction since the company first started buying back stock in late 2012. Apple has entered into five ASRs since August 2012, totalling US\$41bn. The number of shares ultimately delivered - and therefore the average purchase price paid - is determined at the end of each period and so now we know what Apple paid for four of those ASRs.

<sup>45</sup> Accelerated Share Repurchases, July 2011, Bageron, Kulchania & Thomas, <http://epublications.marquette.edu/>

## Apple – Accelerated Share Repurchase (ASR) Programmes

<u>Announcement</u>	<u>Period End Date</u>	<u>Number of Shares (Thousands)</u>	<u>Average Price Paid (US\$)</u>	<u>ASR Amount (US\$bn)</u>
April 2013	March 2014	172,548	69.55	12.0
January 2014	December 2014	134,247	89.39	12.0
August 2014	February 2015	81,525	110.40	9.0
May 2015	July 2015	48,293	124.24	6.0

Source: Apple 10-K

The problem is that we can't compare the average price paid for these ASRs with the average share price over the quarter. We do know, however, that the average price paid for open market repurchases (an additional US\$63bn) hasn't always beaten the actual average price over the quarter.

## Apple - Open Market Share Buybacks and Average Price Paid, by Quarter

<u>Fiscal Year</u>	<u>Number of Shares ('000s)</u>	<u>Average Repurchase Price (US\$)</u>	<u>Average Actual Price (US\$)</u>	<u>Buyback Amount (US\$bn)</u>	<u>Dividend Amount (US\$bn)</u>
2013Q3	62,676	63.82	61.59	4.0	2.8
2013Q4	73,064	68.43	66.28	5.0	2.8
2014Q1	66,847	74.79	75.69	5.0	2.8
2014Q2	79,749	75.24	76.30	6.0	2.7
2014Q3	58,661	85.23	84.87	5.0	2.9
2014Q4	81,255	98.46	98.16	8.0	2.8
2015Q1	45,704	109.40	109.02	5.0	2.8
2015Q2	56,400	124.11	120.20	7.0	2.7
2015Q3	31,231	128.08	127.91	4.0	3.1
2015Q4	121,802	115.15	117.32	14.0	3.0

Source: Apple 10-K

A paper entitled, "Preset Repurchase Plans and SEC Rule 10b5-1"<sup>46</sup> *"studies 1,657 announcements and finds that the larger the portion of the repurchase under the rule, the greater the completion rate, the speed to completion and the abnormal announcement returns . . . establishing a programme to execute an existing repurchase – without increasing the authorised repurchase amount – is associated with positive abnormal returns of 1.1%."* Rule 10b5-1 was first enacted in 2000 and allows companies to establish a preset repurchase plan with a third party, allowing repurchase activity through blackout windows<sup>47</sup>.

## Governance, Inside Information and Buybacks to Fund Option Issuance

Returning "cash" to shareholders in the form of a share buyback is the most common reason given by management as to why the execution of repurchases occur in the first place. But let us not be fooled. The most clear and obvious explanation is that stock-based compensation makes up the bulk of executive pay. We know that buybacks drive up EPS figures which typically form part of remuneration targets but they also enhance ROE and capital employed measures, which might also be included in targets on which "long-term incentive plans" (LTIPs) are based.

<sup>46</sup> Preset Repurchase Plans and SEC Rule 10b5-1, January 2015, Bonaimé & Moore, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2557005](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557005)

<sup>47</sup> Share Repurchases, February 2013, Skadden, [http://www.skadden.com/newsletters/Corporate\\_Finance\\_Alert\\_Share\\_Repurchases.pdf](http://www.skadden.com/newsletters/Corporate_Finance_Alert_Share_Repurchases.pdf)

So-called Shareholder Value Maximisation (SVM) means that management tend to over-focus on their company's share price, which leads them to underinvest in its long-term future in order to boost short-term profits. A paper entitled, "The World's Dumbest Idea"<sup>48</sup> tears apart the notion of SVM demonstrating that the underlying return of companies has fallen significantly under the maxim. So what went wrong? Executive option issuance - which effectively gives management all the potential upside and none of the downside of equity ownership, creating a "heads I win, tails you lose" situation - is the obvious reason.

Buybacks have surfaced as an issue in the 2016 US presidential campaign with Hillary Clinton wading into the debate saying that she wishes to combat what she calls "Quarterly Capitalism" by, for example, requiring shares to be held well beyond the current minimum period of one year before any profit from the sale is taxed as a capital gain<sup>49</sup>. Clinton has said that her policy agenda will *"take a hard look at stock buybacks . . . investors and regulators need more information about these transactions. Capital markets work best when information is promptly and widely available to all. Other advanced economies like the UK and Hong Kong require companies to disclose stock buybacks within one day, but here in the US you can go an entire quarter without disclosing."*<sup>50</sup>

SEC rule 10b-18 provides a "safe harbor" for companies and their affiliated purchasers when the company or affiliates repurchase the company's shares of common stock (i.e. they will not be deemed to have violated anti-fraud provisions of the Securities Exchange Act of 1934). The repurchases must fall within the four conditions of the rule. These cover the manner of purchase, the time of the repurchases, the prices paid and the volume of shares repurchased. Prior to the Reagan administration, managements avoided buybacks due to fears that they would be prosecuted for market manipulation, but the rule, created in 1982 (and now subject to much scrutiny, with several senators pressing the SEC to probe this and other rules) means that corporates feel rather more safe. Many politicians are unhappy that some major US corporates are laying off staff whilst continuing to spend billions buying back their own stock (see Caterpillar later in this chapter).

An annual study, "Top CEOs Make 300 Times More than Typical Workers"<sup>51</sup> found that CEO compensation was up 3.9% in 2014 and 54.3% since the recovery began in 2009. *"From 1978 to 2014, CEO compensation, inflation-adjusted, increased 997%, a rise almost double the stock market growth and substantially greater than the painfully slow 10.9% growth in a typical worker's compensation . . . the CEO-to-worker compensation ratio was 20-to-1 in 1965, peaked at 376-to-1 in 2000 and was 303-to-1 in 2014, far higher than in the 1960s, 1970s, 1980s, or 1990s."* If anyone needs any explanation as to why the top 0.1% are doing so well, start with equity-based compensation.

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<sup>48</sup> GMO White Paper, December 2014, Montier, <https://www.gmo.com/docs/default-source/research-and-commentary/strategies/asset-allocation/the-world's-dumbest-idea.pdf>

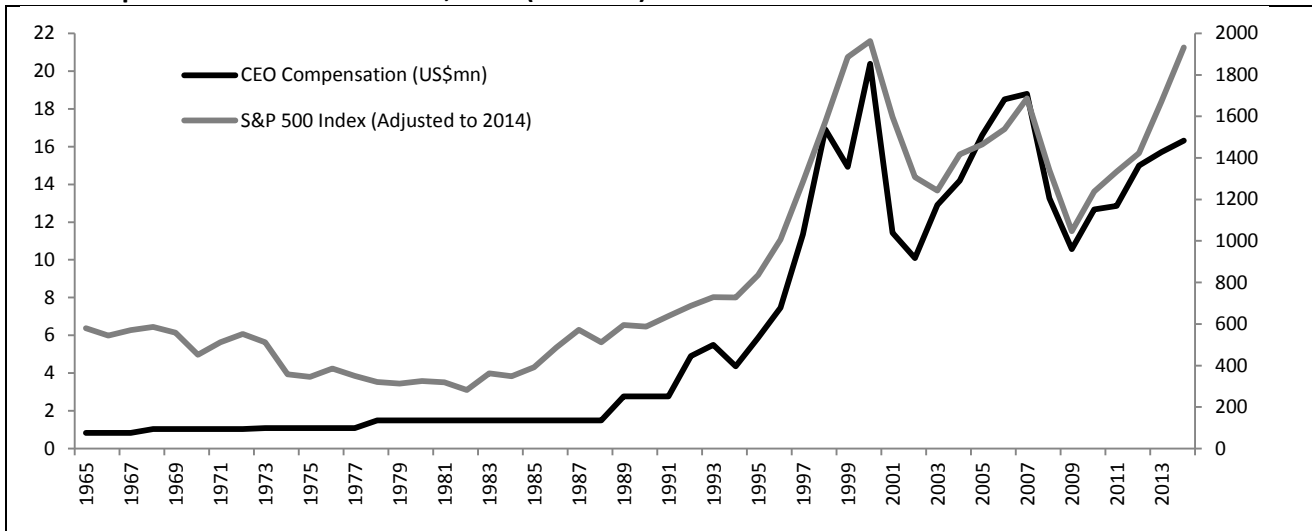
<sup>49</sup> Harvard Business Review, August 2015, <https://hbr.org/2015/08/clintons-proposals-on-stock-buybacks-dont-go-far-enough>

<sup>50</sup> Hillary Clinton, July 2015, <https://www.hillaryclinton.com/p/briefing/factsheets/2015/07/24/encourage-long-term-growth/>

<sup>51</sup> Top CEOs Make 300 Times More than Typical Workers, June 2015, Mishel & Davis, <http://www.epi.org/publication/top-ceos-make-300-times-more-than-workers-pay-growth-surpasses-market-gains-and-the-rest-of-the-0-1-percent/>



CEO Compensation and the S&P500, 2014 (RH Scale)



Source: Mishel & Davis, Note that CEO compensation is for the top 350 companies in the US

While employee tenure amongst the overall labour market has stayed relatively stable, the average tenure of a departing CEO has declined in recent years, from around 10 years in 2000 to 8.1 years in 2012<sup>52</sup>. This theme was also picked up in the paper referenced above. In other words, buying back shares makes sense if executives do not expect to be around for the longer-term.

A study entitled, “Executive Compensation, Share Repurchases and Investment Expenditures”<sup>53</sup> modelled “the dynamic inter-relationship between average salary, bonus, and stock options granted to top five executives of approx. 700 US firms” and found “. . . share repurchases were positively associated with values of stock options granted . . . and . . . share repurchases were negatively and significantly associated with firms’ expenditures on R&D and investments.”

Another paper on the subject, “The Effects of Cash, Debt, and Insiders on Open Market Share Repurchases”<sup>54</sup> found “that stock repurchases function much like tax-efficient special dividends, increasing when FCF is large and when debt levels are low. Companies with greater FCF and less debt are more likely . . . to repurchase their shares.” Interestingly, the study finds, “some evidence that corporate managers attempt to use their inside information to profit from buybacks. For example, managing insiders . . . decrease their selling activity and increase their buying activity two weeks before repurchase announcements.” What a surprise!

As we all know, not all cash allocated to a share buyback results in an actual reduction in the share count. In 2014, the median pay for the top 200 CEOs in the US was US\$17.6mn, an increase of 1.9% year-on-year<sup>55</sup>. However, the very highest paid CEOs are taking home far more, mostly in the form of stock and/or options.

<sup>52</sup> CEO Succession Practices, April 2014, [www.conference-board.org/CEOSuccession2014](http://www.conference-board.org/CEOSuccession2014)

<sup>53</sup> Executive Compensation, Share Repurchases and Investment Expenditures: Econometric Evidence from US Firms, October 2011, Bhargava, <http://www.uh.edu/~cmurray/TCE15/Papers/Bhargava.pdf>

<sup>54</sup> The Effects of Cash, Debt, and Insiders on Open Market Share Repurchases, Winter 2013, Feng, Pukthuanthong, Thiengtham, Thurtle & Walker, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2245435](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2245435)

<sup>55</sup> 200 Highest-Paid CEO Rankings, April 2015, Equilar, <http://www.equilar.com/reports/18-200-highest-paid-CEO-rankings-2015.html>

The press would like you to believe that the CEOs of major investment banks are raking in the cash but that's not actually the case. Jamie Dimon, CEO of JPMorgan, having taken home US\$27.6mn in 2014 (of which less than 5% was base salary, a further 27% cash bonus with the remaining 68% made up of stock and options), isn't even in the top 20. Note that Tim Cook, CEO of Apple, received US\$376mn in 2011.

## Top 20 Highest Paid Directors, US Listed Corporates, 2014 (US\$m)

Name	Company	Compensation	Change	Salary	Bonus	Perks	Stock	Options	TSR
David Zaslav	Discovery Comms	156.1	368%	3.0	6.1	1.9	94.5	50.5	(24%)
Michael Fries	Liberty Global	111.9	140%	1.9	12.8	1.3	89.3	6.6	13%
Mario Gabelli	Gamco Investors	88.5	4%	0	0	88.5	0	0	3%
Satya Nadella	Microsoft	84.3	n/a	0.9	3.6	0	79.8	0	24%
Nicholas Woodman	GoPro	77.4	4,079%	0.8	1.9	0.1	74.7	0	n/a
Gregory Maffei	Liberty Media	73.7	n/a	1.8	6.1	0.5	0	65.3	n/a
Lawrence Ellison	Oracle	67.3	(14%)	\$1	0.7	1.5	0	65.0	26%
Steven Mollenkopf	Qualcomm	60.7	n/a	1.0	1.6	0.1	58.0	0	13%
David Hamamoto	North Star Realty	60.3	227%	0.6	11.0	0.1	48.7	0	39%
Leslie Moonves	CBS	54.4	(6%)	3.5	25.0	1.4	15.0	10.0	(12%)
Philippe Dauman	Viacom	44.3	19%	3.8	20.0	0.5	12.4	7.5	(6%)
Robert Iger	Walt Disney	43.7	27%	2.5	22.8	1.1	8.9	8.3	39%
Joseph Brown	MBIA	43.6	730%	1.0	6.4	0.6	35.5	0	(20%)
Marissa Mayer	Yahoo!	42.0	69%	1.0	1.1	0.1	11.8	28.2	25%
Leonard Schleifer	Regeneron	41.9	15%	1.0	2.1	0.1	0	38.6	49%
Joshua Sapan	AMC Networks	40.3	323%	2.0	8.4	0.1	29.7	0	(6%)
Marc Benioff	salesforce.com	39.9	26%	1.4	2.8	1.3	0	34.4	(7%)
Jeffrey Leiden	Vertex Pharma	36.6	179%	1.1	2.9	0.1	19.9	12.7	60%
Herve Hoppenot	Incyte	32.7	n/a	0.7	3.4	0.5	24.8	3.4	44%
Jeffrey Bewkes	Time Warner	32.6	0%	2.0	14.5	0.2	8.0	8.0	28%

Source: Equilar, Note, due to rounding, the Total Compensation figure may not exactly equal the sum of the parts (but you get the idea!).

A book entitled, "The Outsiders: Eight Unconventional CEOs and Their Radically Rational Blueprint for Success"<sup>56</sup> says, "CEOs need to do two things well to be successful: run their operations efficiently and deploy the cash generated by those operations . . . CEOs have five essential choices for deploying capital – investing in existing operations, acquiring other businesses, paying a dividend, paying down debt, or repurchasing stock and three alternatives for raising it – tapping internal cash flow, issuing debt, or raising equity. Most CEOs focus on (simply) managing operations."

Historically around 25% of all share buybacks were to pay for maturing management stock options. One should bear in mind that stock being bought back is generally to satisfy options that were granted earlier and disguises the true cost of employee compensation as adjusted earnings typically excludes stock-based remuneration given that no cash is actually changing hands. A warning, however, from a recent paper: "disassociating executive compensation from performance measures affected by buybacks, such as EPS, sounds like an easy solution . . . steps that disconnect executive pay from buybacks might reduce stock manipulation. But if they weaken alignment with managers, investors might pay a much bigger price."<sup>57</sup>

<sup>56</sup> The Outsiders: Eight Unconventional CEOs and Their Radically Rational Blueprint for Success, 2012, Thorndike, [http://csinvesting.org/wp-content/uploads/2015/05/Outsiders\\_-\\_Eight-Unconventional-CEOs-and-Their-Radical-Blueprint-for-Success-The-Thorndike-William-N\\_.pdf](http://csinvesting.org/wp-content/uploads/2015/05/Outsiders_-_Eight-Unconventional-CEOs-and-Their-Radical-Blueprint-for-Success-The-Thorndike-William-N_.pdf)

<sup>57</sup> Mandatory Disclosure and Firm Behaviour: Evidence from Share Repurchases, Bonaimé, July 2015, <http://aaajournals.org/doi/10.2308/accr-51027>



## Coca-Cola: An Example of Excessive Management Compensation

The activist investor David Winters of Wintergreen Advisers has publicly (and with some success) fought a battle with Coca-Cola management over its executive compensation plan. He voiced his opinion several times in letters addressed to the company<sup>58</sup>, other shareholders, but also directly to Warren Buffett, Coca-Cola's largest shareholder. If you haven't seen Mr Winters' letters before they are a very interesting read<sup>59</sup>. Briefly, Mr Winters disagreed with Coca-Cola's intention to "gift" management 14.2% of share capital (Coca-Cola's own calculations) then worth around US\$24bn (when combined with previously approved compensation plans). The biggest issue, however, was that the plan allowed the board to grant *"without limitation shares awarded purely as a bonus and not subject to any restrictions or conditions."*

Coca-Cola has actively bought back shares over many years, with the most recent programme launched in October 2012 to repurchase 500mn shares. Indeed, Mr Buffett commented in his Berkshire Hathaway Annual Letter 2013 that its ownership of Coca-Cola increased from 8.9% to 9.1% solely due to the buyback<sup>60</sup>. He also made a point about the importance of *"tenths of one percent"* (which Mr Winters picked up on in his letters), *"if you think tenths of a percent aren't important, ponder this math: For the four companies in aggregate (BH's big four shareholdings of Amex, Coca-Cola, IBM and Wells Fargo), each increase of one-tenth of a percent in our share of their equity raises Berkshire (Hathaway's) share of their annual earnings by US\$50mn."* Mr Winters rightly pointed out that Coca-Cola bought back 121mn shares costing US\$4.8bn in 2013 but issued 54mn shares and options to management, thus reducing the share count by 67mn shares. In other words, if Coca-Cola hadn't issued those 54mn shares, Berkshire Hathaway's ownership of Coca-Cola would be 9.2%!

So what's going on? Whilst Mr Buffett apparently agreed with Mr Winters that Coca-Cola wanted to distribute too much stock to executives, he did not vote against the company, saying, *"I could never vote against Coca-Cola, but I couldn't vote for the plan either."* He added, *"I think it's a great company, it's run by great people and I think it's got a great future. I just think the plan is excessive."*<sup>61</sup> After the vote, Mr Winters wrote another letter raising the issue of corporate governance saying that he had learnt that not a single Coca-Cola director had voted against the plan (note that Warren Buffett's son, Howard, sits on the board), that the plan garnered support from less than half of Coca-Cola's shareholders and that the plan was pushed through despite objections from its largest shareholder.

Latest proxy statements show that Coca-Cola did not issue those controversial bonus awards and the much-criticised stock option programme that was to be without criteria. 2014FY results were announced back in March 2015, upon which Coca-Cola's CEO, Muhtar Kent "respectfully declined" a US\$2.5mn cash bonus. Mr Kent remarked that 2014 was a "challenging" year for the company. Whilst Mr Kent earned US\$18.1mn in 2014 (made up of US\$1.6mn salary, US\$6.5mn in stock and US\$9.3mn in options), he took home less than two years before, when he earned over US\$30mn.

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<sup>58</sup> Latest letter addressed to Coca-Cola from Wintergreen Advisers, April 2015, <http://www.wintergreenfund.com/downloads/Wintergreen-CocaCola-PR-20150413.pdf>

<sup>59</sup> Wintergreen Fund, [www.wintergreenfund.com](http://www.wintergreenfund.com)

<sup>60</sup> Berkshire Hathaway Annual Letter 2013, <http://www.berkshirehathaway.com/letters/2013ltr.pdf>

<sup>61</sup> Coca-Cola, March 2014, <http://www.coca-colacompany.com/coca-cola-unbottled/what-lemonade-stands-can-teach-us-about-ownership/#TCCC>

Mr Wintergreen has further pointed out that Coca-Cola's statements give misleading information and show missed performance targets for 2014 that were apparently overlooked when awarding pay for senior management. In addition, performance hurdles were lowered for 2015 versus 2014 making it easier for management to earn annual bonuses. Mr Wintergreen rightly points out that whilst the company touts a figure of US\$4.2bn in gross share repurchases, in fact, net of dilution from equity compensation, buybacks totalled US\$2.6bn. Similarly, Coca-Cola said that it repurchased 98 million shares in 2014, but shares outstanding declined by just 36 million.

Coca-Cola's AGM in April 2015 saw shareholders back a revised pay package, with 80.4% of votes cast in favour of compensation awarded for 2014. More interestingly, Mr Buffett took to the stage during the AGM, arguing that Coke remained a great investment, saying, *"As long as you can bring a smile to people's faces, it's a great business . . . I've gotta tell you, I feel healthy"* (after telling the audience that a quarter of the calories he'd consumed over the last 30 years came from [Cherry] Coke, his favourite!). Mr Buffett also appeared in a video playing the ukulele and singing, *"I'd like to buy the world a Coke."* He added, *"Of course I **could** buy the world a Coke, but I'm not sure my shareholders would go for that"*<sup>62</sup>. He then put down the ukulele and drank a Coke<sup>63</sup>. Bizarre stuff, but not too dissimilar to the annual Berkshire Hathaway "shin-dig" where you never quite know what to expect!

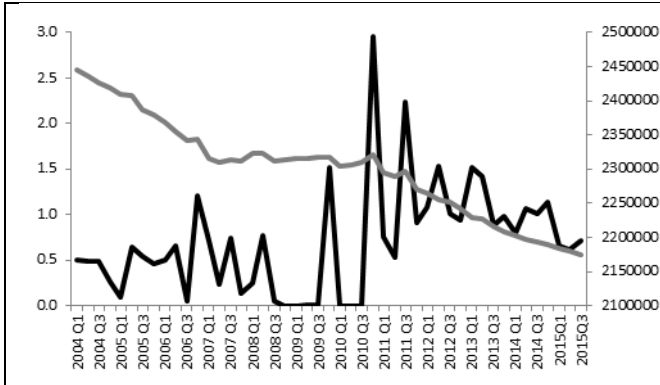
Operationally, Coca-Cola has warned that it will likely miss targets for the third year straight. In a bid to improve margins and profitability, the company is looking to restructure, consolidate some operations and spin-off others. Whilst volumes grew in the third quarter, results were negatively impacted by unfavourable currency translation. With over half of sales generated in markets outside the US, Coca-Cola itself expects a seven percentage point currency headwind on net revenues and 11 percentage point headwind on operating income, more than offsetting any organic growth. We note that for the first nine months of this year, Coca-Cola bought back just under US\$2bn worth of shares, a 30% reduction on the same period last year and roughly half of repurchase spend during the whole of 2014.

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<sup>62</sup> Coca-Cola, April 2014, <http://www.coca-colacompany.com/stories/warren-buffett-if-youre-looking-for-a-wonderful-business-its-hard-to-beat-coca-cola/>

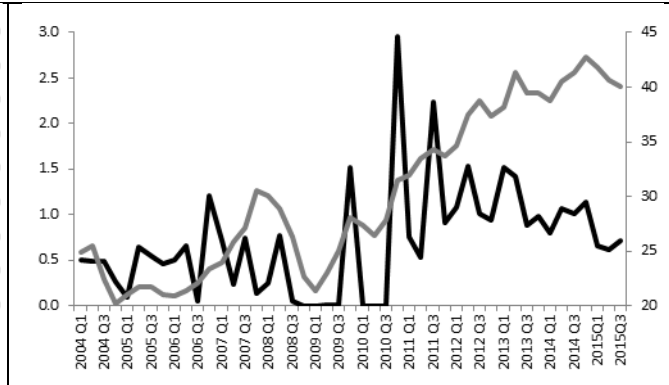
<sup>63</sup> Warren Buffett's Ode to Coca-Cola, April 2015, <https://www.youtube.com/watch?v=o2wCquJtZrI>

**Coca-Cola Buybacks & Average Number of Shares (RHS)**



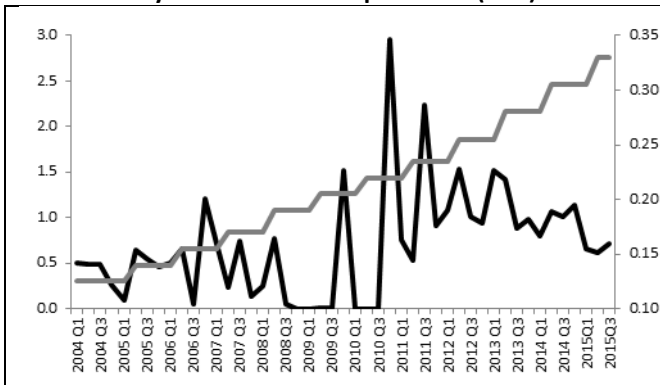
Source: Company Report & Accounts, Adjusted for Stock Split

**Coca-Cola Buybacks & Average Share Price (RHS)**



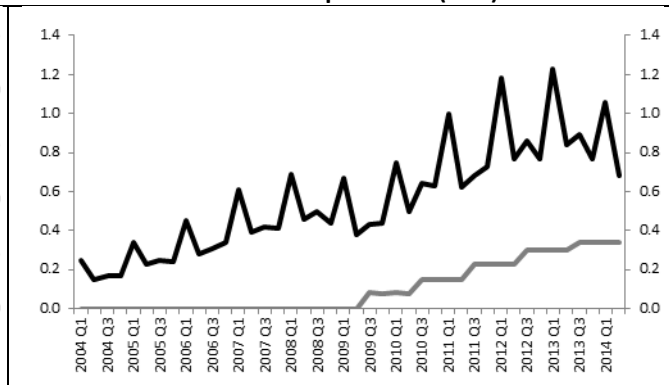
Source: Company Report & Accounts, Adjusted for Stock Split

**Coca-Cola Buybacks & Dividend per Share (RHS)**



Source: Company Report & Accounts, Adjusted for Stock Split

**Coca-Cola EPS and Dividend per Share (RHS)**



Source: Company Report & Accounts, Adjusted for Stock Split

## Caterpillar: An Example of Job Cuts Whilst Buying Back Shares

Caterpillar's 2015Q3 earnings dropped to US\$368mn from US\$1bn a year earlier as sales fell 19% to US\$11bn. The company expects revenues to fall a further 5% in 2016. Caterpillar has said it expects restructuring costs to reach around US\$800mn for 2015 as it plans to cut the workforce by 4,000-5,000 before the end of 2016 via a voluntary retirement enhancement programme, with cuts of up to 10,000 by the end of 2018. By then severance costs are expected to total around US\$2bn.

That said, Caterpillar bought back US\$1.5bn worth of stock in 2015Q3 via an ASR agreement with Citibank, reducing the share count by 4.5% from a year earlier<sup>64</sup>. Chairman & CEO, Douglas Oberhelman said, *"The continued strength of our balance sheet and strong cash flow allow us to return capital to stockholders despite weakness in the cyclical industries we serve."* Management authorised the repurchase of US\$10bn worth of stock in January 2014 which will expire at the end of December 2018. Accompanying most recent results, the company said, *"Our strong balance sheet is important in these difficult times. We've repurchased close to US\$2bn of stock in 2015 (not including the US\$1.5bn ASR) and more than US\$8bn over the past three years."* However, we note that free cash flow generated in the first nine months of 2015 totalled US\$2.667bn, down 42% on the same period a year earlier.

<sup>64</sup> Caterpillar, October 2015, <http://www.caterpillar.com/content/dam/caterpillarDotCom/releases/3Q15%20Caterpillar%20Inc.%20Results.pdf>

As part of continued restructuring, Caterpillar has closed - or announced to close - more than 20 facilities, reducing the total workforce by more than 31,000 employees since mid-2012<sup>65</sup>. Mr Oberhelman said, “We recognize (today’s) news and actions taken in recent years are difficult for our employees, their families and the communities where we’re located. We have a talented and dedicated workforce, and we know this will be hard for them.” We note that Douglas Oberhelman received a 14% pay rise in 2014 with total compensation reaching US\$17.1mn consisting of US\$1.6mn salary, a US\$4.9mn payment under an incentive plan and a stock option award of US\$8.4mn. Caterpillar isn’t alone, however. 3M, Biogen, Dow Chemical, McDonalds and Perrigo, amongst many others, have announced sizeable cuts to their workforces whilst also repurchasing shares.

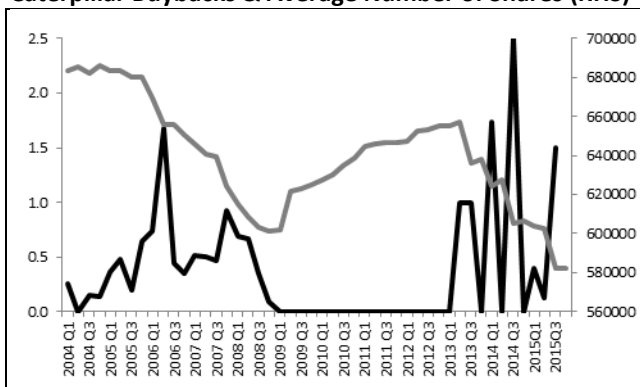
## Caterpillar – Cash Flow Statement, Selected Elements

Year to December (US\$bn)	2011	2012	2013	2014
Net Operating Cash Flow	7.01	5.18	10.19	8.06
CapEx	(3.92)	(5.08)	(4.45)	(3.38)
Net Investing Cash Flow	(11.43)	(6.19)	(5.05)	(3.63)
Dividends Paid	(1.16)	(1.62)	(1.11)	(1.62)
Buyback Spend	0	0	(2.00)	(4.24)
Net Financing Cash Flow	3.97	3.61	(4.51)	(3.00)
Free Cash Flow	3.09	0.11	5.75	4.68

Source: Caterpillar 10-K

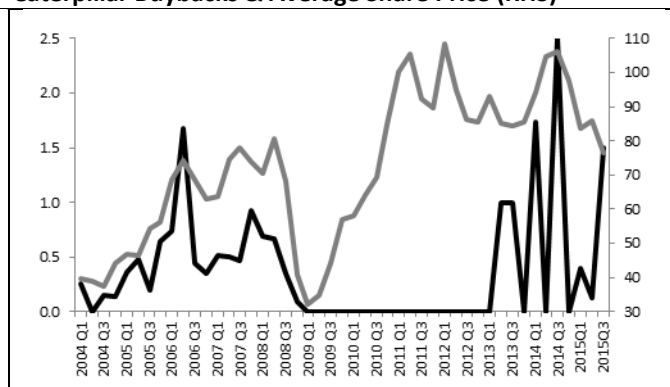
We note that Caterpillar’s share price fell to a low of US\$27.96 in January 2009 against a share price today of around US\$65. In other words, the timing and therefore prices paid of buybacks is commonly mis-judged.

### Caterpillar Buybacks & Average Number of Shares (RHS)



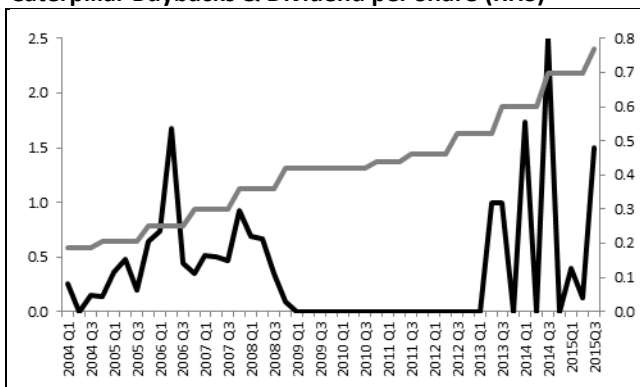
Source: Company Report & Accounts

### Caterpillar Buybacks & Average Share Price (RHS)



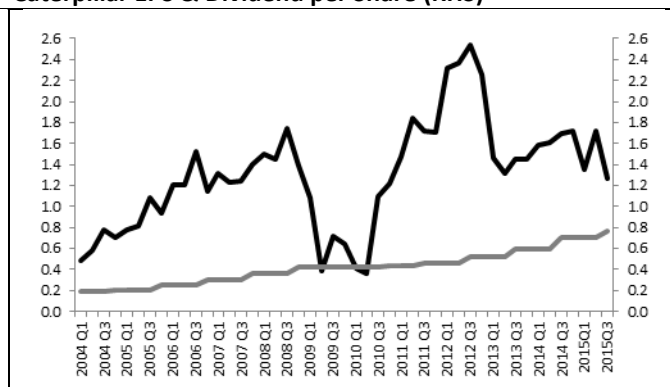
Source: Company Report & Accounts

### Caterpillar Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts

### Caterpillar EPS & Dividend per Share (RHS)



Source: Company Report & Accounts

<sup>65</sup> Caterpillar, September 2015, <http://www.caterpillar.com/en/news/corporate-press-releases/h/building-for-a-stronger-future-caterpillar-announces-restructuring-and-cost-reduction-plans.html>

## The Timing and Prices Paid for Share Buybacks is Typically Disastrous

Whilst much has been written about the timing of share buybacks not much is known about the prices that companies actually pay. Corporates ought to (as is required) give an average price paid over the buyback period (or prior quarter), usually in the 10-K filing, but we find that this is of little use after the event. A study entitled “Can Managers Time the Market?”<sup>66</sup> compares the actual repurchase price paid and the average price over the period and finds that a company’s ability “time the market” varies cross-sectionally. In other words, less frequent repurchasers do so at significantly lower prices, as do firms repurchasing when insiders buy on their own account. In addition, the study found that market timing ability was greater in the face of higher information asymmetry.

By trying to time a share buyback, management is effectively speculating on the future share price of the company, which is quite obviously not the responsibility of corporate executives. A study entitled “Do Firms Buy Their Stock at Bargain Prices?”<sup>67</sup> found that *“firms repurchase at prices which are significantly lower than average market prices. This price discount is negatively related to size and positively related to market-to-book ratio. Firms’ repurchase activity is followed by a positive and significant abnormal return. Importantly, the market response occurs when firms disclose their actual repurchase data in earnings announcements, and this positive response is followed by a one month drift.”* The study segments the sample into three groups based on market capitalization and finds that a company’s size is a determinant of timing ability. Only the smallest sub-sample of companies are able to repurchase at attractive prices and small companies pay 42 basis points less than the volume-weighted average price during the same month.

Further academic studies include one entitled, “The Timing and Source of Long-Run Returns Following Repurchases”<sup>68</sup> and finds that *“Abnormal returns over the periods between repurchase authorizations and completions are indistinguishable from zero.”* It also finds that *“the positive drive in post-authorization stock prices is attributable to subsequent repurchase authorizations and takeover attempts.”* A more recent study, “Wiser to Wait: Do Firms Optimally Execute Share Repurchases?”<sup>69</sup> finds that *“share repurchase programs are executed suboptimally. Firms repurchase when stock prices are higher and valuation ratios are less favourable. Poor repurchase timing is correlated with earnings management, weaker shareholder rights, less monitoring, and fewer alternative uses of cash.”* Yet another study entitled, “Share Buybacks and Abnormal Returns”<sup>70</sup> finds evidence of abnormal returns after buyback announcements. It examines a market-neutral portfolio that is long equally weighted (with daily rebalancing) all companies that announced (a buyback) within the most recent month - and short the IWM ETF/market using a rolling beta estimated from the recent 250 days – and finds average annual abnormal returns of 11.6%, with a Sharpe ratio of 1.3 over the period 2000 to end 2014. It concludes, *“we provide evidence that buybacks could potentially provide a signal for timing/predicting the overall market.”*

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<sup>66</sup> Can Managers Time the Market?, May 2014, Dittmar & Field,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2423344](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2423344)

<sup>67</sup> Do Firms Buy Their Stock at Bargain Prices?, June 2013, Ben-Rephael, Oded & Whol,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1738922](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1738922)

<sup>68</sup> The Timing and Source of Long-Run Returns Following Repurchases, October 2013, Bargerion & Thomas,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2343913&rec=1&srcabs=2339619&alg=1&pos=4](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2343913&rec=1&srcabs=2339619&alg=1&pos=4)

<sup>69</sup> Wiser to Wait: Do Firms Optimally Execute Share Repurchases?, May 2014, Bonaime, Watson Hankins & Jordan,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1977654](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1977654)

<sup>70</sup> Share Buybacks and Abnormal Returns, September 2015, Uekoetter,  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2664098](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2664098)

## Home Depot: An Example of Driving Up Your Own Share Price

Before the US housing bubble burst, Home Depot had been investing heavily in its business with around 65% of operating cash flow spent on CapEx. However, since 2008, the company's capital investment has fallen dramatically and Home Depot has instead been spending cash on dividends but more so on share buybacks. Whilst not the largest buyback announcement in history, Home Depot said back in February 2015 that, accompanying a 26% dividend hike, it would embark on a new US\$18bn share buyback programme to be completed by the end of fiscal 2017. Home Depot has bought back US\$53bn worth of stock between 2002 and the end of January 2015, including US\$7bn worth during fiscal 2014.

Home Depot has long stated that its bond issuance would be used for *"general corporate purposes including stock buybacks."* Indeed, back in January 2013, CFO Carol Tomé said, *"so long as the after-tax cost of any new debt is less than the yield on Home Depot stock, a debt-fuelled buyback is just a good trade."* Long-term debt has increased to over US\$30bn as at the end of fiscal 2015, meaning that interest expense has also gone up. Most recent second quarter results saw net income rise by 7.9% but EPS jump by 14.9%, driven by a 4.7% reduction in the number of shares outstanding. The company also raised US\$2.5bn of incremental long-term debt and will *"use the proceeds from that debt offering to increase our share repurchases to US\$7bn for the year."* Home Depot said it plans to tap bond markets again to support its US\$1.6bn acquisition of Interline Brands. However, Home Depot stock is currently trading at all time highs, on a multiple approaching 25x earnings (the last time it traded over 20x was in 2009, the height of the housing bubble), which makes the buyback seem even more ridiculous.

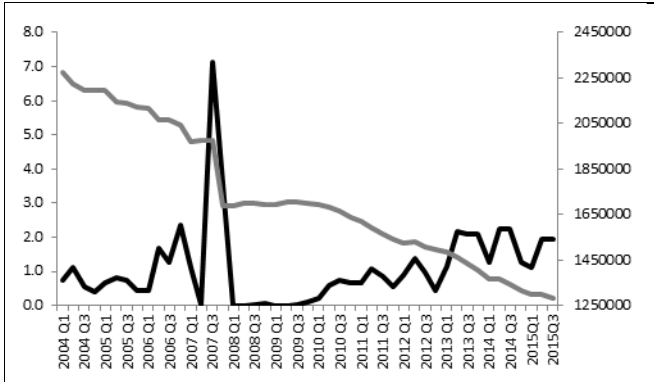
### Home Depot – Debt Issuance

<u>Maturity Date</u>	<u>Amount</u>	<u>Price</u>	<u>Coupon</u>	<u>Type</u>	<u>Callable</u>	<u>Yield to Maturity</u>
03/01/2016	3,000.0	101.3	5.400	Fixed	No	0.60
12/16/2036	3,000.0	122.2	5.875	Fixed	No	4.27
06/01/2022	1,250.0	99.4	2.625	Fixed	No	2.73
04/01/2046	1,250.0	100.2	4.250	Fixed	No	4.24
09/10/2018	1,150.0	102.5	2.250	Fixed	No	1.34
02/15/2024	1,100.0	105.4	3.750	Fixed	No	3.01
09/15/2025	1,000.0	101.9	3.350	Fixed	No	3.13
06/15/2019	1,000.0	101.1	2.000	Fixed	No	1.72
04/01/2023	1,000.0	98.9	2.700	Fixed	No	2.86
02/15/2044	1,000.0	109.5	4.875	Fixed	No	4.30
03/15/2045	1,000.0	104.2	4.400	Fixed	No	4.15
04/01/2043	1,000.0	99.7	4.200	Fixed	No	4.22
04/01/2021	1,000.0	110.6	4.400	Fixed	Yes	2.29
04/01/2041	1,000.0	125.4	5.950	Fixed	Yes	4.30
09/15/2017	500.0	100.3	0.000	FRN	No	---
09/15/2020	500.0	108.4	3.950	Fixed	No	2.11
09/15/2040	500.0	115.8	5.400	Fixed	No	4.35

<http://quicktake.morningstar.com/stocknet/bonds.aspx?symbol=hd>

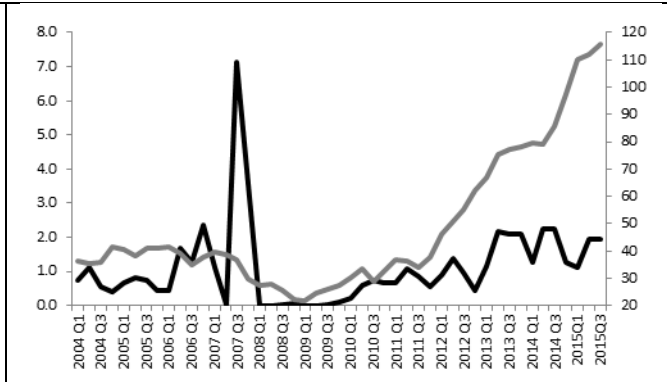


Home Depot Buybacks & Average Number of Shares (RHS)



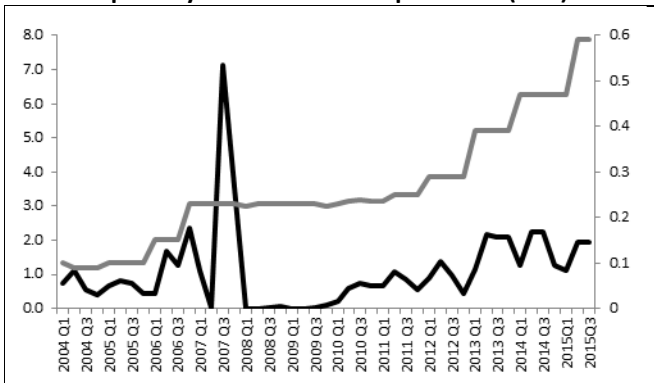
Source: Company Report & Accounts

Home Depot Buybacks & Average Share Price (RHS)



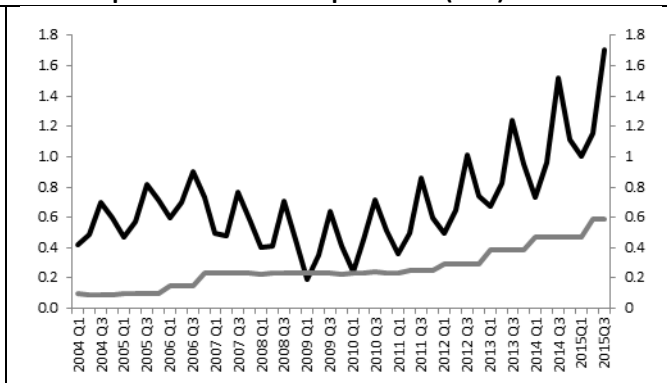
Source: Company Report & Accounts

Home Depot Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts

Home Depot EPS & Dividend per Share (RHS)



Source: Company Report & Accounts

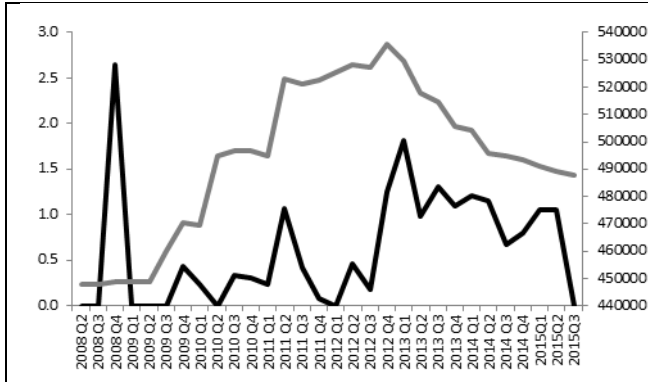
## Visa: An Example of Attempting to Time the Market

Since its IPO in early 2008, Visa has actively bought back shares but the net number of shares outstanding continued to rise until the end of 2012. The company has developed a benchmark using the 25<sup>th</sup> percentile of analysts' 12 month price outlook<sup>71</sup>. Byron Pillitt, Visa's CFO has said, "We typically buy below the 25<sup>th</sup> percentile of the 12-month outlook." If the shares are within a certain pricing bank, Visa might buy back 5% of what it's eligible to repurchase in one day and at a lower pricing band, it might purchase 10-15% of eligible volume. However, Mr Pollitt warned, "When you get above 15% of a day's volume, you start running the risk that you're actually moving the stock price." Note that current rules limit companies to buying back no more than 25% of daily trading volumes.

Visa has a September year end and most recent fiscal third quarter results ending June 2015 saw the company repurchasing 15.5mn shares at an average price of US\$68.05 per share, costing US\$1.1bn. For the nine months ending June 2015, Visa bought back 44.1mn shares, costing US\$2.9bn. Interestingly, we see that Visa cut spend to zero for 2015Q3 and has US\$2.8bn remaining on its current buyback authorisation. That said, the company very recently raised US\$16bn in this year's fourth-largest corporate bond offering with much of the cash to be used to pay for its EUR21.2bn acquisition of a former European subsidiary.

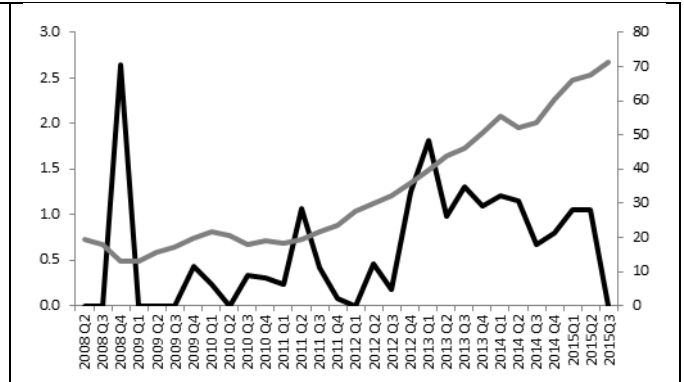
<sup>71</sup> Rethinking Buybacks, July 2014, CFO Magazine, <http://ww2.cfo.com/capital-markets/2014/07/rethinking-buybacks/>

Visa Buybacks & Average Number of Shares (RHS)



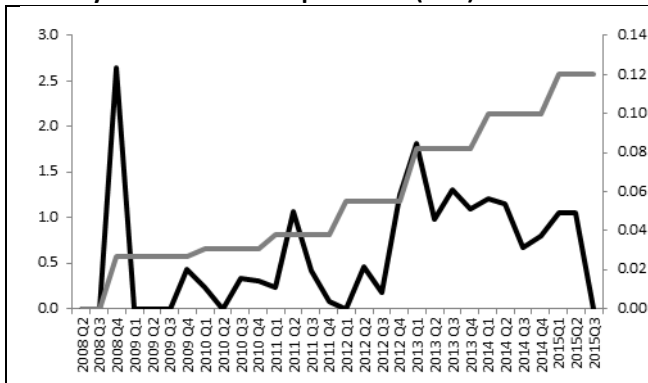
Source: Company Report & Accounts, Adjusted for Stock Split

Visa Buybacks & Average Share Price (RHS)



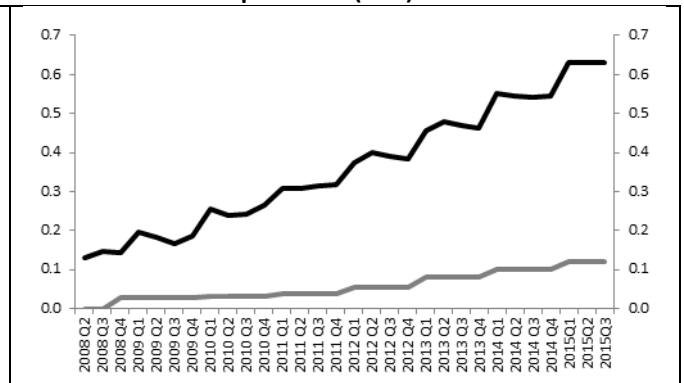
Source: Company Report & Accounts, Adjusted for Stock Split

Visa Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts, Adjusted for Stock Split

Visa EPS & Dividend per Share (RHS)



Source: Company Report & Accounts, Adjusted for Stock Split

## Financial Flexibility, Signalling Theory and Buybacks being an Integral Part of Dividend Policy

Should buybacks be an integral part of dividend policy? The obvious answer is “yes”. But buybacks currently require no formal disclosure, there is little cost in simply announcing the intention to repurchase shares and any announcement isn’t subsequently binding. One should - quite rightly - assume that a buyback ought to lead to a reduction in the number of shares outstanding. However, that is not always the case. So far this year buyback authorisations have exceeded US\$500bn with General Electric setting the pace planning to repurchase up to US\$50bn.

### Top 10 Largest Buyback Authorisations in History

Date	Company	Industry	Value (US\$bn)	% of Shares Outstanding
10/04/15	General Electric	Industrial	50.0	19.30
23/04/13	Apple	Technology	50.0	13.12
20/07/06	Microsoft	Technology	40.0	17.16
22/09/08	Microsoft	Technology	40.0	17.41
17/09/13	Microsoft	Technology	40.0	14.64
20/07/04	Microsoft	Technology	30.0	9.89
03/08/07	Procter & Gamble	Consumer	30.0	15.08
23/04/14	Apple	Technology	30.0	6.63
10/11/05	Intel	Technology	25.0	16.45
19/06/07	Home Depot	Consumer	22.5	30.02
28/01/05	Procter & Gamble	Consumer	20.0	14.85
15/14/04	Intel	Technology	20.0	12.67

Source: Birinyi Associates<sup>72</sup>

<sup>72</sup> Birinyi Associates, [www.birinyi.com](http://www.birinyi.com)



Whilst not paying a dividend, Berkshire Hathaway set a great example regarding the communication of their (extremely short-lived) share buyback that we believe all companies should follow when disclosing information to the market on buyback policy. Mr Buffett set clear parameters on the value at which he would consider buying back shares and gave precise details to his shareholders both before and after the buyback. However, other companies are not so precise. Microsoft uses the “... *illustrates our confidence in the long-term growth of the company and our commitment to returning capital to shareholders*” reason as part of their dividend policy statement. Apple has been more transparent regarding its policy, stating, “... *the primary objective (of the buyback) is neutralizing the impact of dilution from future employee equity grants and employee stock purchase programs.*” Note that this was for their first repurchase scheme announced back in 2012. The company has not told the market, however, at what level it feels its shares are undervalued and on which measures.

We know that the split between dividends paid and share buybacks has changed dramatically in recent years with “financial flexibility” being accepted as the norm. Whilst not paying a dividend, 16% of US corporates are buying back their own stock. We recognise that some investors might prefer the repurchase option as they can obviously choose whether to participate or not, with the decisive factor being transaction costs involved or a potential deferred tax gain obtained. That said, any buyback misses the opportunity of a future long-term compounding dividend stream.

If a company's management is confident of future cash flows, exactly how much “flexibility” does one actually need? A damning report entitled, “Is Managerial Flexibility Good for Shareholders? Evidence from Share Repurchases”<sup>73</sup> states that, “Managers . . . should be able to add value through market timing . . . yet . . . managers repurchase when stock prices are high and valuation ratios are unfavourable.” The study finds that “both earnings management and managerial overconfidence contribute to the poor timing of repurchases.” It concludes, “when it comes to repurchase timing, managerial flexibility is harmful to shareholders.”

## **Bed Bath & Beyond: An Example of a Share Buyback Whilst Not Paying a Dividend**

Bed Bath & Beyond has been a massive retail story in the US over the last decade but revenue growth is now slowing and the share price is down 22% year-to-date on concerns that momentum is fading. Whilst not paying a dividend, the company continues to buyback shares. Most recent 2015Q2 results were released in September (the company has a February year-end) and whilst the EPS figure came in at US\$1.21 (against US\$1.17 a year ago), organic sales growth was just 0.7% and net income was down 10%, with gross, operating and net margins all lower compared to a year ago.

BB&B only met the earnings per share estimate as it bought back US\$194mn worth of stock during the quarter, reducing the share count by just under 25 million shares. Without the buyback, EPS would have been down 13%. It is also worth noting that the company spent a tenth of revenue on buybacks during the first six months of fiscal 2015 (down from over a fifth for the same period a year earlier). Free cash flow generation was US\$248.5mn for the six month period, down from US\$449.7mn a year ago, whilst CapEx spend was roughly the same.

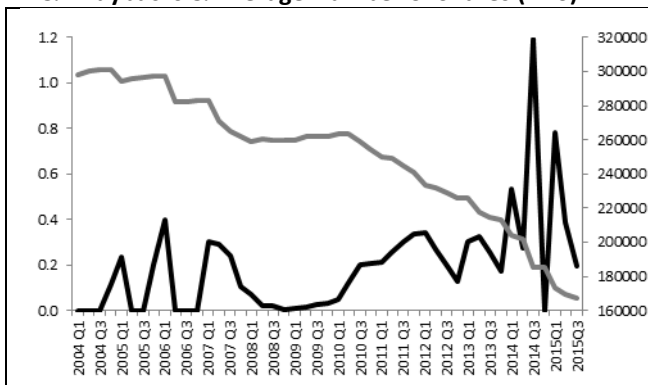
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<sup>73</sup> Is Managerial Flexibility Good for Shareholders? Evidence from Share Repurchases, August 2012, Bonaimé, Hankins & Jordan, <http://www1.villanova.edu/content/dam/villanova/VSB/assets/marc/MARC%202013%20-%2069%20Alice%20Bonaime%20Paper%20%232.pdf>

Between 2004 and 2015Q2, the company has said that it bought back over US\$9bn worth of stock, which compares to a market capitalisation today of US\$9bn. With just US\$300mn left on the current buyback authorisation, management has given authorisation for another buyback worth US\$2.5bn, "We are pleased that we have been able to make significant investments in people and technology to position our Company for continued successful growth in the ever evolving retail environment, while at the same time, returning value to our shareholders through share repurchases" said Steven Temares, CEO. "Our Board authorized this new share repurchase program based upon its continued confidence in our Company's long-term growth potential, financial outlook and cash flow generation, and it is anticipated that this US\$2.5 billion share repurchase program will be funded from current cash and future cash flows. That said, our Company's Board of Directors continues to review our capital structure on an ongoing basis."<sup>74</sup>

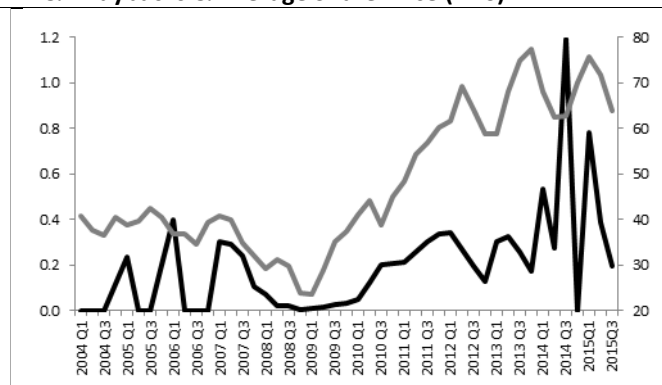
As mentioned above, free cash flow generation was US\$248.5mn during 2015H1 but buyback spend totalled US\$579mn. Back in July 2014, BB&B launched a US\$1.5bn bond to help pay for repurchases. Then, the company said, "The timing and amount of the Company's share repurchases impacts the quarterly and full year diluted weighted average shares outstanding differently with the impact on the individual quarters being greater than the impact on the full year." What does that mean exactly? That the buyback has overly influenced the EPS figure at the quarterly stage? Who knows!

**BB&B Buybacks & Average Number of Shares (RHS)**



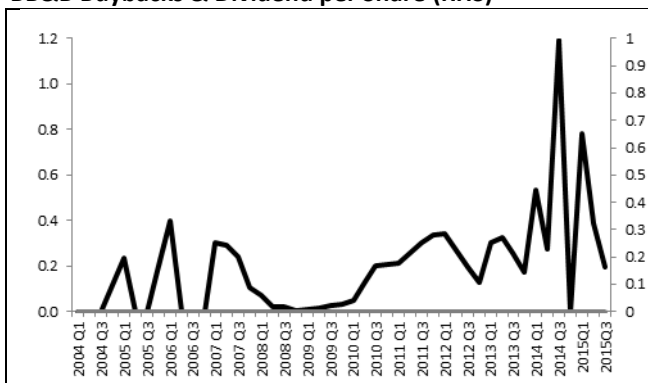
Source: Company Report & Accounts

**BB&B Buybacks & Average Share Price (RHS)**



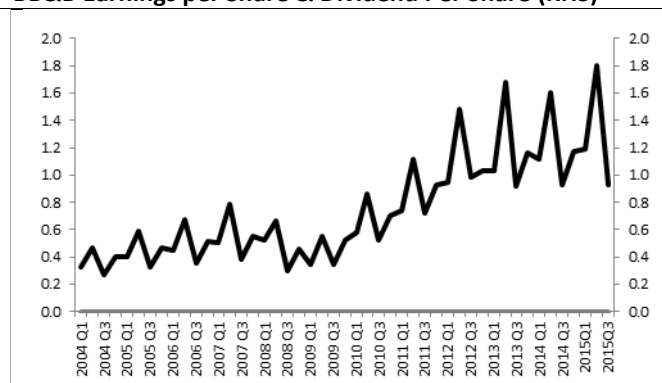
Source: Company Report & Accounts

**BB&B Buybacks & Dividend per Share (RHS)**



Source: Company Report & Accounts

**BB&B Earnings per Share & Dividend Per Share (RHS)**



Source: Company Report & Accounts

<sup>74</sup> Bed Bath & Beyond 2015Q2 Results, September 2015, <http://phx.corporate-ir.net/phoenix.zhtml?c=97860&p=irol-newsArticle&ID=2090319>

## Buybacks at the Expense of Investment, Innovation and Future Growth of Profits

It is not easy to foresee the future but corporates must invest if they are to be part of it.

*"Radio has no future. Heavier-than-air flying machines are impossible. X-rays will prove to be a hoax."*

Lord Kelvin, President of the Royal Society, 1895

*"Who the hell wants to hear actors talk?"* Harry Morris Warner, 1927

*"I think there is a world market for maybe five computers."* Thomas Watson, Chairman of IBM, 1943

*"There is no reason anyone would want a computer in their home."* Ken Olsen, Chairman of DEC, 1977

*"Everything that can be invented has been invented."* Charles Duell, Comm, US Office of Patents, 1899

This is an area that we believe is not discussed nearly enough. Current monetary policy has made debt so much cheaper than equity with low interest rates stifling the case for investment, effectively encouraging corporates to repurchase stock instead. A research study entitled, "How Share Repurchase Affects Firm Innovation"<sup>75</sup> investigates this relationship. Using a sample size of 6,889 US firms during the 10 year period 1996-2006, the study finds *"a significantly negative effect of share repurchase on current and future firm innovation."*

The latest Geneva Report suggests that the rate of growth of potential output is likely to slow in the US in part because of demographic effects but also because the rate of innovation is likely to be permanently lower. Rapid growth over the past 250 years, since the start of the Industrial Revolution, has been on the back of three fundamental innovations: the steam engine and railroads, electricity and the internal combustion engine, and the digital revolution. Indeed, productivity has declined in recent years in most major developed countries as a consequence of low investment. How much a company invests is a decision that will depend upon many factors, one being how management is incentivised. Interestingly, investment spend in the US by unquoted companies is twice that of quoted corporates, even though the two are roughly the same size<sup>76</sup>.

In an open letter sent to S&P500 CEOs, Larry Fink CEO at BlackRock, seems to agree, *"It concerns us that, in the wake of the financial crisis, many companies have shied away from investing in the future growth of their companies. Too many companies have cut capital expenditure and even increased debt to boost dividends and increase share buybacks. We certainly believe that returning cash to shareholders should be part of a balanced capital strategy; however, when done for the wrong reasons and at the expense of capital investment, it can jeopardize a company's ability to generate sustainable long-term returns."*<sup>77</sup> BlackRock, with nearly US\$5trn under management, has enormous clout and companies that do not live up to expectations do so at the risk of upsetting a very powerful investor. (As an aside, BlackRock's own repurchase spend in 2015Q3 was just under US\$275mn, an increase of 10% on a year earlier. The company has been repurchasing around US\$250mn worth of stock each and every quarter since the beginning of 2013. Also, Mr Fink earned US\$23.8mn in 2014, made up of US\$900,000 salary, US\$9.1mn cash bonus and a US\$13.6mn stock award).

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<sup>75</sup> How Share Repurchase Affects Firm Innovation, August 2015, Nguyen, Vu & Yin, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2647816](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2647816)

<sup>76</sup> Executive Pay Holds the Key to the Productivity Puzzle, May 2015, Smithers, [http://www.smithers.co.uk/news\\_article.php?id=136](http://www.smithers.co.uk/news_article.php?id=136)

<sup>77</sup> Larry Fink Open Letter to S&P500 CEOs, March 2015, [http://online.wsj.com/public/resources/documents/LDF\\_letter\\_to\\_corporates\\_2014\\_public.pdf](http://online.wsj.com/public/resources/documents/LDF_letter_to_corporates_2014_public.pdf)

Goldman Sachs apparently drew a similar conclusion. David Kostin, US equity strategist at GS, said in June 2015, *“Tactically, repurchases may lift share prices in the near term . . . but . . . it is a questionable use of cash at the current time, when the PE multiple of the market is so high.”*<sup>78</sup> Ironically, Goldman Sachs itself has repurchased over US\$2.5bn worth of stock during the first nine months of 2015, a 327% increase over the same period a year earlier, at a time when its share price is not far off its all-time high last reached in 2007!

But not everyone is in the same camp. Larry Summers, President Emeritus at Harvard and Treasury Secretary under President Clinton, said, *“. . . low rates somehow promote corporate stock buybacks and this is an alternative to real new investment. I confess that I cannot follow the logic here. I would have supposed that the choice between real investments and share repurchases would depend on their relative price . . . if . . . QE has raised stock prices this should tilt the balance towards real investment. Likewise, I would have thought that by making the return to holding cash less attractive, easy money would tend to drive firms into making real investments. And for the many firms that do not have huge hoards, it would bring down borrowing costs.”*<sup>79</sup>

Part of the idea of near-zero interest rates in the developed world is to discourage saving and encourage borrowing. Money saved is not money spent and this reduces aggregate demand. But we know that savings equal investment and investment is needed to grow the economy over the longer-term. We also know that QE hasn't been particularly successful in encouraging business investment but can low investment levels be wholly blamed on the alternative being share buybacks? Perhaps new technology requires less capital than old heavy industrial businesses<sup>80</sup> or might a slow-growth / low yield environment simply discourage capital investment? Whilst many corporates continue to complain about a shortage of investment opportunities, we believe that the problem is not the lack of desire to invest but anaemic demand reflected in very low revenue growth. Even excluding energy, US profits and revenues are declining and are not being helped by a strong dollar, which is up 9.5% year-to-date on a trade-weighted basis against a basket of other currencies.<sup>81</sup>

It is tempting to believe that buyback activity will slow when the Fed markedly raises interest rates. However, profit margins were already falling before the Fed ended QE and a continuing strong dollar, coupled with further rate rises, will likely boost the dollar even more, putting downward pressure on already weak US corporate profits. At this point it's probably good to remind ourselves that profits and the cash derived from true profits (those reported under GAAP principles<sup>82</sup>) drive stock market prices. The relationship between interest rates and earnings ultimately affect equity prices (rising rates negatively impact market prices only if greater than the effect of rising profits<sup>83</sup>). Whilst the market was right in believing in a tightening of rates, US corporates are in the midst of a “profits recession” and this combination does not bode well for equity markets overall.

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<sup>78</sup> Goldman Sachs, June 2015, David Kostin, <http://www.zerohedge.com/news/2015-06-01/almost-every-measure-stocks-are-overvalued-warns-goldman-after-slamming-corporate-bu>

<sup>79</sup> Larry Summers Blog, October 2015, <http://larrysummers.com/category/blog/>

<sup>80</sup> FT Alphaville Blog, November 2015, Wolf, <http://ftalphaville.ft.com/2015/11/19/2145436/how-information-technology-is-shrinking-the-pie/>

<sup>81</sup> Federal Reserve Bank of St Louis, November 20105, <https://research.stlouisfed.org/fred2/series/DTWEXM#>

<sup>82</sup> NY Times, October 2015, [http://www.nytimes.com/2015/11/01/business/valeant-shows-the-perils-of-fantasy-numbers.html?\\_r=0](http://www.nytimes.com/2015/11/01/business/valeant-shows-the-perils-of-fantasy-numbers.html?_r=0)

<sup>83</sup> Richard Bernstein Advisors, November 2015, <http://rbadvisors.com/>

In the meantime, with credit still abundant, there are easier ways to boost asset prices. However, does returning cash to shareholders in the form of a buyback reflect a managements' failure to find value-creating investments within the business? Does engaging in share repurchases send a negative (not positive) signal to the market? Many previously innovative companies such as Hewlett-Packard, Motorola and Blackberry, for example, have used their profits (and sometimes more than they earned) to prop up share prices via huge buybacks, only to hit a financial wall. So what will the cyclical behemoths who have been buying back shares in the billions do? Common sense says that they should batten down the hatches, weather the storm and focus on future growth but the likelihood is that, given set short-term earnings targets, they'll continue to buy back shares to meet those targets. That said, if a company is growing steadily, with decent returns on capital, it might be (and sometimes is) almost impossible to reinvest everything earned within the business.

## Intel: An Example of Buybacks Over Investment?

Intel is a company that has regularly engaged in massive buybacks, reducing its share count by 22% over the last 10 years whilst also continuing to invest in the business (Intel expects capital spend to be around US\$10bn in 2016). Over the last decade, Intel has spent over US\$61bn repurchasing stock and US\$75bn on R&D<sup>84</sup>. Over the same period the company distributed 97% of net income to shareholders including 61% in the form of share buybacks.

Having suffered from continuing competition in mobile computing devices and lackluster demand of traditional PCs, two of Intel's divisions are now doing much better. The Data Center Group (DCG) saw revenues grow 12% year-on-year in 2015Q3 and revenues from the smaller "Internet of Things" Group rose 10%. More than offsetting this growth, however, overall revenues declined as Intel still makes most of its money from its mature Client Computing Group (a bit like Pfizer and GEP).

Intel's recent acquisition of Altera for US\$16.7bn aims to improve its position in chip manufacturing for servers within the DGC division. One should bear in mind that Intel's track record on acquisitions isn't a good one, paying US\$7.7bn for McAfee in 2011 (say no more). However, Intel says that Altera's FPGA chip technology will gain share under Intel's wing. Intel tapped the markets for US\$7bn to finance part of the deal, at lower rates than initially offered. The longest portion of the four-part deal saw Intel sell US\$2bn of 30 year securities with a coupon of 4.9%. Brian Krzanich, Intel's CEO said, *"We believe we can add to their architectural capabilities and their Moore's Law capabilities to grow the base business at a faster rate. That was the fundamental first reason (for the deal)."*

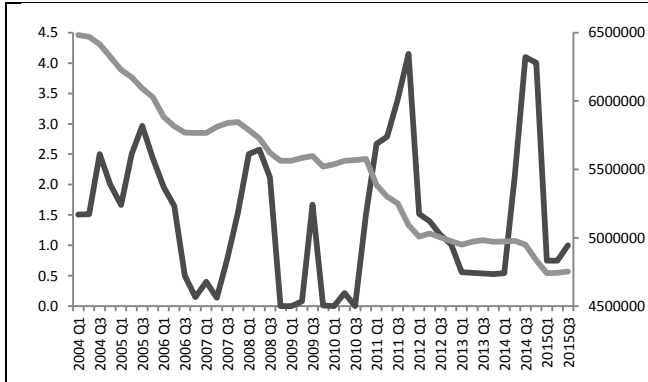
Intel's solid margins (the company expects gross margins of 62% for 2016), means that it generates around US\$10bn of free cash each and every year. Indeed, Intel recently announced that it was increasingly the quarterly dividend by 8% beginning 2016Q1 to US\$1.04 per share. Accompanying the announcement, Stacy Smith CFO, said, *"Our financials show that Intel's transformation is underway, and we're forecasting growth for 2016 . . . The 2016 dividend increase reflects confidence in the strategy and Intel's ongoing commitment to create value and return cash to shareholders."*<sup>85</sup>

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<sup>84</sup> Harvard Business Review, March 2015, <https://hbr.org/2015/03/stock-buybacks-arent-hurting-innovation>

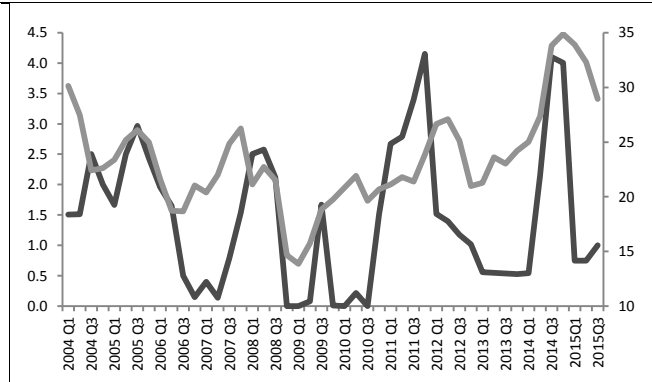
<sup>85</sup> Intel, November 2015, <http://www.intc.com/>

Intel Buybacks & Average Number of Shares (RHS)



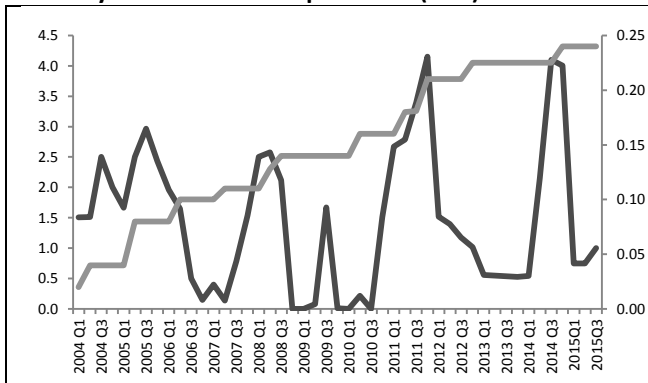
Source: Company Report & Accounts

Intel Buybacks & Average Share Price (RHS)



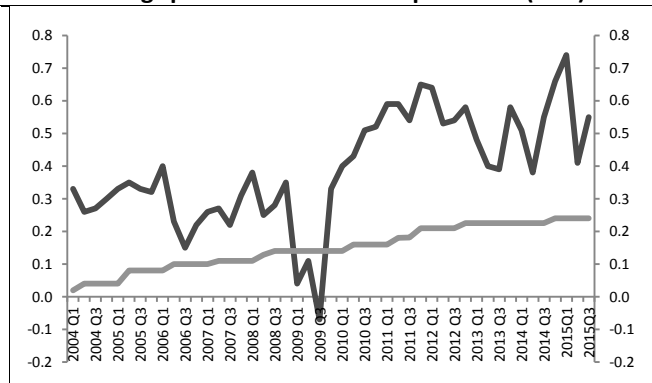
Source: Company Report & Accounts

Intel Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts

Intel Earnings per Share & Dividend per Share (RHS)



Source: Company Report & Accounts

## Pensions, Compounding Returns and the Future for Long-Term Investing

Warren Buffet wrote in his Berkshire Hathaway 2013 letter, *"During the next decade, you will read a lot of news – bad news – about public pension plans. I hope my memo (referencing a letter he wrote to the Chairman of The Washing Post Company about the pitfalls of pension promises and the importance of investment policy) is helpful to you in understanding necessity for prompt remedial action where problems exist."*<sup>86</sup>

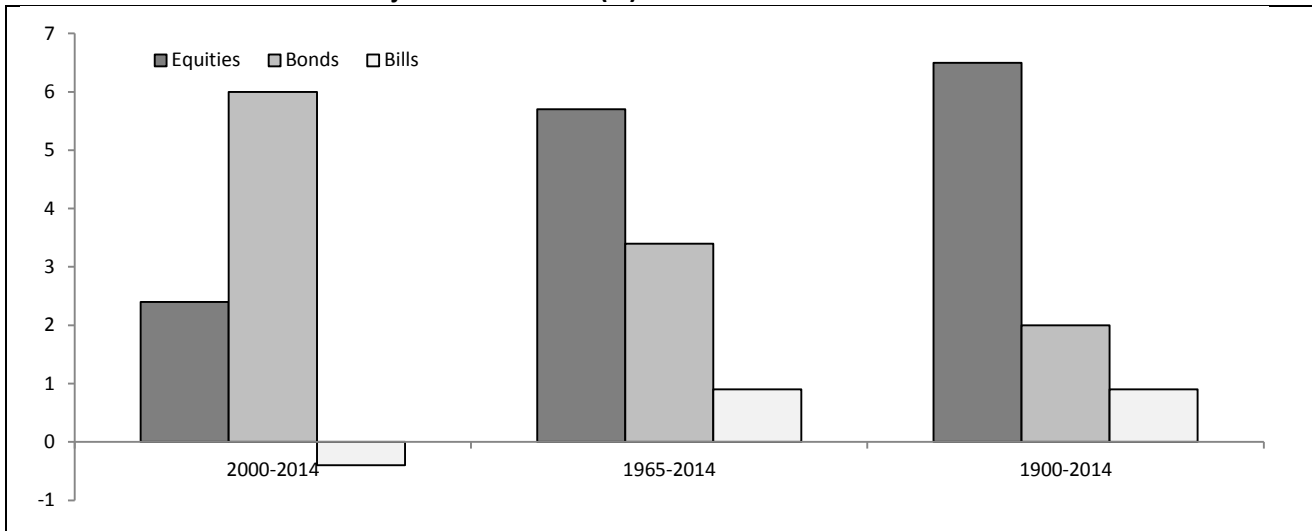
But what might one expect a reasonable investment earn in the future? What to expect from each asset class is, quite obviously, important when deciding how much to invest, in which assets to invest in and how much to spend. A paper published back in 1997 studies the changes in valuation between the starting and ending point of an investment and finds that long-run returns on assets obscure the return that each asset has made. This means that both absolute returns and risk premiums are distorted.<sup>87</sup>

<sup>86</sup> Berkshire Hathaway Annual Letter 2013, <http://www.berkshirehathaway.com/letters/2013ltr.pdf>

<sup>87</sup> What Rate of Return Can You Reasonably Expect . . . or What Can the Long Run Tell Us about the Short Run?, April 1997, Bernstein, <http://www.cfapubs.org/doi/pdf/10.2469/faj.v53.n2.2068>



Annualised Real Returns on Major Asset Classes (%)



Source: Dimson, Marsh & Staunton<sup>88</sup>

Pension accounting is fraught with difficulty. The accuracy of multiple assumptions to be made about the discount rate, expected rate of inflation, salary growth, changing demographics and life expectancy will have a major effect on plan finances and funding levels. But many state pension funds in the US remain final salary schemes and, on average, assume a 7.69% nominal return<sup>89</sup>. Based on past performance, that figure might look achievable as, over the last 25 years, the median public pension annualised investment return has been 8.5%. However, we know that returns come from two sources: capital gains and income. 25 years ago, long-dated Treasury bonds yielded over 8%, which compares to a little over 2% today. Equity income yields are also far lower with the yield on the S&P500 falling from 3.7% 25 years ago to around 2% today. That said, yields move in the opposite direction to prices, implying that capital gains from rising equity values have been highly beneficial to these funds.

Looking ahead, most commentators seem to agree that returns are likely to be far lower. A study entitled, "The 5 Percent Solution"<sup>90</sup> argues that by assuming annual growth in dividends and profits of 1.5% for a portfolio split 60-40 between equities and bonds, one might earn a return of 2.4%. Adding an assumed inflation rate of 2%, a nominal return of 4.4% certainly doesn't meet assumptions for pension funding requirements. So, if you are a pension fund manager with, say, US\$1bn to invest over the next 40 years, compounding on a nominal basis by 8% would return US\$21.7bn (and by 6% US\$10.3bn and by 4% US\$4.8bn). As mentioned above, nominal returns are fine but the reality is that inflation will erode longer-term returns. The same US\$1bn invested over 40 years (assuming a 2% inflation rate) compounded by 8% (6% real) would produce US\$10.3bn, and by 6% (4% real) US\$4.8bn and by 4% (2% real) US\$2.2bn. So US\$1bn in 40 years' time could be worth just US\$2.2bn, or maybe even less!<sup>91</sup>

<sup>88</sup> Dimson, Marsh & Staunton, 2015 <http://www.investing.dk/documents/10655/157815/Credit+Suisse/0c0ceeb5-c5af-464d-be00-fb1378cb0412>

<sup>89</sup> Public Pension Plan Investment Return Assumptions, NASRA, May 2015, <http://www.nasra.org/content.asp?admin=Y&contentid=120>

<sup>90</sup> The 5 Percent Solution, AQR, May 2012, <https://www.aqr.com/~media/files/.../ii-the-five-percent-solution.pdf>

<sup>91</sup> John Mauldin, <http://www.mauldineconomics.com/>



A study focused on the 100 largest US public companies with defined benefit pension plans found that those plans with the highest equity exposure were the biggest beneficiaries in 2013 but this changed during 2014<sup>92</sup>, *"Pension plan liabilities skyrocketed because of plummeting discount rates . . . a 75 basis point cut to 4% overwhelmed a robust 10.9% investment gain. In reversal of 2013, plans with highest proportion of fixed income allocation saw a 14.5% average return. Those plan sponsors that heavily de-risked and invested in LDI strategies at the beginning of 2014 had a "banner" year . . . investment allocations made by plan sponsors and their advisors showed a continued trend toward implementing LDI strategies during 2014."* Thirty seven of the top 100 corporate pension funds had funding ratios below 80% at the end of 2014. Most recent quarterly data shows returns fell 2.5% for 2015Q3, largely driven by investment losses in August and September coupled with lower discount rates used to value liabilities. Yields for longer-term bonds have declined which has increased pension plan's projected liabilities, with discount rates falling to 4.19% in September, down more than two percentage points since the financial crisis. Interestingly (buried later in the study), the expected rates of return on plan assets was, on average, 7.3% for 2014 which compared to 7.4% for 2013, 7.5% for 2012, 7.8% for 2011, 8% for 2010 and 9.4% back in 2000.

So what's happening? There seems to be a circular investment theme with pension plan sponsors and their advisors investing in large corporate bond issues, with the corporates themselves using that cash to buy back their own stock, thus ramping up the share price, resulting (hopefully) in a capital return improvement for those pension funds. This cannot possibly continue forever.

### **Delta Air Lines: An Example of Buybacks Over an Underfunded Pension Liability**

A brief history of Delta Air Lines: Delta plunged into bankruptcy in September 2005 due to a catalogue of management errors including, for example, an undisciplined pursuit to purchase every new large aircraft touted by manufacturers, high costs and stiff competition in the budget travel market and a more-than-generous labour agreement that saw some of its most senior pilots paid more than US\$300k a year. After re-emerging from bankruptcy, Delta has put in place a more rigorous approach to profitability via aggressive cost cutting and a well-timed merger with Northwest.

In May 2014, the management of Delta Air Lines approved a US\$2bn share buyback programme (the announcement of which accompanied a 50% increase in the quarterly dividend). It was expected that the buyback would be completed by the end of 2016 at the latest. At the time, Daniel Carp, Chairman said, *"the company is furthering its commitment to its shareholders by . . . providing a flexible vehicle to return cash through the US\$2bn stock buyback program."* He added, that Delta *"deployed its strong cash flows to drive value for owners by strengthening its balance sheet through debts and pension reductions."*<sup>93</sup>

Whilst the Government has granted relief for companies to improve pension funding, those with severely underfunded obligations must take more urgent action or suffer the penalty of paying higher premiums to the Federal Pension Benefit Guaranty Corporation in order to insure their programmes. This has meant that some companies have started to buy into more riskier assets. Others have decided to make much larger annual contributions. Some corporations, including Delta, are doing both. At the end of 2014, Delta Air Lines' pension funding was just 42.8% (American Airlines was 62.4%).

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<sup>92</sup> Milliman, Corporate Pension Funding Study, The 100 Largest US Public Companies with Defined Pension Plans in the US, March 2015, <http://us.milliman.com/PFS/>

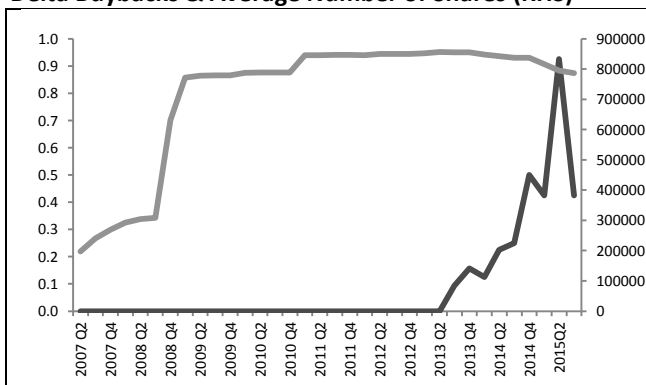
<sup>93</sup> Delta Air Lines, May 2014, <http://news.delta.com/delta-announces-plan-return-additional-275-billion-shareholders-through-2016>

To combat this underfunding, Delta is putting US\$1bn a year into its pension pot through to 2020 which should (hopefully) mean it reaches an 80% funded level within the next five years. Notably, just 12% of the pot is invested in fixed income assets, 21% in equities, with the rest invested in “other investments”.

However, Delta has been buying back shares at a far faster pace than originally targetted and also in larger quantities than cash put into the underfunded pension pot. The company began 2015 having spent US\$850mn of the US\$2bn authorisation. In May this year, Delta laid out a new capital allocation plan revealing that it was going to complete the US\$2bn buyback authorisation by the end of the second quarter - in other words, a year and a half earlier than anticipated. It also unveiled an even larger US\$5bn programme to repurchase as much as 15% of outstanding shares by the end of 2017. We note that Delta has spent US\$1.875bn on buybacks during the first nine months of 2015, more than triple the amount it spent during the same period a year earlier, no doubt which will be justified by the low price of oil boosting profits.

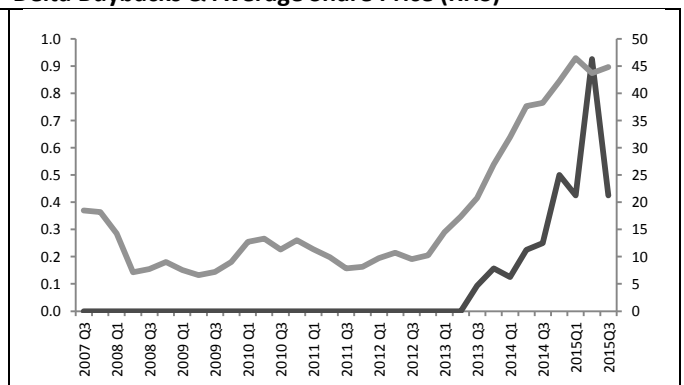
Whilst the company believes that its stock is cheap, a continuing strong US Dollar coupled with weak demand in some international markets has put pressure on revenues. Delta has said that it will continue to take advantage of the flexibility afforded to airlines as part of the Pension Protection Act<sup>94</sup> and has until 2031 to fully fund its pension plans. However, everyone knows that revenues and the resulting cash flows of airline stocks are highly cyclical<sup>95</sup> and, whilst we applaud Delta management’s attempts to rectify its underfunded pension liability, we wonder why it feels the need to splash the cash on buybacks just now?

**Delta Buybacks & Average Number of Shares (RHS)**



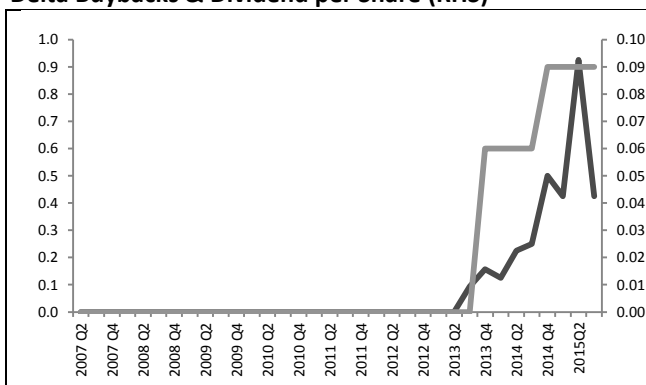
Source: Company Report & Accounts

**Delta Buybacks & Average Share Price (RHS)**



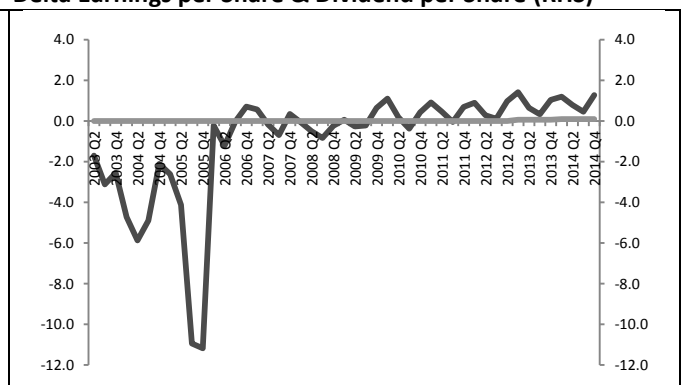
Source: Company Report & Accounts

**Delta Buybacks & Dividend per Share (RHS)**



Source: Company Report & Accounts

**Delta Earnings per Share & Dividend per Share (RHS)**



Source: Company Report & Accounts

<sup>94</sup> US Department of Labor, Pension Protection Act, 2006, <http://www.dol.gov/EBSA/pensionreform.html>

<sup>95</sup> Cyclical Dynamics of Airline Industry Earnings, November 2013, Pierson & Sterman, <http://onlinelibrary.wiley.com/doi/10.1002/sdr.1501/abstract>

## Buyers & Sellers, Activist Investors and Propaganda

Up until the turn of the millennium, corporates were generally share issuers but, since the buyback train really got going again in 2011, corporates have become by far the largest purchasers of equities in the US. It is estimated that around 25% of non-electronic trades (i.e. excluding high frequency trading that now makes up the bulk of the market) involve corporates buying back their own shares. Nigel Wilson, CEO of Legal & General, a large UK-based passive investor owning nearly 5% of each and every company in the FTSE100, has commented, *"Companies with innovative intellectual property are also often just as innovative in financial engineering and tax management . . . The share buy back does not generate real economic value, although of course it does generate personal financial wealth for any remunerated on a per-share metric. This seems fundamentally wrong."*<sup>96</sup>

Now, whilst we agree with Mr Wilson, there may be a rather different reason for his lack of enthusiasm for buybacks. **Index funds are, by their very nature, being "forced to trade" due to buybacks.** For example, say that Mr Wilson's fund requires him to own 5% of every stock in the FTSE100 and due to a buyback a company's share count is reduced by 10%, the result is that the funds' ownership of that particular stock automatically increases to 5.55%. Now, whilst Mr Buffett might find that wholly acceptable, passive investors such as Mr Wilson are being forced to enter the marketplace - which obviously comes at a cost - to balance the fund.

A study entitled, "The Role of Institutional Investors in Open-Market Share Repurchase Programs"<sup>97</sup> uses a large sample of transaction-level institutional trading data on actual repurchases made and finds that, *"trading prior to an open market repurchase (OMR) announcement has significant predictive power for the magnitude of the abnormal return around the announcement; institutional trading immediately after an OMR has significant predictive power for the firm's subsequent stock return performance (in other words, the larger the net buying by institutions, the better the subsequent long-run return); institutions are able to realise significant abnormal profits (net of commissions and trading costs) by trading in the equity of firms undergoing OMRs; and institutional trading immediately after an OMR announcement has significant predictive power for the actual repurchases made by the firm."*

In May 2013, S&P Dow Jones unveiled its S&P500 Buyback Index which tracks the performance of S&P500 constituents with the largest stock buyback programmes. The methodology behind the index is simple and basically measures the performance of the top 100 stocks with the highest buyback ratio (i.e. total cash spent of buybacks in the trailing year versus a company's market cap) during the last 12 months. S&P stated, *"Similar to dividends, buybacks can serve as a way to return value to shareholders. However, unlike dividends, buybacks are not tied to a pre-announced policy and they can give management leeway in terms of timing, hopefully to further enhance shareholder value. Historically, companies that have returned value to shareholders through buybacks have generally outperformed the overall market . . . Buybacks can be seen as an important indicator of corporate health. Much like dividends, corporate buybacks is another method that companies use to return value back to shareholders. In 2012, S&P 500 companies bought back US\$399bn worth of stock, and continue to hold record amounts of cash."* Funnily enough, so far this year the S&P500 Buyback Index is lagging the return of the overall S&P500 by over three percentage points, having lost 3.21% year-to-date compared to the market which is up by 0.21%.

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<sup>96</sup> Legal & General, Nigel Wilson's blog, <http://www.legalandgeneral.com/your-life/nigels-blog/>

<sup>97</sup> The Role of Institutional Investors in Open-Market Share Repurchase Programs, December 2014, Chemmanur & Li, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2543397](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2543397)

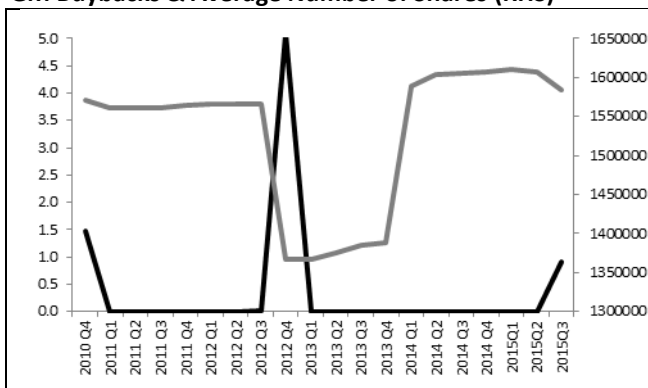
Whilst some companies may have seen robust returns on their buybacks historically, many corporates are apparently now getting “less bang for their buck”. Median buyback return on investment (ROI) fell to 14.9%, down almost 10 percentage points from 24.2% a year ago<sup>98</sup>. Whilst we do not disagree with this aggregate figure, the measure is clearly a lagging indicator. Poor buyback timing typically plagues cyclical industries who often ramp up repurchases when shares are expensive and forgo them when cheap. In other words, when buyback ROI looks good, it may be a signal to sell, and vice-versa.

## Ford & GM: Examples of Activist-Led Buybacks

In March 2015, following discussions with a group of hedge funds who own roughly 2% of total stock, GM quelled a potential proxy fight by announcing that it would embark on a US\$5bn share buyback to be completed by the end of 2016. Former GM adviser, Harry Wilson (in 2009, Wilson was part of the team that the Obama administration hired to structure the bailout of GM) had joined sides with the group of hedge funds calling for a larger US\$8bn buyback and “angling” to join the board. In 2010, GM re-emerged from bankruptcy protection and the US government finally sold off all of its holding in December 2013 but only after taxpayers had footed a US\$11.2bn bill.

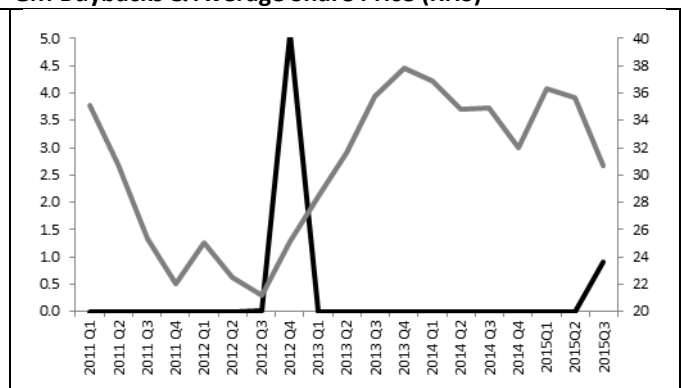
Regarding the buyback, GM’s CEO Marry Barra, said, “We were on the path to do this anyway.” Around US\$9bn of the company’s then US\$25bn cash hoard had been earmarked for investment during 2015 but GM faces uncertainties going forward, including the negotiation of new labour contracts with the UAW and a possible fine from the Justice Department.

GM Buybacks & Average Number of Shares (RHS)



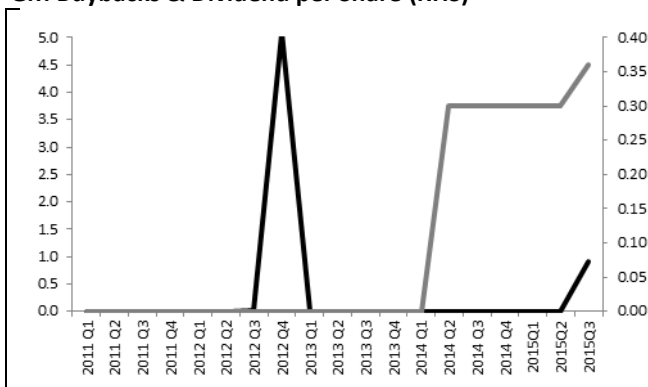
Source: Company Report & Accounts

GM Buybacks & Average Share Price (RHS)



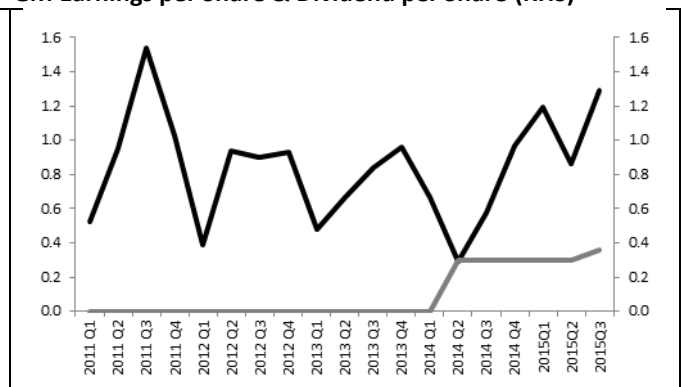
Source: Company Report & Accounts

GM Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts

GM Earnings per Share & Dividend per Share (RHS)



Source: Company Report & Accounts

<sup>98</sup> Institutional Investor, October 2015, <http://www.cenveomobile.com/i/581779-oct-2015/57>

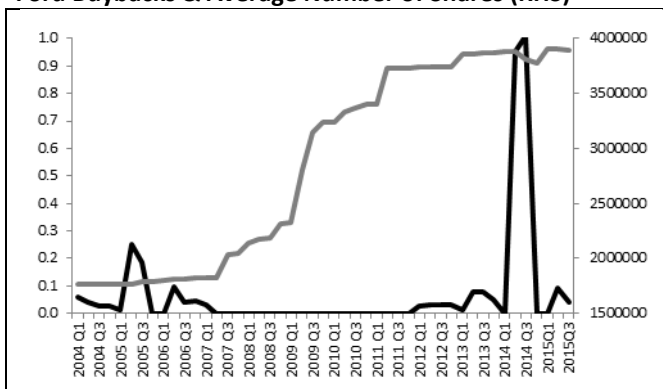
GM's most recent results for the first nine months of 2015 saw vehicle sales of 7.2 million units, with record sales in China and strong gains in the US. Truck sales in North America were up 16% on the back of the continued low price of oil. GM ended the period with US\$34bn of cash and equivalents, having returned US\$1.6bn in dividends so far during 2015 and spending US\$2.9bn buying back shares. Bear in mind that GM repurchased over US\$20bn worth of stock between 1986 and 2002. Bob Lutz, a veteran auto executive who has worked in many senior positions for GM, Ford and Chrysler over the years, commented, *"stock buybacks are always a harbinger of the next downturn . . . in almost all cases, you regret it later."*<sup>99</sup>

Whilst GM is currently "firing on all cylinders", the automotive industry remains highly cyclical but everyone in Detroit seems to forget that during the good times they must prepare for the next downturn. Peaking at just above 18mn vehicle sales this year, easy credit can only take the industry so far. Characterised by intense competition and major technological change, GM will need all the financial resources it can muster to produce vehicles that buyers will want in the future at prices they are willing to pay. Buying back US\$5bn worth of stock won't likely help during the next downturn.

We are having a mad déjà vu with regards a similar situation at Ford back in 2000 and the pressure from its shareholders to the company's cash riches. As a quick recap: Ford was flush with US\$25bn and was under constant pressure to do something with the money. Management stressed that it would need the hoard to carry it through the next automotive downturn (it being a highly cyclical business), but management bowed to shareholder activism and said it would return US\$10bn via a complicated stock swap and repurchase plan (which meant that it ended up returning just US\$5.7bn).

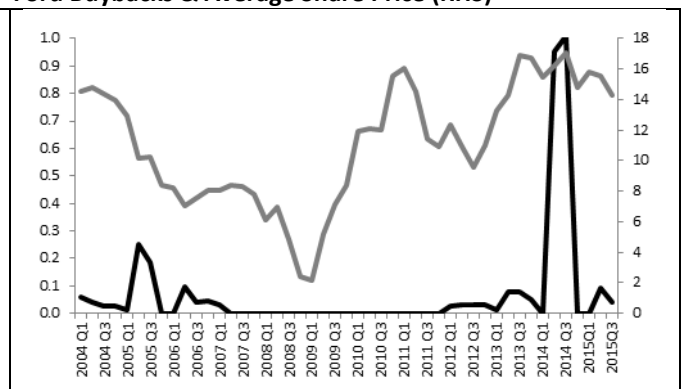
Ford then launched a surprise second buyback. The problem was that this came in the midst of the Firestone tyre debacle and Ford, not only dealing with a serious image problem, was also facing an unforeseen damage liability. When Ford launched the second buyback the share price stood at US\$26. On the back of multiple management blunders – and, of course, the next automotive downturn – the share price fell to US\$6.76 in 2003 then to a low of US\$1.42 in 2008.

**Ford Buybacks & Average Number of Shares (RHS)**



Source: Company Report & Accounts

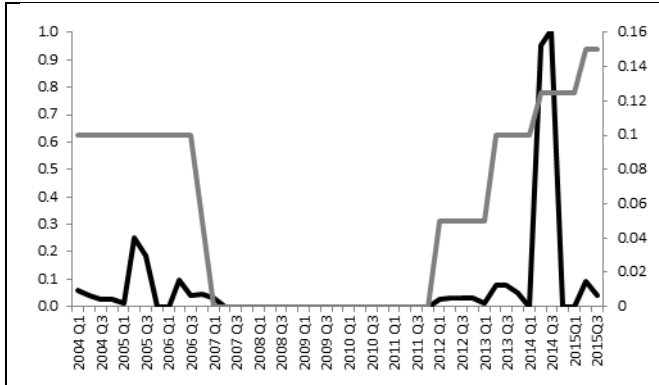
**Ford Buybacks & Average Share Price (RHS)**



Source: Company Report & Accounts

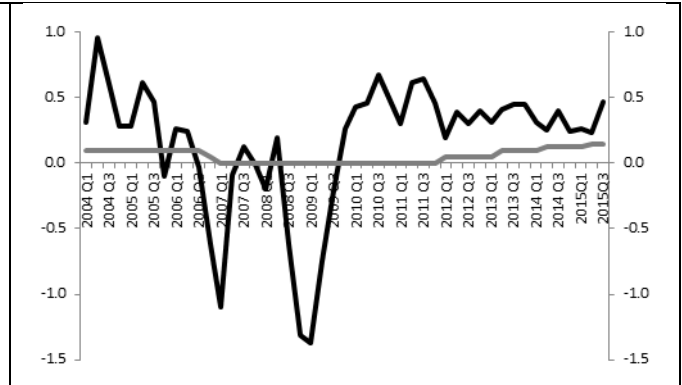
<sup>99</sup> Bob Lutz, March 2015, <https://twitter.com/zerohedge/status/576174607599845376>

Ford Buybacks & Dividend per Share (RHS)



Source: Company Report & Accounts

Ford Earnings per Share & Dividend per Share (RHS)



Source: Company Report & Accounts

## The Value of Share Buybacks, the Effects on Performance Metrics and Empirical Evidence

Under current accounting rules, when a company buys back shares they disappear from the balance sheet – along with the cash – and this obviously distorts measures of performance. If a company hands out a load of stock options, diluting shareholders by, say 10%, but then buys back those shares you might think that no-one gets hurt but the truth is that the cash does not find its way back to shareholders but into the pocket of senior management (and some employees as a substitute for salary), that would otherwise be required to be expensed. Now that share buybacks have become prevalent, how should corporates accurately account for them? Should managements be required to justify a buyback with reference to the price paid and the implied return and compare this investment to an alternative? Should repurchased shares be treated as if they were an investment and reflected as an asset on the balance sheet? Should the return on the buyback investment also be reflected in the profit and loss account? We say yes, yes and yes!

If you're interested in the mathematical mechanics of share buyback valuation, an excellent paper entitled "The Value of Share Buybacks"<sup>100</sup> might likely tickle your fancy (be aware, it's heavy going). The core conclusion (shown theoretically and empirically) is that the so-called substitution hypothesis as discussed in the often-quoted paper "Dividends, Share Repurchases, and the Substitution Hypothesis"<sup>101</sup> is a fallacy. We couldn't agree more.

Another damning study, "The Real Effects of Share Repurchases"<sup>102</sup> finds that *"the probability of share repurchases that increase EPS is sharply higher for firms that would have just missed the EPS forecast in the absence of the repurchase, when compared to firms that "just beat" the EPS forecast. EPS-motivated repurchases are associated with reductions in employment and investment, and a decrease in financial slack in the four quarters following the repurchase. Our evidence suggests that managers are willing to trade-off investments and employment for stock repurchases that allow them to meet analyst EPS forecasts."*

<sup>100</sup> The Value of Share Buybacks, Magnus Erik Hvass Pedersen, August 2014, [www.hvass-labs.org/people/magnus/publications/pedersen2012share-buyback.pdf](http://www.hvass-labs.org/people/magnus/publications/pedersen2012share-buyback.pdf)

<sup>101</sup> Dividends, Share Repurchases, and the Substitution Hypothesis, April 2000, Grullon & Michaely, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2227300](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2227300)

<sup>102</sup> The Real Effects of Share Repurchases, September 2013, Almeida, Fos & Kronlund, <http://business.illinois.edu/halmeida/repo.pdf>



A recent study entitled, “Earnings Predictability Following Equity Issues and Buyback Announcements”<sup>103</sup> finds evidence that *“if managers use non-public (inside) information to time a firm’s corporate actions, it is likely that equity issues will precede bad earnings while buyback announcements will precede good earnings.”* Another paper entitled, “Evidence for the Existence of Downward Real Earnings Management”<sup>104</sup> seeks to “establish the existence of downward Real Earnings Management (REM) by investigating several corporate events in which managers have incentives to temporarily deflate market valuations” and finds *“downward REM before share repurchases, MBOs and CEO option awards.”*

One should never forget that the value of a company for any long-term (or so-called “eternal”) shareholder is the present value of future earnings which will be paid out as dividends (plus any excess cash on hand). Being a long-term investor inherently means that you should never realise any capital gain (or loss) on your investment. As we know, whether for dividends or share repurchases, both do not reflect any creation of value. They both may lift the market’s expectations of a company’s future cash flows but do not directly affect the cash flow generation of the firm themselves. However, as one might expect, changing the proportion of dividends paid as share buybacks (or vice-versa) has a material impact on a company’s valuation multiples.

## IBM: An Example to Show the Effects of Buybacks on Performance Metrics

One cannot fail to notice that IBM seems to be consuming itself with the number of shares outstanding having fallen by 39% over the last 10 years. Dividend growth over the same period has been a massive 444% but dividend payments have been dwarfed by repurchase spending. We note that the company’s annual CapEx and R&D has been about flat at US\$10bn for 10 years. IBM spokesman, Michael Fay has said, *“Our capital allocation model drives reinvestment in the business through R&D, capital expenditures, and acquisitions, it pays the dividend every quarter since 1916, and it returns excess capital to shareholders through share repurchase. We can do both, invest and return cash, and we do.”*

IBM came back from the brink over 20 years ago and had successfully remodelled itself by making value-added acquisitions, almost exclusively for cash and using debt wisely, whilst also aggressively buying back shares. Mr Buffett, IBM’s largest shareholder, has made a lot of money by holding the stock over a period when profit margins were falling whilst it struggled to find a new business model. However, IBM kept its largest shareholder happy by buying back more than US\$122bn worth of stock over the last 10 years, accounting for around 90% of profits. Upon his investment in 2011, Mr Buffett said, *“I don’t think there’s any company that’s done a better job of laying out where they’re going to go and then having gone there. They have laid out a road map and I should have paid more attention to it five years ago, where they were going to go in five years ending in 2010. Now they’ve laid out another road map for 2015.”*

What should a long-term investor, such as Berkshire Hathaway, want from IBM? Mr Buffett said back in 2012<sup>105</sup> that he would *“wish for IBM’s stock price to languish throughout the five years.”* Funnily enough, that’s exactly what has happened. Most recent results saw a 14<sup>th</sup> straight quarterly decline in revenues and adjusted EPS down 9%. Revenues seem to be in terminal decline with several broken promises made regarding management reaching EPS targets, which have not materialised.

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<sup>103</sup> Earnings Predictability Following Equity Issues and Buyback Announcements, July 2015, Amini & Singal, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2589966](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2589966)

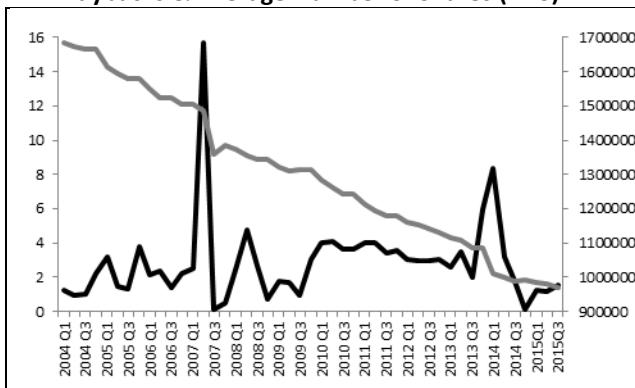
<sup>104</sup> Evidence for the Existence of Downward Real Earnings Management, August 2015, Hasan & Li, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2647317](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2647317)

<sup>105</sup> Berkshire Hathaway Annual Letter, 2012, <http://www.berkshirehathaway.com/letters/2011ltr.pdf>



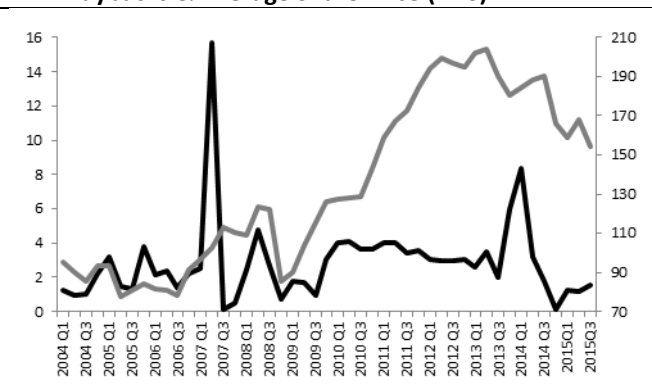
Around the same time that Mr Buffett first invested in IBM back in 2011, Berkshire Hathaway also announced that it too would embark on a share buyback programme, which was ultimately short-lived. Mr Buffett stated that he favoured repurchases when two conditions were met: *“a company has ample funds to take care of the operational and liquidity needs of its business; and its stock is selling at a material discount to the company’s intrinsic business value, conservatively calculated.”* However, Mr Buffett has witnessed many bouts of share buybacks that failed his second test, saying, *“Many CEOs never stop believing their stock is cheap.”* Berkshire Hathaway hopes that when a company repurchases stock, two events might happen: first, that earnings will increase at a good pace for a long time and, second, that the stock underperforms in the market for a long time too. What’s the logic? If you are going to be a net buyer of a stock in the future, either directly or indirectly (when a company repurchases shares), you are hurt when share prices rise and you benefit most when the share price is depressed. That said, we believe that any investment should be determined by expected future earnings, resulting cash flow generation and cash shareholder distributions.

**IBM Buybacks & Average Number of Shares (RHS)**



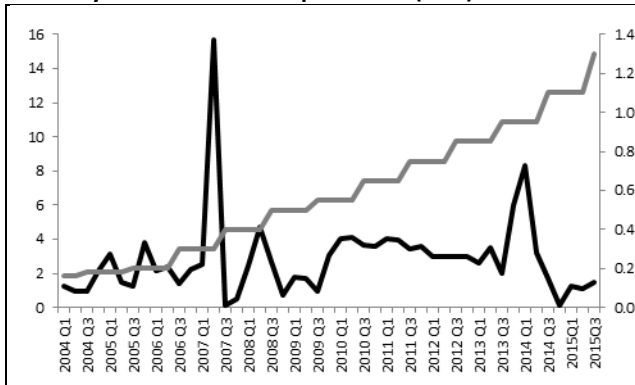
Source: Company Report & Accounts

**IBM Buybacks & Average Share Price (RHS)**



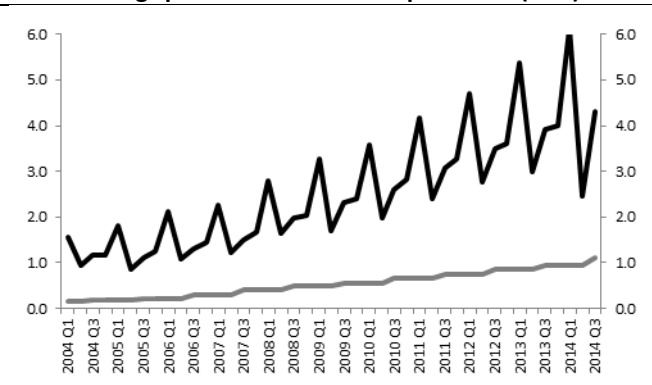
Source: Company Report & Accounts

**IBM Buybacks & Dividend per Share (RHS)**



Source: Company Report & Accounts

**IBM Earnings per Share & Dividend per Share (RHS)**



Source: Company Report & Accounts

## Conclusion: Corporate Cannibalism

Low rates have encouraged corporates and many other investors to increase risk appetite in their search for yield. From junk-bond issuance to emerging market corporate debt, cheap money has clearly been driving markets higher. Sometimes referred to as “zaitech”<sup>106</sup> whereby all grand experiments in financial engineering ultimately come unstuck, we believe that debt-fuelled growth of corporates buying back their own stock creates an illusion of value. The reality is that shareholders simply end up owning a smaller proportion of a more highly indebted company. The day of reckoning may not too be far away.

In this note I’ve referenced many rather clever people who (mostly) agree that manipulation of the market using share buybacks has to stop. All the information contained in this note is publicly and widely available. If you would like data and/or analysis for any stock not mentioned in this publication, please get in touch. As ever, I’d very much welcome any comments, suggestions or constructive criticism regarding anything included in this note. If you would like any further explanation of commentary contained within this document, please let me know. Lastly, if you would like to reproduce any part of this publication, please contact me before doing so. Many thanks. Zee.

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