The Importance of Capital Allocation For Shareholder Returns

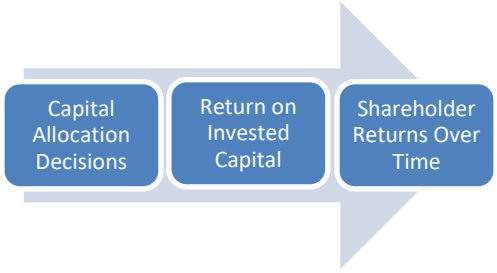
By: Dan Erdle

Introduction

A business's Return on Invested Capital will be the primary driver of a shareholder's returns if the investment is held for an extended period of time. In addition to industry dynamics and firm specific characteristics, return on invested capital is dictated by the investment decisions of management. These decisions, where to put money to work, and just as importantly where not to, drive the long term value of the firm**.**

Unfortunately, the capital allocation decisions by many businesses leave much to be desired. Simply too many CEO's do not approach their business with a capital allocator's mindset. A CEO with a capital allocator's mindset approaches decisions with the intent to maximize the use of each incremental dollar in the business. **A good capital allocator thinks of every decision as an investment decision—focusing on maximizing the rate of return of the company by allocating capital to the best use amongst the alternatives available**. However, for a variety of reasons many businesses squander the money entrusted to them by shareholders.

Successful capital allocation means converting inputs, first and foremost money, into something more valuable than they would be otherwise. It follows then that the core test of success for a business is whether $1 put to use in the company generates value of more than $1 in the marketplace**.** This occurs only when a business **earns a return on investment in excess of the opportunity cost of capital.** As a result, the degree to which management makes disciplined capital allocation decisions will drive returns on invested capital which in turn will drive shareholder wealth over time.



Importance of Capital Allocation Decisions

Capital Allocation is of vital importance because of its ability to create and destroy the value of the company. Value is created when money is put to use that produces *returns in excess of its opportunity cost*. **The greater the spread between returns and cost, the greater the length of time that this exists, and the greater the amount of money able to be invested, the more value that is created.**

The amount of time spent by investors assessing the capital allocation performance of the managers of their businesses is incredibly low in comparison to its importance. Investors spend a tremendous amount of time asking questions such as: what will GDP growth be next year? How will some political event effect returns? Where will interest rates go? While those are all important questions, they pale in comparison to the task of finding a manager who can successfully produce earnings from a business, and reinvest those earnings profitably over long periods of time.

Value Creation = Return on Invested Capital > Opportunity Cost of Capital

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There are 3 main sources of capital for businesses. Funds can be obtained from the issuance of debt, from the issuance of equity, and from internally generated funds. In the United States around 90% of the capital in the average business comes from internally generated funds. Almost by definition, a great business produces more funds than are necessary to maintain its current position. What to do with this capital is senior management's most fundamental responsibility. This is no small task. After ten years on the job, a CEO whose company annually only retains earnings equal to 10% of net worth will still have been responsible for the deployment of more than 60% of all the capital at work in the business. Capital allocation is the place senior management has the largest impact on shareholder returns.

A company that is allocating its resources wisely will ultimately prevail over a competitor that is allocating its resources foolishly. **Unless an input is going to its best and highest use, it is underperforming relative to its opportunity cost.** This is either destroying value or leaving money on the table through suboptimal allocation.

Therefore, no determination of the intrinsic value of a business can ignore the effects of management's capital allocation decisions on the level of ROIC and how much capital is invested at that ROIC. Some companies will turn retained dollars into fifty-cent pieces, others into two-dollar bills. As Warren Buffett says, "an outside investor stands by helplessly as

management reinvests his share of the company's earnings. If a CEO can be expected to do this job well, the reinvestment prospects add to the company's current value; if the CEO's talents or motives are suspect, today's value must be discounted. The difference in outcome can be huge."

Capital Allocation Generally

Strong capital allocation seeks to answer the question: **where do I put my next dollar to work?** The goal of course is to find the highest returning use for each incremental dollar.

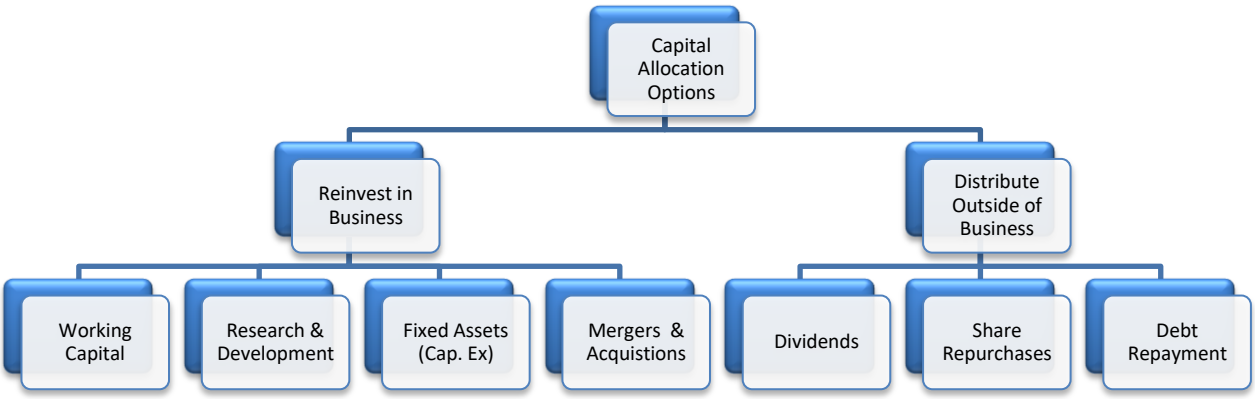
Unfortunately, most companies allocate money using the Johnny Appleseed approach. They sprinkle a little capital over here and a little over there and hope something grows somewhere. The actual result is a netting out effect in which the good ideas are offset by nonproductive ones. In contrast, great capital allocators approach their job with laser focus. They fully fund their best idea before dropping down to the next and then the next and so on. The highest returning opportunities receive large amounts capital and many potential but low returning investments receive none.

An incredibly relevant concept to capital allocation is the **Pareto principle**, known more commonly as the 80/20 rule. It says that 80% of your outcome will come from 20% of your inputs. In other words, we do not live in a world that produces 1:1 results. We must concentrate our effort on the small number of relevant factors that will produce disproportionate outcomes. The takeaway is straightforward—some investments will produce large returns, others will produce negligible ones. The job of a skilled capital allocator is to get as much money into the former and avoid the latter.

Capital Allocation Options

In allocating capital, companies face three major decision points. The first is to retain capital or pay it out. Secondly, if they decide to pay it out, they must decide whether they do so in the form of dividends or share buybacks or perhaps even pay down debt. Finally, if they instead decide to retain the capital, they must decide how to put the money to use—in working capital, research and development, capital expenditures, or in acquisitions.

A company should retain its earnings, or otherwise access capital, if it can invest at a rate of return that is higher than the cost of capital. On the other hand, if shareholders can earn a higher rate of return on capital than the company can, even if by investing in the market itself, the company should give the money back to shareholders.



Reinvesting in the Business

1) Working Capital

Working capital is defined as current assets minus non-interest bearing current liabilities. It is the capital a company requires to run its day to day operations. Working capital consists of around 1/4 of total assets for the average U.S. company.

Effective working capital management has been associated with high returns on invested capital. The cash conversion cycle, a calculation of how long it takes a company to collect on the sale of inventory, is the standard way to analyze working capital efficiency. A lower cash conversion cycle is positive because it means the company is collecting money faster. Academic research shows a strong relationship between a lower CCC and a higher return on capital within, and across, industries.

2) Research and Development

Research and Development is expensed on the income statement rather than placed on the balance sheet, even though its expected benefits are likely to last for extended periods of time. This is an instance where accounting does not fully reflect reality.

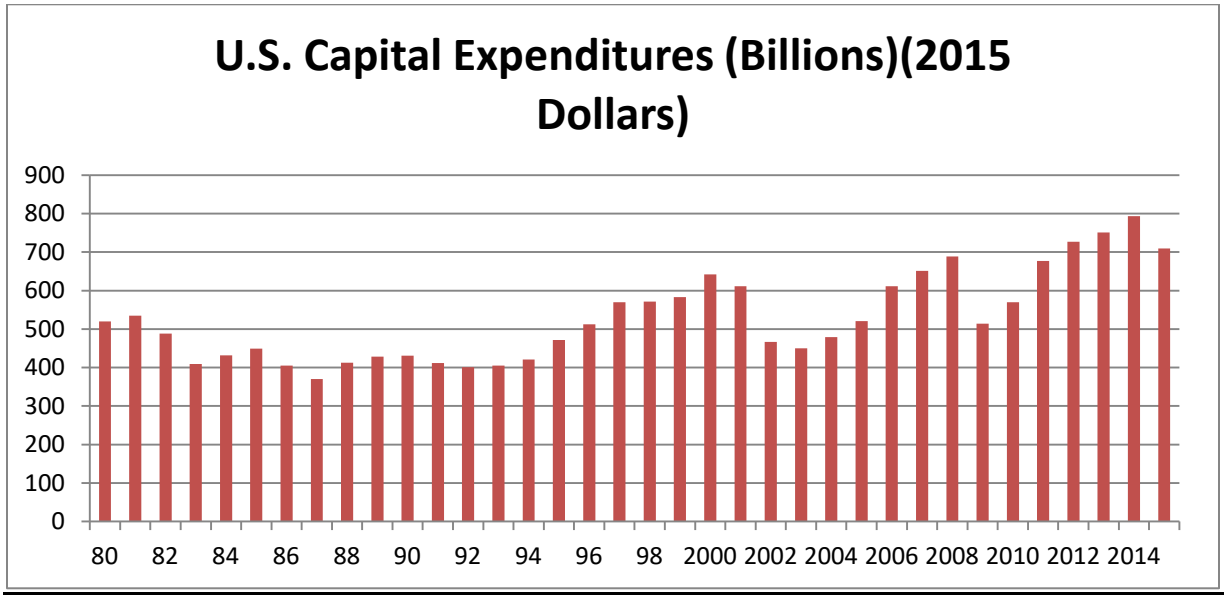
In recent years R&D spending in the U.S. has averaged a little over 2% of sales. However, this is higher for businesses dependent on R&D. The industries that spend the most include information technology, healthcare, materials, and aerospace and defense.

Academic research assessing R&D spending of American businesses has come back mixed. Some studies have been pessimistic arguing that the technology companies that are in the bottom one-third of R&D spending as a percentage of sales deliver higher returns to shareholders than those in the top third. This would suggest that as a whole R&D spending is not delivering its promised returns to shareholders.

However, other studies have concluded that the returns to R&D are positive and higher than other capital investments. With conflicting signals about R&D, the best route for investors to take in R&D intensive businesses is a qualitative assessment of how management approaches R&D. This will likely mirror their capital allocation philosophy generally. If management approaches R&D with discipline, focusing on projects with realistic payoffs, R&D has the ability to be value enhancing.

3) Capital Expenditures

Capital Expenditures tend to be the second largest use of capital in the United States, coming in behind Mergers and Acquisitions. Spending on CapEx tends to be fairly stable and certainly less prone to volatility as M&A.



However, in cyclical industries CapEx tends to follow the same pattern as seen in M&A and buybacks: companies spend when things look good and hunker down when they don't. As a consequence, companies tend to add too much capacity at the top of the cycle and suffer when the cycle recedes.

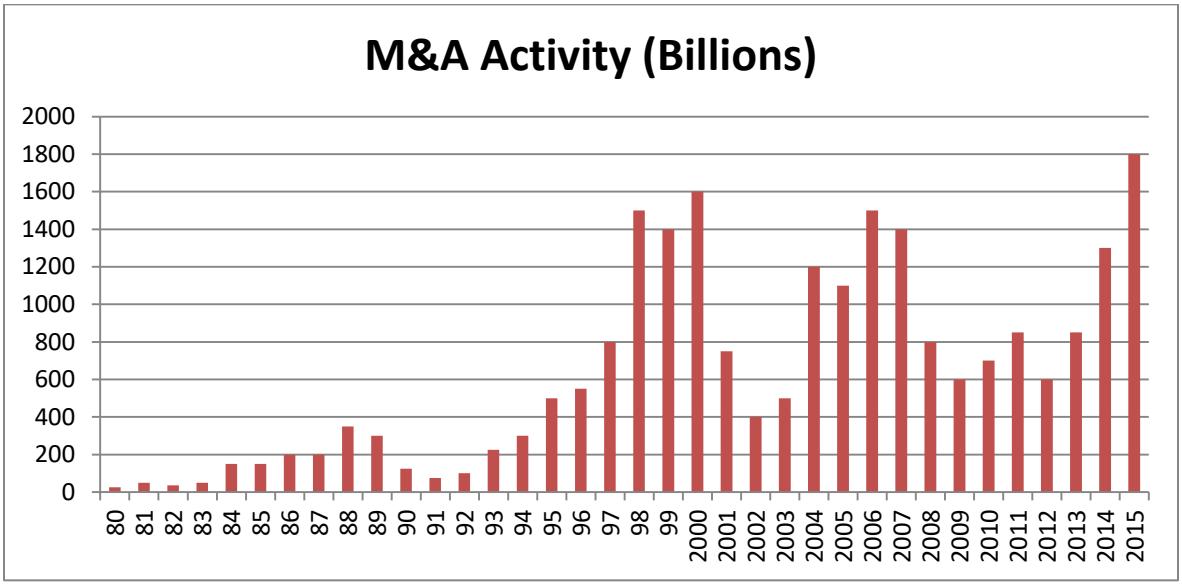
The framework for approaching capital expenditures is the same as any other capital allocation alternative**: capital expenditures will create value if the return on invested capital exceeds the opportunity cost of capital.** The market will reward high quality projects that create value, and punish firms that engage in CapEx without regard to returns.

There is a general rule of thumb that is worth noting. Firms that increase their CapEx the most tend to suffer from poor relative total shareholder returns in the years following the growth. This seems to indicate that as firms spend more and more on CapEx they tend to become less demanding in regard to the rate of return on those assets. Large accumulations of assets indicative of "empire building" generally results in stock market underperformance and is evidence that rapid accumulation of assets predicts poor stock returns.

4) Mergers and Acquisitions

Mergers and Acquisitions (MA&A) is by far the largest use of capital, but it is very cyclical, ranging from a low of less than 1 percent of sales in 1980 to almost 30 percent at its peak in the late 1990s. In terms over absolute size, Mergers and acquisitions (M&A) have averaged 9% of the equity market capitalization in the U.S. since 1980.

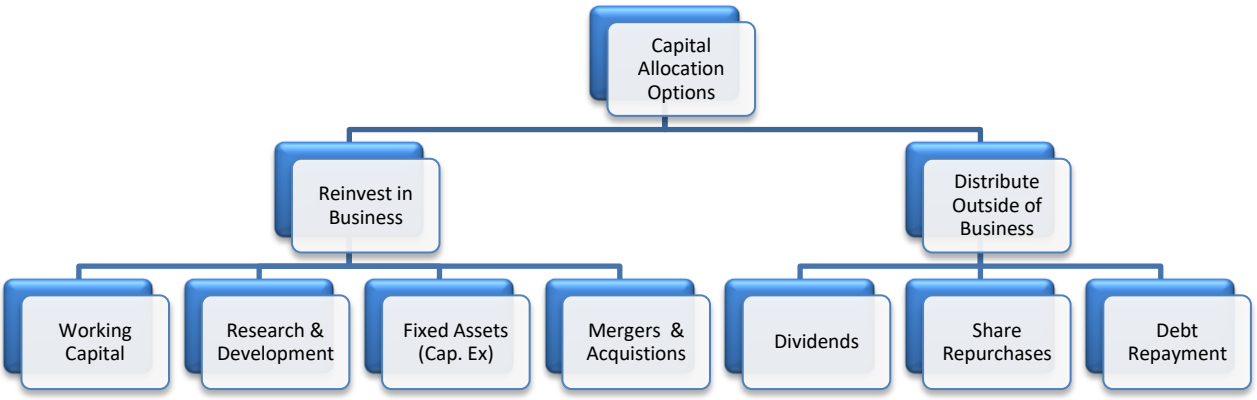
M&A activity tends to be greatest when the economy is doing well, the stock market is up, and access to capital is easy. **As a result, companies frequently do deals when they can, rather than when they should.** It comes as no surprise that companies that act early in an M&A cycle tend to generate higher returns than those that act later. The first movers in an M&A wave enjoy the benefits of a larger pool of acquisition targets and cheaper valuations than companies that acquire later in the cycle.



Research by McKinsey & Co. concluded that about two thirds of all M&A deals are either value neutral or value destroying. Said in most basic terms, most companies overpay for their acquisitions. Any value that the merger produces via combined synergy is usually captured by the selling firm in the form of the acquisition premium. Research by Credit Suisse found that in

the three years following a material transaction, the median acquiring firm underperforms by 1-3% annually.

When evaluating M&A transactions, senior executives should focus on the ability of the acquisition to generate cash flows that are greater than the amount paid for the company, in present-value terms. **Simply put, in order to create shareholder value a company should get more than what they pay for.** The deal will only create value for the buyer if the synergy from putting the businesses together exceeds the premium for control the acquirer must pay to close the deal.



Distribute Outside of Business

Management can return excess cash to shareholders in two ways—dividends and share repurchases. Returning cash to shareholders can be an incredibly prudent use of capital when reinvestment opportunities are not abundant. Returning cash to shareholders avoids the very real danger of it being put to use in value destroying projects when left in the hands of management. It is a sad but true fact that management exhibits less than demanding standards when a lot of excess cash is simply sitting around in the business.

1) <u>Dividends</u>

The largest benefit of using dividends to return capital to shareholders is its ease. Dividends are straightforward and compared to share repurchases present management less opportunity to make mistakes.

Dividends have been much less volatile that share buybacks in the United States. Once a dividend is established, management tends to feel a sense of commitment to it. Therefore, rapid changes in dividend policy tend to be the exception.

In order for a dividend to makes sense, a company has to generate cash flow beyond the basic needs to maintain the business and support its growth. So an investor should gauge a company's cash flow prospects in order to anticipate a company's ability to pay dividends. In addition, if money could achieve a higher rate of return in the business than with the investor the money is better left in the business. **Dividends and Repurchases should only be used as a residual after all value creating opportunities in the business have been exhausted.**

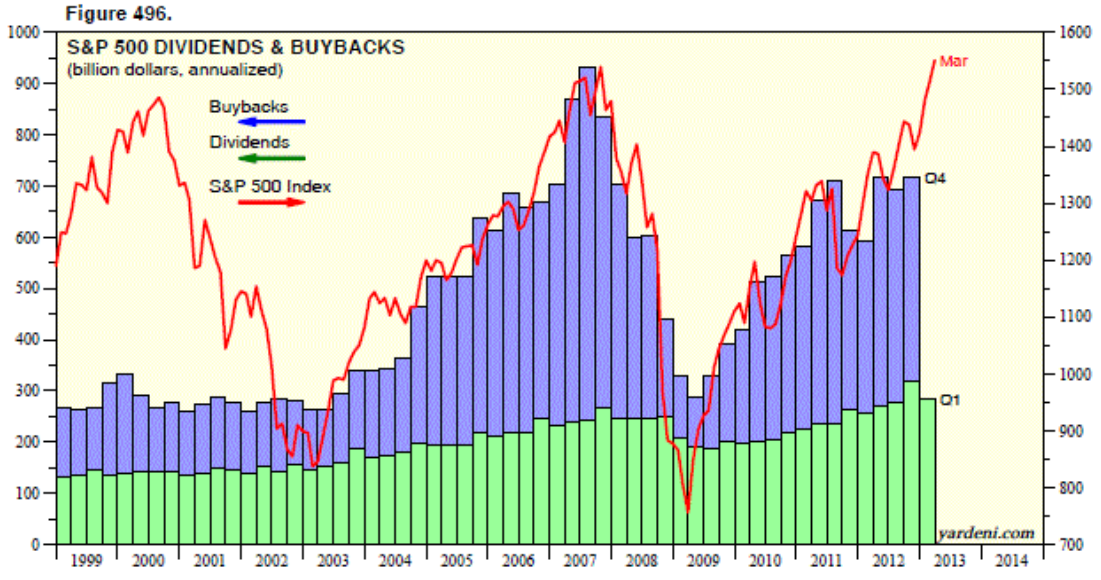
The major downside to dividends is the tax consequences. When a dividend is paid the investors incur a taxable event. If the objective of the investor is to simply turn around and reinvest the dividend, the company and the investor have just handed money back and forth with the only beneficial party being the taxman. In contrast, a share repurchase allows a shareholder to choose to hold on their shares instead of selling them back to the company, hence deferring a tax consequence.

2) Share Repurchases

Share buybacks went from being virtually nonexistent in 1980 to a large use of capital in the last decade. In fact, in the last few years buybacks have overtaken dividends as the primary method by which management chooses to return cash to shareholders.

The use of share repurchases rather than dividends opens the door to a major capital allocation problem. To put it bluntly, most companies are terrible in the way they conduct repurchases. Management teams tend to repurchase shares when their shares are expensive, which erodes shareholder value. For example, buybacks last peaked in 2007, just before the market crash, whereas few firms bought in 2009 when shares were cheap. Further, since 2009, the level of share buybacks has continued to increase just as the S&P 500 has moved higher.

Figure 496.



Source: Standard & Poor's Corporation.

As can be seen, buybacks hug the results for the market. This implies that managements have a proclivity to buy high and not buy low, meaning the capital allocated to share repurchases at most companies is being put to suboptimal use.

The first law of capital allocation—whether the money is slated for acquisitions or share repurchases—is that what is smart at one price is dumb at another. Unfortunately, companies do not usually have a realistic view of the intrinsic value of the stock. Surveys consistently show that executives believe their stock to be cheap regardless of the facts. For example, in a survey from mid-2013, 60 percent of chief financial officers thought that U.S. equities were overvalued, but only 11 percent thought their own stock was overvalued.

When assessing a repurchase program, investors and executives should consider the golden rule of share buybacks, which states: **A company should repurchase its shares only when its stock is trading below its intrinsic value and when no better investment opportunities are available.**

It is unfortunate that buybacks have been used so poorly in the past because share repurchases can be highly beneficial to shareholders when executed correctly. If shares in the market are undervalued, share repurchases are superior to dividends for the long term shareholder. It allows shareholders to increase their ownership in the business without additional capital outlays, it defers taxable events, and produces value as a result of acquiring an asset for less than it's worth.

The shareholder rate of return on a buyback is the cost of equity divided by the ratio of stock price to intrinsic value. For instance, if the cost of equity is 8 percent and the stock is trading at two-thirds of its intrinsic value, the shareholder rate of return is 12 percent (.08/.66). Managers can compare this rate of return to alternative investment opportunities.

3) <u>Debt Repayment</u>

Repaying debt is an intelligent use of capital if as a result of over-leverage the cost of capital has increased substantially because of fear of default. In recent years few companies have reduced their debt load. In fact the opposite has been true. Because of low interest rates and hence lower costs of financing, many businesses have added additional leverage to their balance sheet to fund acquisitions, share repurchases and dividends.

Obstacles to Rational Capital Allocation

1. Capital allocation is usually outside the knowledge and skill set of the typical CEO.

Developing the skills and the mindset to be a good capital allocator is different than most functions in business. Most bosses rise to the top because they have excelled in an area such as marketing, production, sales, administration or, sometimes, institutional politics. In other words, most top executives have gotten where they are because they are strong in execution. When faced with the new task of determining how to allocate the company's large pool of money, they have difficulty adopting a new mindset. They have never had to think like investors before. They now have to consider how an entire business builds value instead of how to simply run a single department effectively.

2. Institutional Pressures and Politics.

There are a variety of **internal and external pressures** that capital allocators must confront.

The internal pressures facing a capital allocator include the variety of personal interests, pet projects, and strong personalities that anyone who has held a job in corporate America can attest to.

Because of institutional politics, and convenience, most capital allocation decisions in a given year are made on the basis of how much money was allocated the year prior. A study of more than 1,600 U.S. companies by McKinsey found that there was a 0.92 correlation between how much capital a business unit received in one year and the next. For one-third of the companies, that correlation was 0.99. In other words, inertia appears to play a large role in capital allocation.

A strong capital allocator should re-deploy capital from divisions that do not earn sufficient returns to pay for their cost of capital. Management teams that are judicious re-allocators of capital tend to do better over the long term. A study by McKinsey showed that over a 15-year period, companies that shifted more than 56% of their capital across their business units outperformed those that simply made small adjustments but always followed the same investment pattern.

There are also considerable external pressures exerted on capital allocators. **The primary pressure is the natural human tendency to imitate what others are doing around you.** There is a temptation to move lock step with the market, especially when it comes to acquisitions and share repurchases. To be able to take advantage of the best opportunities requires that the individual (1) be patient and (2) be aggressive when it is time. Jumping in when things are falling apart takes courage. Not jumping is during a period of investing frenzy takes character. By

definition, you have to be willing to be a little anti-social to do that. We as human beings like the validation of doing what other people are doing. If you fail conventionally, you're amidst a herd and you will not be singled out. When you choose to do things that are different from what everybody else is doing, you're completely vulnerable and you're taking career risk to do that.

3. Ego and Overconfidence.

Many CEO's attain their positions in part because they possess an abundance of passion and ego. While these attributes don't have to be negative, they usually are detrimental to capital allocation. Capital allocation requires a firm grounding in reality and a keen awareness of the pitfalls present in capital allocation.

Most CEO's have a natural tendency to want to grow rather than shrink. As companies grow and diversify, capital allocation and strategic control can become more challenging. In other words, maybe the company will get bigger -- even impressively so -- but the shareholders end up no richer or even worse off and management ends up with a huge headache. As we have seen, managers tend to prefer to buy than to sell, even though the empirical record shows quite clearly that sellers fare better than buyers, on average.

4. Misalignment of Interests.

One of the biggest impediments to good capital allocation is the noise produced by short term Wall Street focus. A good capital allocator must develop an ability to ignore Wall Street analysts and commentators and manage solely for long term value creation. Wall Street is interested in the near term; businesses must make investments for the long term.

One of the most obvious obstacles is quarterly earnings per share estimates. The challenge is that the EPS measure can be easily manipulated and is distorted by differences in leverage, taxes and levels of capital investment. A management team that is measured on EPS may then become overly focused on meeting EPS targets, at the expense of pursuing actions that further the strategic vision of the company and boost long-term value.

A survey of 400 chief financial officers in the United States found that management was less likely to invest in a project that had a positive net present value (that is, that boosted long-term value per share) if this resulted in the company missing earnings estimates. Too frequently, companies select actions that add to earnings or earnings per share without properly reckoning for value.

Warren Buffett has summarized the barrage of obstacles that businesses must overcome to effectively allocate capital, "1) As if governed by Newton's First Law of Motion, an institution

will resist any change in its current direction; (2) Just as work expands to fill available time, corporate projects or acquisitions will materialize to soak up available funds; (3) Any business craving of the leader, however foolish, will be quickly supported by detailed rate-of-return and strategic studies prepared by his troops; and (4) The behavior of peer companies, whether they are expanding, acquiring, setting executive compensation or whatever, will be mindlessly imitated."

Evaluating Allocation as an Investor

Assessing the capital allocation abilities of a company's management should involve both qualitative and quantitative factors. Investors should think about some of the behaviors indicative of sound capital allocation.

Good capital allocators display some of the following characteristics:

- Returning capital to shareholders either through dividends or share buybacks when these offer the best available return on capital
- Saving shareholders money by controlling costs in an unusually disciplined way
- Deploying growth capex with a keen focus on return on investment
- Shutting down or selling poor return, non-core or loss-making businesses
- Acquiring businesses or large assets at prices which deliver superior long term shareholder returns

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From a quantitative standpoint, investors should focus their attention primarily on Return on Invested Capital (ROIC) and Return on Incremental Invested Capital (ROIIC). Recall that value can only be created when:

$$\text{Return on Invested Capital} > \text{Opportunity Cost of Capital}$$

$$\text{Return on Invested Capital} = \frac{\text{Net Operating Profit After Tax (NOPAT)}}{\text{Invested Capital}}$$

Return on Invested Capital measures returns on the basis of all of the capital in the business. Return on Incremental Invested Capital on the other hand measures returns only on the new capital that has been invested over a period of time. ROIIC can reveal interesting information about how effective recent capital has been put to use. Companies that have high ROIIC can reinvest incremental dollars at very high rates.

$$\text{Return on Incremental Invested Capital} = \frac{\text{Incremental NOPAT}}{\text{Incremental Invested Capital}}$$

Below I have calculated ROIIC for two businesses over a 3 year and 5 year basis—Polaris Industries and Wal-Mart. You can see the two businesses have very different return profiles. Polaris has been able to reinvest at incredible rates of return over the past 3 and 5 years. Wal-Mart on the other hand has only found mediocre opportunities for its incremental capital. As the ROIIC for Wal-Mart suggests, Wal-Mart lacks a strong opportunity set to put new money to work. When met with a situation like that found at Wal-Mart, good capital allocators would return a lot of capital to shareholders in the form of dividends and share repurchases rather than reinvest large sums of money back into the business.

Polaris leadership has clearly done an excellent job of allocating capital in recent years. As shown by the ROIIC, they were able to find substantial opportunities to put money to work at very high rates of return.

Polaris Industries (PII)	Year					
	2015	2014	2013	2012	2011	2010
NOPAT	465	465	375	290	227	143
Invested Capital	1506	1309	1083	1102	946	879

3 Year ROIIC	
Incremental NOPAT	465-290 = 175
Incremental Invested Capital	1506-1102 = 404
175/404=	43%

5 Year ROIIC	
Incremental NOPAT	465-143= 322
Incremental Invested Capital	1506-879 = 627
322/627=	51%

Wal-Mart (WMT)	Year					
	2015	2014	2013	2012	2011	2010
NOPAT	17,645	17,466	18,070	17,262	16,602	15,567
Invested Capital	142,775	141,677	138,541	130,691	126,214	120,187

3 Year ROIIC	
Incremental NOPAT	17,645-17,262 = 383
Incremental Invested Capital	142,775-130,691= 12,084
383/12,084	3.1%

5 Year ROIIC	
Incremental NOPAT	17,645-15,567= 2,078
Incremental Invested Capital	142,775-120,187= 22,588
2,078/22,588	9.1%

As Wal-Mart illustrates, a number of sound businesses just can't get high returns on incremental capital. So it makes little sense for them to invest for growth. Unfortunately, this reality doesn't necessarily prevent many businesses from allocating the capital imprudently anyway.

In the end Investment decision-making should come down to what will produce the highest returns on capital, with all risks and alternatives carefully considered, over the long haul.

Below are a few questions that may aid in the process of evaluating the capital allocation of companies:

- What is the company's ROIC? In the past has ROIC been above the opportunity cost of capital?
- What is the company's ROIIC on a 3, 5, and 10 year basis?
- What are the prime uses of the company's capital?
- How does the company conduct its budget process?
- Does the company have a clear philosophy or approach to allocating capital?
- When the company engages in acquisitions are they done at the top or bottom of cycles?
- Has the company shown a willingness to return capital to shareholders when value creating opportunities are not present in the business?
- How is the company's incentive compensation structured?
- Does management focus on EPS or long term cash flow?

Capital Allocation Rules to Live By

1) GOOD CAPITAL ALLOCATION PUTS THE NEXT AVAILABLE DOLLAR TO ITS BEST USE

2) ALL CAPITAL HAS AN OPPORTUNITY COST

3) VALUE CREATION OCCURS ONLY WHEN ROIC > OPPORTUNITY COST OF CAPITAL

4) FOCUS ON CASH FLOW, NOT ACCOUNTING EARNINGS

5) GREAT EFFORT MUST BE TAKEN TO AVOID CONSIDERATIONS OTHER THAN VALUE CREATION—DISTRACTIONS INCLUDE INSTITUTIONAL POLITICS, EGO, SHORT TERM WALL STREET ESTIMATES, HERD MENTALITY, ETC

6) MOST ACQUISITIONS DO NOT CREATE VALUE FOR THE ACQUIRER'S SHAREHOLDERS

7) MOST COMPANIES END UP ALLOCATING A LOT OF CAPITAL AT THE TOP OF CYCLES WHEN RETURNS ARE MINIMIZED AND LITTLE CAPITAL AT THE BOTTOM WHEN RETURNS WOULD BE PLENTIFUL. THIS IS ESPECIALLY TRUE OF CAPEX, ACQUISITIONS AND SHARE REPURCHASES.

8) THE KEY DETERMINATION FOR ALL CAPITAL ALLOCATION ESPECIALLY R&D, ACQUISITIONS AND BUYBACKS IS SIMPLE: ARE YOU GETTING MORE IN VALUE THAN YOU ARE PAYING?

9) GOOD CAPITAL ALLOCATION REQUIRES STRONG LEADERSHIP THAT THINKS INDEPENDENTLY AND RATIONALLY ABOUT HOW TO PUT MONEY TO USE, SOMETIMES IN DIRECT OPPOSITION TO WHAT OTHERS ARE DOING

10) GOOD CAPITAL ALLOCATORS SEE THEMSELVES AS STEWARDS OF SHAREHOLDER WEALTH AND MAKE DECISIONS AS IF THEY WERE IN THE SHAREHOLDER'S POSITION