A Focused Compounding member sent me this email:

“I’ve just become a FC member and I’ve been listening to the very interesting podcasts from day one. Really enjoying them. Those have convinced me to purchase a membership of 1 year (for now).

I have a question that has been spinning my head for a while now.

Everybody is looking for this gem of a company with a sustainable competitive advantage and consequently… a high sustainable ROIC or ROIIC.

But when you invest in a company at 2 times invested capital doesn’t that hurt your compounding effect big time in the long term (ROIC of 20% becomes 10%?)? Or am I pursuing the wrong train of thought here?”

Yes, it does hurt your compounding. But, paying more than you normally would – in terms of price-to-book – for a great business may not hurt your long-term compounding quite as much as you think.
However, there’s a tendency for investors to focus more on how high the company’s return on capital, growth rate, etc. is right now instead of how long those high rates of return on capital, of sales and EPS growth, etc. can last. What matters a lot – as I'll show using numbers in a minute – is how long you own a stock and how long it keeps up its above average compounding.

Think of it this way. If you buy the stock market as a whole, it tends to return about 10% a year. A great business might be able to compound at 20% a year. So, how much more can you pay for a great business than you would pay for the S&P 500? It might seem the simple answer is that you can pay twice as much for a great business. However, that’s only true if you’re planning to sell the stock in a year. That’s because 20% / 2 = 10%. So, paying 2 times book value gets you the same return right out of the gate in a great business as what you’d have in the S&P 500.

When value investors like Warren Buffett, Charlie Munger, and Phil Fisher talk about how it’s fine to pay up for great, durable businesses – they mean if you intend to be a long-term shareholder and if the company continues to compound at high rates far into the future. This makes all the difference in what kind of price-to-book value you can afford to pay.

To figure out how much more you can pay for a great business and still beat the market, you can actually just sit down and work out the math.

Here’s what matters…

* Price / Asset (equity, invested capital, etc.)

* Amount of earnings reinvested in the business

* Return on that reinvestment

Over shorter holding periods in stocks reinvesting less of their earnings each year – the price you pay matters more.
Over longer holding periods where the stock is reinvesting almost all of their earnings each year – the return on reinvestment matters more.

A company’s maximum growth rate tends to be set by its return on capital. Of course, they could issue stocks, borrow money, etc. for a time. But, in the long-run the only way a company can really have high EPS growth is by having a high enough return on capital. Otherwise, it wouldn’t produce enough earnings to grow by that much each year. The easiest way for a company to compound at a high rate for a long time is simply to produce enough cash to fund its own high growth rate.

Okay. So, a company with a high rate of return and a lot of opportunity to grow is the kind of business you can afford to pay a higher multiple of book value for. From now on, let’s talk in terms of rate of compounding instead of just return on capital.

So, let’s pretend we’ve found a company with a high compounding rate. Now, we want to figure out what multiple of book value we can afford to pay for this company.

Say a stock compounds book value by 20% per year for 20 years (this is equivalent to having a 20% after-tax return on capital and always reinvesting 100% of the earnings back into the business). And let’s say you hold this stock for 20 years.

How much does it matter how much you paid?

If you pay 1x book value you make 20% a year for 20 years.

If you pay 2x book value you make 16% a year for 20 years.

If you pay 3x book value you make 14% a year for 20 years.

If you pay 4x book value you make 12% a year for 20 years.
If you pay 5x book value you make 11% a year for 20 years.

If you pay 6x book value you make 10% a year for 20 years.

This is what you make for holding a stock for 20 years – not what you make for “flipping” the stock by buying at a lower price-to-book today than it will trade at in the future. In other words, I assumed the same exit price – in terms of price-to-book – for all of those 6 scenarios (you always sell at one times book value).

So, thinking purely as a long-term shareholder, if you pay a bargain price (1x book value) for a great company with a really long period of growth ahead of it – you can make much, much more than the stock market overall.

But, even if you pay 6 times more for that great business with a really long period of growth ahead of it – you can still do about as well as the stock market overall.

So, truly long-term growth investors aren’t wrong. If you find Southwest Airlines or Wal-Mart in the 1970s or Amazon in the 1990s or 2000s it will pay off – if you hold the stock long enough.

A really simple way to think of it is this:

The SHORTER your holding period in a stock, the more important the PRICE YOU BUY AT (P/E, P/B, etc.) and the PRICE YOU SELL AT (P/E, P/B, etc.)

The LONGER your holding period in a stock, the more important the RETURN ON CAPITAL / GROWTH RATE of the company you’ve invested in.

Basically, value investing works AND growth investing works. Buying and selling value stocks – paying a lower P/E, P/B etc. and then selling at a higher P/E, P/B, etc. works.
And HOLDING good, growing businesses also works.

One of the best ways to think about this is to remember this formula.

Your “hold” return in a stock is:

\[
\text{Free Cash Flow Yield (that's Free Cash Flow / Market Cap)} + \text{Growth} = \text{“Hold Return”}
\]

So, if you buy a stock that pays you out a 4% dividend and is growing at 6% a year – then, you can make 10% a year for as long as you own the stock without having to sell at a higher P/E, P/B, etc. than you bought at.

But, then you have the “trade” return in the stock.

So, let’s say you buy a stock – like a net-net – that doesn’t grow. Say the stock trades at 0.6 times NCAV. You’d make 19% over a 3-year holding period even if the stock didn’t grow. You’d make 11% a year if you had to hold the stock for 5 years. So, because the “trade return” on a net-net is so higher (greater than 10% a year over more than 5 years, if you buy in at a greater than 40% discount), you can afford to hold a non-growing net-net for a long time and still match the market or even beat it.

However, good investments usually combine both aspects. A decent hold return or a decent trade return combined with a really good form of the other kind of return.

In other words, great investments are often “growth businesses” bought at “value stock” prices and then sold at “growth stock” prices.

For example, let’s say I buy a stock with a 15% free cash flow yield and 3% growth. I make 18% a year while I hold it. But, then, say the stock doubles its FCF multiple (so the FCF yield drops to 7.5%) by the time I sell it in 5 years.
In that case, you'd make a return of greater than 30% a year (you have a double-digit return from a
good free cash flow yield and a double digit return from buying at a really low Price/FCF multiple and
selling at a “normal” one within 5 years).

That’s obviously a great situation. Many good long-term investments don’t look that good on the face
of them. But, they do combine positive contributions from both the “hold return” and the “trade
return”.

Let’s look at what can go wrong if you pay too much for a stock.

We said you could pay 6 times book value for a stock that compounds book value at 20% a year.
You’d do okay. Not great. But, okay. You’d match the market. But, what if it turns out the stock only
compounds at 10% a year for 20 years? In that case, you’d only make about 1% a year. So, the
extra 10% a year in compounding – between 20 years of compounding at 20% a year and 20 years
of compounding at 10% a year – is the difference between having a long-
term stock performance
that matches the market versus one that is a very bad outcome (a stock that does nothing for two full
decades).

Now, growth investors may argue I’ve been unfair here. If a business is a really great compounding
and it staysa really great compounding – it should trade at a higher multiple of book value even when
you sell it. This would make a big difference in your long-
term return.

For example, let’s say you have a stock that you pay 6 times book value for today. It compounds
book value per share at 20% a year for the next 20 years. And then, at the end of those 20 years,
it still trades at 20 times book value. In that case, you would – of course – make a 20% annual
return.

This is the argument that investors often make when projecting out their own long-term returns in a
great, growing business. They assume the stock will grow at more like 20% a year rather than the
market’s normal return of 10% a year – plus they assume that, because the stock keeps growing at
an above average rate, it’ll keep having an above-average price-to-book ratio.

There’s a logical problem with this argument. The argument isn’t wrong. It’s right. But, it leaves you
with no margin of safety. You think you’re going to make 20% a year for 20 years, because you are
paying 6 times book value for a stock that will compound its value at 20% a year and then will still trade at 6 times book value.

But, what happens if the stock grows at 10% a year instead of 20% a year?

Well, your two defenses here – the two reasons you think you’re going to get a good return in this stock – are that you expect an above-average growth rate and then you expect to exit the stock at an above-average price-to-book ratio because the stock will still have an above-average growth rate. Really, you are projecting both the growth rate that happens while you own the stock and the price at which you exit the stock based on a single projected data point: how fast this stock will grow.

All you’re doing is going all in with a bet on the stock’s future growth rate.

I talked about the “hold return” you can get in a stock (because it’s a great, growing business) while you own it and the “trade return” you can get when you sell a stock (because you sell it for more than you bought it for).

Well, if you assume both a high growth rate in a stock while you own it and a high price-to-book ratio when you sell it (because it’ll still be a growth stock) – then, you’re really only making one bet. You’re betting the stock will still be growing at an above average rate far into the future. That is sometimes a difficult bet to make. And, if you’re wrong, there’s no protection on the downside. But, if you’re right – then, paying a price-to-book ratio of anywhere up to 6 times book value can make sense – if you’re buying the right business. Overall, though, it’s the durability of this growth that matters more than you’d think. Buying a stock that will compound at 30% a year for the next 4 years is nowhere near as good a deal as buying a stock that will compound at 15% a year for the next 40 years. Of course, if you time your entrance into and exit out of the stock perfectly – that 30% a year compounder sounds enticing. But, if you time it wrong, any collapse in the growth rate – even from say 30% a year to 15% a year – can cause a collapse in the price multiple. You can’t enter a stock paying 30 times earnings and exit it at 15 times earnings and make money – unless you own the stock for a long time and it grows nicely while you own it. A 5-year holding period where you sell at a lower P/E, P/B, etc. than you bought it at is almost always a situation where you aren’t going to do as well as the market.

However, if you’re right about the long-term future growth of a stock – that it will stay above the growth of the stock market overall for decades to come – you’ll probably get both a good “hold return” from the high growth rate and a nice “trade return” from exiting at an acceptable price multiple. But, if you buy a growth stock that isn’t so durable – your “hold return” might be great, but you will lose a lot of money with a negative “trade return”. For example, a stock has to grow EPS at
15% a year for the next 5 years just to have you break even on an investment made at 30 times earnings today and then sold at 15 times earnings in 5 years. To get a market matching type return, you’d need more like a 25% annual growth rate in earnings per share for the next 5 years just to fully offset the collapse in the P/E ratio from 30 to 15 and still leave you with a 10% annual return.

What I just said was a mouthful. And it might be hard to follow all the theoretical numbers I’m using here. But, the key point is this: you can more easily afford to pay up for a great, growing business today if you are supremely confident it will still be a great, growing business when you sell it. The less confident you are that a stock will stay a great, growing business the less sure you are of two things: 1) Your “hold return” from the stock’s actual EPS / BV etc. growth and 2) Your “trade return” from selling out at the same or higher P/E, P/B, etc. ratio you bought into the stock at.

What you want to look for is situations where earnings per share, book value per share, etc. grow nicely while you own the stock AND where you will be able to sell the stock at a higher P/E ratio, P/B ratio, etc. than you paid to get into it.

Both growth investing and value investing work. Growth investing is the best form of investing when **holding** a stock. Value investing is the best form of investing when **“flipping”** a stock. As an investor, you are always doing both. Even in the longest term investments, you are eventually “flipping” it. But the “flipping” return matters more the shorter you hold it for.

For those smart enough and patient enough to find amazing businesses and stick with them – the price multiple they bought at and the price multiple they sold at don’t matter so much.

For example, it can be a great deal to buy a stock at 1x book value and hold it for 20 years if it compounds at 20% a year. But, it can still be an above average performing stock even if you pay 4 times book value for it and hold it for 20 years.

One warning is that stocks tend to be priced based on their future growth expectations. So, a great business that is slowing its growth usually has its P/E ratio keep declining over time. So, it may be that if you buy a growth stock at 30 times earnings today and hold it for 20 years, you’ll end up selling it at 15 times earnings because it’ll be expected to grow slower at that point. This obviously lowers your return. But, it’s still possible if you pick the right stock and hold it long enough to even make above average returns in situations like that.
The other thing I should mention is why I used a 20% compounding rate. That implies you don’t want to pay more than 6 times book value for a stock (I’m leaving the issue of negative book value stocks aside – you can do these same calculations substituting P/E for P/B, it’s just simpler to explain this point using a P/B ratio).

It seems like I’m saying you should never be willing to pay more than 6 times book value. This would also mean there is some limit in terms of P/E you shouldn’t pay more than. It might be 50 times earnings or something like that.

Is that true? Is it really a mistake to pay more than 6 times book value or 50 times earnings or whatever other multiple cut-off you want to use? Is there really any sort of hard price limit a sane investor can’t pay above and still expect to outperform?

This is a difficult question to answer. The truth is that investments should be made on the probabilities. If you make one investment at 7 times book value and the stock compounds at 30% a year for the next 30 years – obviously, you will still do well in that stock. In theory, you didn’t “overpay”. But, what is the chance you could correctly predict which stock would grow 30% a year for 30 years? What is the confidence level with which you’d make that prediction.

Academics talk about risk adjusted returns. These are objective measures. I don’t think that’s the best way to look at your past investment decisions and judge them. But, we know it’s wrong to assume that you should be given full 100% credit for a strategy that in one case correctly picks a stock that compounds at 30% a year for 30 years. We know there has to be some kind of discount factor applied to your “strategy” of paying 7 times book value for such stocks, because you couldn’t have had 100% confidence the stock would grow 30% a year for 30 years before it did so. When looking back into the past, we can make claims with 100% confidence. But, when looking into the future – it may have been that if you had picked your top 5 favorite stocks you though would grow 30% a year for the next 30 years, 4 out of 5 would fail to do that. So, maybe an honest appraisal of your likelihood of picking the right stock going forward was just 20%.

This matters a lot. If you can have 80% confidence in predicting 30 years of 30% growth in a stock – then, you would be justified in paying an absurd seeming price for that stock.

However, if you really only have 20% confidence in predicting 30 years of 30% growth in a stock – then, you would not be justified paying anywhere near the theoretical limit of what is an acceptable price to pay for that stock today.
How can you gauge your confidence level?

Think of it this way. If you think you can match or beat the market with your stock picking, then your opportunity cost (that is, your next best alternative) when choosing a stock can’t be lower than the long-term return in the stock market as a whole. Let’s use 10% for this figure.

How sure are we that the S&P 500 will return 10% a year over the next 20 years? I’m not that sure. But, if you widen that out to some annual return figure between 5% and 15% a year over the next 20 years – I’m feeling like that’s more likely than not. And if you widen the return number out to some figure between 0% and 20% a year over the next 20 years, I’d say I’m feeling “confident” that the S&P 500’s actual return will fall somewhere in that 0% to 20% range.

Use that as your yardstick. You are theoretically justified in paying something like 5-6 times book value for a stock that you think will compound at 20% a year for the next 20 years if the confidence with which you can predict that compounding in this stock is similar to the confidence with which you can predict the 20-year annual rate of compounding in the S&P 500.

For most fast growing stocks, I think investors would – if they’re being honest with themselves – have a lower confidence level in the projected compounding of this stock’s book value, earnings, etc. than they would in the price level of the S&P 500. As a result, I think you should be more reluctant to pay 5-6 times book value for any business you perceive to be a great, growing business than the math would suggest, because the confidence you have in your perception of the business is less than the confidence you have in the future of the S&P 500.

We can start with what the math tells us. But, then we need to make our actual decisions taking subjective measures of confidence into account.

This explains why I did not use any projections for a great, growing business where book value could compound at more than 20% a year for more than 20 years. Based on the history of public companies, I don’t believe you can make projections for growth rates higher than 20% a year for longer than 20 years with any degree of confidence at all. Your confidence level would be so low that the math wouldn’t be very important.

There are situations where someone with terrific foresight could make projections with some confidence about 20 year growth rates of 20% or so. This is more along the lines of what Phil Fisher tried to do. You won’t be right all the time. But, even if your confidence level was just 50% of the
confidence you have in the S&P 500 as a whole – you’d be able to pay more than 3 times book value for a stock you like. And that’s certainly a start.

Finally, there’s the issue of whether you should be more and more willing to pay a higher and higher price-to-book ratio as the expected return on your chosen yardstick used to measure opportunity cost declines. For example, if the S&P 500 seems likely to return just 5% a year for the next 20 years can you now pay a much, much higher than 6 times book value price for a stock you are convinced is a great, growing business that will still be a great, growing business in 2038?

The theoretical answer is yes. The more practical answer is no. There’s no evidence in the past history of the stock market supporting the idea that just because your opportunity cost drops from 10% a year to 5% a year today it’s likely to stay 5% a year in 20 years. It’s very likely the S&P 500 will again have an expected return of more like 10% a year starting in 2038. So, it’s unreasonable to assume you can sell out at a high price-to-book ratio in 20 years just because stocks have a high price-to-book ratio now.

The only argument that does make sense is that you should accept lower returns on your investments, because there aren’t as many cheap alternatives around these days. That might be true. But, it’s a topic for another day. And, my advice is to be careful overpaying for stocks in high-priced stock markets. Don’t use high prices on other stocks as an excuse to pay too high a price for the business you like best right now.