Four Types of Businesses

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Introduction

Businesses can be placed on a continuum from the extraordinary to the abysmal. Although it is a continuum, to simplify this process, **a business can generally be thought to belong to one of four basic types**.

The Four Types of Businesses

Type 1 – An Ideal Business Earns High Returns on Invested Capital and Has Numerous Opportunities to Reinvest those Earnings at Equally High Rates

Type 2 – High Returns on Invested Capital, but Minimal Opportunities to Reinvest, but Low Maintenance Capital Requirements, Creates High Levels of Current Free Cash Flow

Type 3 – Decent Returns on Invested Capital, but Because of the Capital Intensive Nature of the Business There are Large Ongoing Maintenance Requirements and Any Growth Requires Substantial Capital

Type 4 – Low Returns on Invested Capital, and Because of the Capital Intensive Nature of the Business the Business Must Be Constantly Fed Additional Capital at These Low Rates of Return

As you can see, there are three criteria that determine which of the four categories a business will fall in:

1) A business's initial ability to produce returns on invested capital—the higher the better. As we move down the list from Type 1 to Type 4, returns on invested capital fall to the point that businesses in Type 4 struggle to earn their cost of capital through an economic cycle.

2) The level of additional incremental investment that can be made at high rates of return—the higher the better. Type 1 businesses stand apart from the rest in this regard. Because Type 1 businesses earn high returns on capital and have many opportunities to reinvest at these high rates, they can grow their intrinsic values faster than other businesses. Businesses in other

categories likely do not have the opportunity to reinvest growth capital, or if they do, growth requires a substantial outlay of capital like in the instance of businesses in Type 3.

3) The amount of maintenance reinvestment that is required—the lower the better; maintenance reinvestment is often synonymous with the capital intensity of the business. Businesses in Categories 1 and 2 are "capital light" businesses—they earn large returns on the small amount of capital required to run the business; in addition reinvestment can be used exclusively for growth opportunities. Businesses in Categories 3 and 4 are capital intensive businesses that require ongoing maintenance reinvestment. What makes businesses in Category 3 superior to those in 4 is that those businesses in category 3 have other offsetting business attributes that allow them to earn higher returns on invested capital than Category 4 businesses. Category 3 businesses can still be decent investments but their economics will always be inferior over time to those in Category 1 or 2.

Before moving on let's take a closer look at this concept of maintenance reinvestment requirements because it is vital to understanding the opportunity presented by a business.

Maintenance Reinvestment

Each year every business must put a certain level of capital back into the business to simply maintain its existing position. This is not growth capital—it is an amount necessary to simply maintain its current competitive position from year to year. It can be outlays to replace worn out equipment or funding necessary to keep up on the latest technologies. Either way a business does not get ahead because of maintenance requirements.

Generally speaking businesses that have large amounts of fixed tangible assets are going to have greater ongoing maintenance capital requirements because it is their tangible assets that wear out and need to be replaced.

Higher maintenance reinvestment requirements are detrimental because they create less distributable cash for the shareholders of the business. Remember, the value of a business is the sum total of the net cash that is made available for the owners of that business over its lifetime, with those cash flows discounted back to the present at the appropriate rate. The larger percentage of money that cannot be removed from a business, the less valuable a business becomes. This is why businesses in categories 1 and 2 are more valuable than those in 3 and 4.

Business Quality and the Price Paid

Before taking a closer looking at the four types of businesses, we need to remind ourselves of one major point:

This analysis is putting the question of price aside for the time being. Successful investing requires both an ability to assess the quality of the underlying business and also the ability to figure out how much that quality is worth. You may have an excellent business, but if the market price you must pay to acquire it already reflects this fact, it won't make for a great investment. In this article, we are only discussing the first half of the equation—an assessment of business quality. We are completely leaving the question of how much to pay for a business untouched. So don't run out and buy a business simply because it falls into category 1 or 2. You still want to make sure the price you are paying represents an opportunity for future returns. Of course using this framework of the four business types to initially focus your investment opportunity set can still be very beneficial.

Business Type # 1

High Returns on Invested Capital – Many Opportunities to Invest Incremental Capital at Equally High Rates

Classic Examples

The best business is one that generates very high returns on capital and can reinvest back into the business at equally high rates. Think of a business that has $100 million of capital and earns 30% returns but then can also take those earnings of $30 million and earn 30%. The effects of compounding begin working heavily in its favor. These businesses can earn 30% on $ 100 million, and then 30% on $130 million and 30% on $169 million and so on. Because of this dynamic, businesses in Category 1 don't create much current free cash flow, but because large amounts of capital can be reinvested at high rates of return, they offer large offsetting cash flows in the future.

These businesses are very rare. A few things make this the case. First it is difficult to find a business that earns these types of returns on capital in the first place. However, if you are able to find a business with high returns the real difficulty comes from the reinvestment component. Even the highest returning businesses often have difficulty reinvesting large portions of their earnings at anywhere near the high rate as their existing funds. The effects of competition and market saturation tend to limit the available

runway for extended periods of growth. This makes staying in Category 1 for an extended period extremely difficult. As investors we must be cautious about thinking we have a Category 1 business. These are hard to sustain.

There are a couple of additional practical difficulties about investing in Category 1 businesses. First, they can be relatively difficult to value because so much of their value comes from future growth. Secondly the valuations they do receive in the market tend to be incredibly high—many times rightly so. They trade at very high multiples and those high multiples are contingent on the promised future growth coming to fruition.

In other words it can be very difficult to acquire these businesses at a discount or even a fair price. But putting the question of price aside, purely as businesses, these are the best businesses in the world. If we can acquire companies in Category 1 at reasonable prices, these compounding machines are the best assets to own.

Business Type # 2

High Returns on Invested Capital –Limited Opportunities to Invest Incremental Capital—But Low Maintenance Capital Requirements

<u>Classic Examples</u>

HERSHEY'S

MOODY'S

Businesses in Category 2 generate a lot of money, but, unlike Category 1 businesses, cannot generate high returns on incremental capital. For example, Coca Cola has high returns on capital for over 50 years, but incremental capital doesn't earn anywhere near the existing returns. The fact that these businesses can't reinvest at high returns does not mean that they can't be great investments over time.

The key to the success of Category 2 businesses is that they are capital light. They require only a small amount of capital to operate and have minor maintenance reinvestment requirements. So although they cannot reinvest their earnings at high rates, because of low capital requirements, almost all of the earnings are available to the owners of the business. And don't forget the amount of earnings created is no small sum. The returns on capital generated by these types of businesses are often comparable to those in Category 1, its just these businesses can't reinvest at those rates.

Take a look at some of the results from Moody's (MCO) over the past 5 years. Moody's is an excellent business that takes almost no capital to operate. They have consistently generated high returns on invested capital because of the necessity of using Moody's ratings service before issuing debt securities. In comparison to the cash flow being generated, capital reinvestment requirements are minimal. The most they have had to put back in the past five years was $115 million when they generated $1.2 billion in cash from operations. Because of low capital requirements, Moody's has generated approximately 4.75 billion in free cash flow on behalf of shareholders in the past five years. MCO:

	2016-12	2015-12	2014-12	2013-12	2012-12
Operating Cash Flow USD Mil	1,226	1,153	1,019	926	823
Cap Spending USD Mil	-115	-89	-74	-42	-45
Free Cash Flow USD Mil	1,111	1,064	944	885	778

As another example of a Category 2 business, think about the tobacco business of Philip Morris. It is a simple business that has strong brand loyalty that allows pricing power. The combination of high margins and minimal capital requirements makes a company like Philip Morris a strong Category 2 business. The world has changed drastically in the past 50 years, but in spite of all the change a cigarette today is essentially the exact same as it was back then. Because technological change has left tobacco untouched, it has allowed Philip Morris to generate large returns on a small amount of required capital with only minimal reinvestment requirements. Compare Operating Income to the amount of tangible long term assets on the balance sheet. PM:

	2016-12	2015-12	2014-12	2013-12	2012-12
Operating income	10,815	10,623	11,702	13,515	13,846
Net property, plant and equipment	**6,064**	**5,721**	**6,071**	**6,755**	**6,645**

The fact that Phillip Morris can earn $10.8 billion in operating income on only $6 billion of net property, plant and equipment illistrates the success that can be created in businesses that do not have large capital requirements. Although Category 2 businesses can't reinvest for growth, investors in Category 2 businesses like Philip Morris can do well earning solid cash flows on only a minimal tangible capital investment.

The past 5 year results from American Express (AXP) illistrates a similar dynamic. American Express is a capital light business that does not require large investments in tangible property to operate. American Express generates all of its returns with less than $4.5 billion in total property and equipment. This lack of physical property has minimized the need for maintenance reinvestment over the years. This has allowed shareholders to benefit large cash flows without much shareholder capital. AXP:

	2016-12	2015-12	2014-12	2013-12	2012-12
Net income	5,219	5,408	5,163	5,885	5,359
Property and equipment	4,433	4,108	3,938	3,875	3,635

Category 2 businesses all share the trait that they are capital light businesses with very little shareholder capital in the form of physical property. In addition as illustrated by an example such as Moody's they do not require large ongoing maintenance capital. Although Category 2 businesses cannot generate nearly the returns on incremental capital that they can on existing capital, they generate large amounts of cash flow that is fully available to be distributed to shareholders.

Business Type # 3

Good Not Great Returns on Invested Capital—Incremental Growth Requires Substantial Capital— High Maintenance Capital Requirements

Classic Examples

Businesses in category 3 are not nearly as good of businesses as those in Category 1 and 2 but the businesses here are not here because of any wrongdoing of their own; what they all share in common is that the very nature of their business requires them to own a lot of physical "stuff." There is nothing they can do to change this fact; they have to own a lot of tangible assets as a requirement of the type of business they are in. Because of this, these businesses often have significant ongoing maintenance reinvestment requirements because of the need to replace their tangible assets.

As a group, businesses in Category 3 will always be inferior to businesses in Category 1 or 2 because investors in businesses of Type 3 will always have a substantial portion of their capital "stuck" in the business. Rather than producing pure cash for its owners, a substantial amount of capital in these businesses will always remain tied up in the form of physical assets. At the end of every year a portion of shareholder earnings will automatically have to be diverted to purchase tangible assets for the business. At the end of the year shareholder capital is sitting in the form of factories, trucks, or equipment, rather than in the form of cash that can be distributed to shareholders.

For example, in the past five years Union Pacific (UNP) has had to reinvest almost $20 billion back in business to maintain its operations. Investors have a massive fixed tangible in the business and the tangible fixed investment will only increase over time. UNP:

	2016-12	2015-12	2014-12	2013-12	2012-12
Cap Spending USD Mil	-3,505	-4,650	-4,346	-3,496	-4,012

There is no way to ever get this capital out of Category 3 businesses because the business requires these assets to operate –if they sold their physical assets for cash they would cease to be able to do what it is they are in business for. Also, because their businesses revolve around physical stuff, in order to grow they need to make substantial outlays of capital to support physical capacity.

Take a look at Exxon Mobil (XOM) which is a great example of a Category 3 business. It produces decent but not great returns on invested capital and requires a substantial level of physical assets to operate its business. As a result it also requires substantial capital in order to grow. XOM:

	2014-12	2013-12	2012-12	2011-12	2010-12	2009-12
Net income	32,520	32,580	44,880	41,060	30,460	19,280
Net property, plant an...	**252,668**	**243,650**	**226,949**	**214,664**	**199,548**	**139,116**

From 2009 to 2014 Exxon Mobil increased net income by an impressive $13.2 billion. However to achieve this growth the company had to invest in additional physical assets in the amount of $113.5 billion. This is a massive outlay of investor capital but it is not unique for Category 3 businesses. Massive use of investor capital is required to achieve growth.

Compare this type of business economics to that of Apple (AAPL). Apple is a Category 1 or 2 business and the difference between its economics and Exxon Mobil is striking. AAPL:

	2014-09	2013-09	2012-09	2011-09	2010-09	2009-09
Net income	39,510	37,037	41,733	25,922	14,013	8,235
Net property, plant an...	**20,624**	**16,597**	**15,452**	**7,777**	**4,768**	**2,954**

Compare financial performance in 2014. Exxon Mobil had $32.5 billion in net income while Apple had net income of $39.5 billion. Now look at how much investment in tanglible long term assets were required to generate these results at the two businesses. Apple produced $7 billion greater net income while requiring less than 1/12 of the capital required at Exxon Mobil. This is an astonishing difference. While Exxon's performance is nothing to scoff at, it will always be inferior over longer periods to time to businesses with genuienly superior economics like that of Apple.

There is nothing wrong with investing category 3 businesses. They are not bad businesses by any stretch of the imagination. But their inherent economics are nowhere close to the higher returning, capital light businesses in Category 1 and 2. By purchasing a stake in Category 3 businesses investors must realize that a substantial portion of future earnings already have a claim on them. In addition, investors must realize that in order to achieve growth investors have to pay to play. For example I am almost certain UPS will be delivering more packages 10 years from now than they are today. They will also likely be earning a far greater sum than they are today, but in order to achieve this UPS will have to invest billions in additional tangible capital over the next decade.

Business Type # 4

Low Returns on Invested Capital—Capital Intensive Business Requiring Reinvestment at These Low Rates Because of High Maintenance Requirements

Classic Examples

Category 4 businesses are low returning businesses that because of their capital intensity require investors to continually pump money back into them. Think about the worst possible scenario for a shareholder: a business that requires a large investment of capital for supposed growth but instead earns little or no money. Historically investors in certain industries have poured money into a bottomless pit, attracted by growth when they should have been repelled by it.

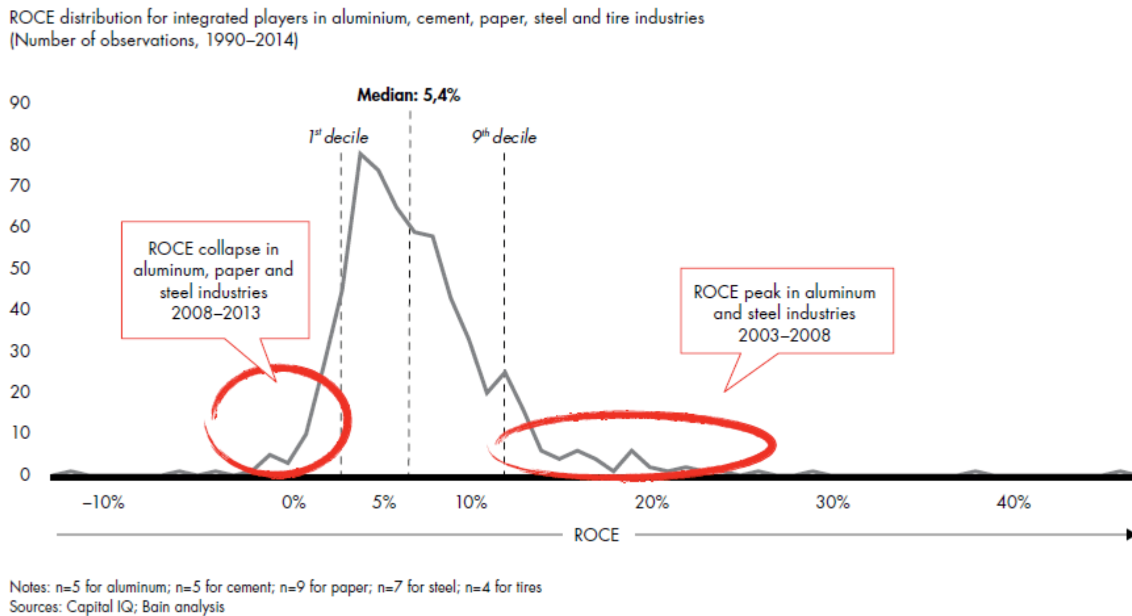
Steel, aluminum, automobile manufacturing, and airlines are all good historical examples. This may be changing for airlines because of the consolidation in the last 5 years. Recent results for airlines have been strong, but only time will tell whether the industry can break its historical cycle of over-supply and irrational pricing.

In general, Category 4 businesses typically operate in low margin, highly competitive businesses where the end product they sell is more or less a commodity. These businesses tend to lack pricing power and their industries are often plagued by over supply. Excess returns are difficult to obtain because even momentary bursts of decent results tend to invite competition to increase volume which kills overall profit for the industry.

In addition, Category 4 businesses require large deployments of capital even when they are not achieving strong business results. Think of Category 4 businesses like a savings account at a bank that is

earning below market interest on your money. Worse yet, you find out after you have opened the account that the only way to gain even the small amount of promised interest is to add ever increasing sums to the account.

The chart below illustrates the overall difficulty of operating in capital intensive commodity type businesses.

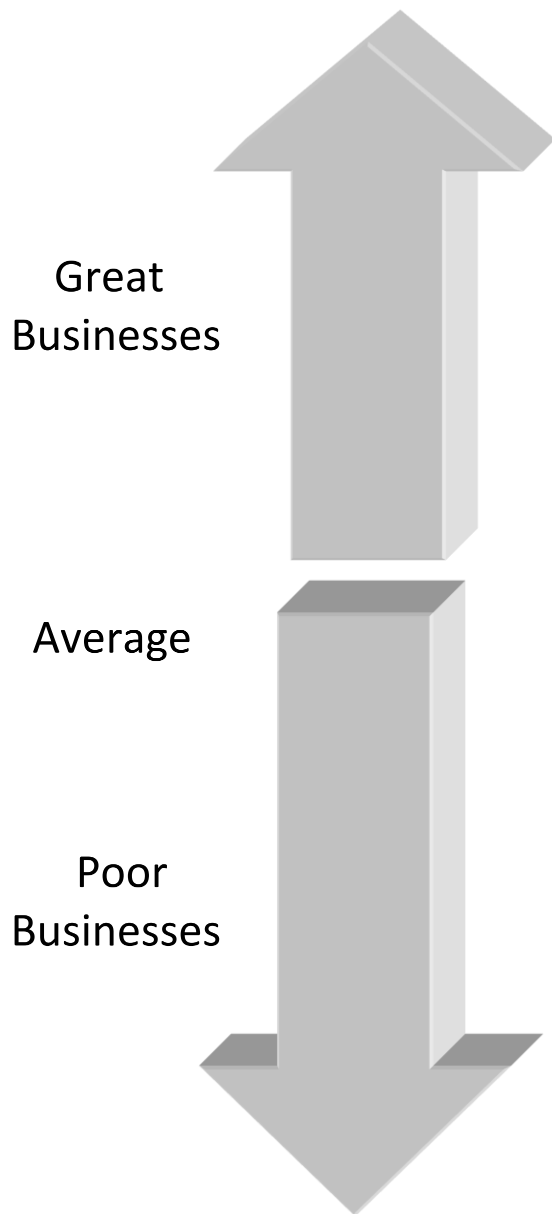


Conclusion

The ideal business is one that earns high returns on invested capital and has numerous opportunities to reinvest these earnings at equally high rates. At the other end of the spectrum, a terrible business is one that earns low returns on invested capital and has an unending requirement for additional funds because of its capital intensity.

The situation we desperately want to avoid is getting into a low return business that continually sucks additional capital that must be put in at low rates of return. There are capital intensive businesses can lead to this spiraling dynamic. Instead we should try to get as much of our wealth into higher returning, capital light businesses like those in Category 1 or 2.

Thinking about where a business lies on the continuum in regard to its returns on invested capital, incremental growth opportunity, and capital intensity can help provide a framework for evaluating businesses. The point of this exercise is to understand how to categorize businesses in a general way so that over time we can shift a greater portion of our wealth to businesses with more favorable attributes.



- High Returns on Capital
- High Returns on Incremental Capital

- High Returns on Capital
- Low Maintenance Reinvestment Requirements

- Decent Returns on Capital
- Substantial Reinvestment Required For Both Maintenance and Any Available Growth

- Low Returns on Capital
- High Maintenance Reinvestment Requirements