Factor Investing – Review of Your Complete Guide to Factor-Based Investing

Our advanced book for the 2017 Continuing Financial Education week is brought to us by Andrew Berkin and Larry Swedroe. Your Complete Guide to Factor-Based Investing has been on my list all year. Of the books I reviewed this week, it’s the only one I actually purchased and really, aside from the history books, the only one I really wanted to read. I mean, let’s be honest. I have little interest in reading a book about physician-specific personal finance. I wrote the book on that topic. I write about it several times a week, do a podcast about it etc. The likelihood of me finding something I can use in a book like that is pretty low. And if it wasn’t, I’ll get another one in the mail next month. But this book, this book promised to teach me something I wanted to know.

Factor-Based Investing and Portfolio Diversification

So what did I think the book could teach me? The answer to this question:
What should I do with all these fancy new factors like momentum, quality, and profitability? Should I incorporate them into my portfolio or not and if so, how?

If that question made zero sense to you, don’t worry. As I mentioned above, this is an advanced topic. You see, some people advocate that you diversify within an asset class, using an index fund for example. It is also generally taught to diversify between asset classes, some in stocks and some in bonds and some in real estate. Those asset classes get subdivided into large growth stocks and small value stocks and international stocks and multi-family and commercial etc. But there is an entirely different way to look at diversification. That is to diversify into “factors.” Academics love this stuff. They’ve found 600+ factors out there that they use to try to explain stock market performance, and they haven’t even really gone after other asset classes yet. Snooty quantitative mutual fund companies like DFA, Bridgeway, and AQR love this stuff too, as do the advisors who sell access to those advisor-only funds. But the DIY investor is left wondering- am I missing out? Should I change my portfolio to reflect all this research that is coming out in the last decade about factors? Am I getting sub-par returns because I’m not paying a DFA advisor 1% a year to get me into these awesome funds?

Enter Andrew Berkin, Larry Swedroe, and Cliff Asness. Cliff, who works for AQR, wrote the foreword (did a nice job actually, that’s probably the best part of the book.) Andrew Berkin works for Bridgeway. Larry Swedroe is the foremost DFA advocate on the planet when it comes to the popular investing literature, although he works as the chief investment guru for Buckingham and the BAM alliance of financial advisors. Given that background, you won’t be surprised to see these guys are all huge advocates for factor investing. But even so, they do a pretty good job in the book pointing out issues with it. But first, let’s point out some of the problems with the book.
Some Issues With the Book

In the words of WCI columnist Whitney—“That cover sucks.” She’s right. Look at it. The subtitle of the book is “The Way Smart Money Invests Today.” That presentation on the cover is apparently really, really boring. Good investing is usually boring investing though, so we had a nice discussion about how it is important not to judge a book by its cover. Unfortunately, the rest of the book is just as boring as the cover. I’ve read a half-dozen of Swedroe’s books and my impression after reading this one is that Larry didn’t write this. I think he lent his name to Andrew to put on the cover. I mean, I have no doubt he agrees with the ideas in it and did plenty of work, but it doesn’t feel like his writing to me. It’s a real slog to get through the book.

Each chapter is mostly just statistics and numbers being thrown at the reader and short descriptions of academic studies one after another. Let’s put it this way- you won’t have trouble putting this book down because it will naturally fall out of your hands when you nod off. As long as we’re criticizing, let’s talk about the layout of the book. The first half is chapters. The second half is appendices. But if you thought you could quit reading when you got to the appendices, you’ve got another thing coming. A big chunk of the most useful information in the book is in the appendices, including the real conclusions and recommendations of the
Those shallow criticisms out of the way, I’m glad I read the book. It did answer the questions I was looking to get answered. It led to a great discussion with my wife about whether or not we want to add momentum to our portfolio. I like that the authors take a stand, like Swedroe did in his *alternative investments* book—these are the factors to pay attention to and these are the ones to ignore. I like that they start at the historical beginning and work their way through.

**Beta**

This factor represents the return you get for investing in the market (stocks) instead of a riskless asset like treasury bills. It turns out that the mix of Beta to riskless assets (i.e. stock:bond ratio) determines about 70% of your portfolio return. Academics have known about this for a long, long time and those of us who invest know that higher risk generally correlates with higher long-term return, at least expected return.

**Small and Value**

The next two factors the book hits are those that were added to Beta by Fama and French way back in 1992. I incorporated those into my portfolio when I first designed it more than a decade ago, so they’re not new to me. The idea is that small value stocks have higher expected returns than the rest of the market because of both risk reasons and behavioral reasons. Together with beta, this three factor model explains 90% of portfolio return. Anyone who’s read any Swedroe, Ferri, or Bernstein at all is likely familiar with these factors.
Momentum

The next factor in the book, as well as in history, popped up in about 1997. This is basically the idea that stocks have momentum, that is the ones that have done well in the recent past will continue to do well in the near future. Why? Well, nobody really knows. It just happens. But the academics put forth two explanations- the first behavioral, basically a herd effect, and the second risk-based, because when momentum crashes it crashes hard! Despite those terrible crashes though, investing preferentially in stocks with momentum, at least when viewed through the retrospectoscope, have led to higher returns. The really interesting thing about momentum though is that it appears to be the best factor. Better than Beta. Better than Value. Certainly better than Small (which may be the least meaningful of the factors at least based on past data.) Adding momentum to the three-factor model apparently explains 95% of portfolio return. But where oh where could that last 5% be coming from?

Profitability and Quality

These two factors were lumped together into their own chapter in the book. I’ve been hearing this term quality thrown about for years but never really had the definition on the tip of my tongue. Profitability though is relatively easy to define. There are lots of different ways to measure it, but the best
is probably gross profitability - that is the total profit of the company divided by the capitalization of the company. Although you would think profitability would be priced in a relatively efficient market, apparently, preferentially investing in profitable stocks leads to a premium. This one really hit the academic literature in 2013. I mean, I’ve been blogging longer than that. It’s a baby as factors go (and most are even newer!) So I don’t know how much faith to put in it.

Even after reading the chapter on quality, I still can’t define it without going back to the book. So I’ll just quote it:

*High quality companies have the following traits: low earnings volatility, high margins, high asset turnover, low financial leverage, low operating leverage, and low stock-specific risk.*

Okay, that all sounds good, I agree. But why that isn’t priced into a company’s price is beyond me. I mean, that sounds to me like exactly what an actively managed mutual fund manager should be interested in, so they ought to bid up the price of these companies until the return from them is equal to that of a low-quality company. But apparently they don’t, so it’s a factor.

**Comparing Stock Factors**

The best page (page 133) in the book is at the end of the Profitability/Quality Chapter. I reproduce the ‘money” table here:
Let’s spend just a moment on here to explain it. Across the top are the factors- MB is just beta. Down the left side are the good things you want and bigger is always better. So if we look at Beta, if you invest in stocks instead of 30-day treasury bills, historically that has given you 8.3% better returns. Seems like a great reason to invest in stocks, right? The Sharpe ratio is a measurement of risk-adjusted return. It’s the average return minus the risk-free return divided by the standard deviation of return on an investment. It’s really only useful when comparing one ratio to another. Its absolute value doesn’t mean much. But as you can see, the Sharpe ratio in the chart is momentum. In other words, you’re better off
taking momentum risk than stock risk, especially when you consider that the premium is larger and the odds of outperformance are higher, at least in the past. But the bottom line of the chart is that all the factors contribute something, but if you had to rank them, it’s momentum first, then market risk, then value/profitability/quality (which all seem pretty related to me), and finally size. These are clearly the stock factors that Berkin and Swedroe think are worthwhile, although based on Asness’s foreword, it sounds like there is still plenty of controversy even here.

Other Factors

But at this point, you’re only halfway through the book. There’s a chapter on bond factors. Basically, the authors think taking term risk is rewarded but taking default/credit risk is not.

There’s also a chapter on the “carry” factor. Carry is most commonly thought about when trading currencies. Basically, if you live in Japan where interest rates are crap, you send your money to Australia where interest rates are higher. As long as inflation is similar in the two locations, and the exchange rate on the currencies doesn’t change too much, you come out ahead. But apparently, the carry factor can also be applied to stocks, bonds, and commodities as well, with actually pretty good sharp ratios and odds of outperformance (better than all the stock factors in the chart above.) That said, there seems to be a pretty good risk explanation for this. The authors describe carry as:

*Carry can be like picking up nickels in front of a steamroller. It has been profitable over the long term, but one must be sure they can handle being run over every so often.*
Sounds a lot like momentum I suppose. The authors give both a behavioral and risk-based explanation for why carry exists. As near as I can tell, the author’s only suggestion for how to implement it in your portfolio is by buying AQR funds.

The appendices of the book list a bunch of other factors which the authors think are not worth tilting a portfolio toward. No Swedroe aficionado will be surprised to find an entire appendix railing against dividends. They’re not a factor. Never were. And dividend-paying stocks certainly don’t take the place of bonds. If you still don’t believe that, this chapter is worth the cost of the book.

There’s another appendix on the “low-volatility” or “low-beta” factor. The authors cite a 2016 study, among other evidence, showing it’s a crummy factor. If these guys who think factors are the cat’s meow don’t like a factor, I’m certainly not interested.

**Factor Investing Implementation Advice**

There’s a lot of other great stuff in the book. This includes the shortest appendix (G) which points out that adding more factors to your portfolio can be counterproductive. You don’t get the full premium for each new factor, plus you may
increase turnover, raising trading costs and reducing tax efficiency. Not to mention, you reduce diversification among securities. So maybe don’t try to add 10 factors. We’ve already got three, but we’re at least thinking about one more.

There’s also a great chapter on the biggest risk with factor investing - tracking risk. The more of your portfolio you have tilted toward all these factors, the less it is going to perform like the S&P 500 and your friend’s portfolios, which might make it hard to stay the course for the decades it might take for these factors to pay off.

A related issue I think about a lot with regards to tilting, is that you’ve got to be a real believer in order to reduce your diversification (at least traditional diversification into more securities) and increase your costs to chase these factors. Believing is a big part of it. It will take a real commitment to these factors to stick with them when they’re not paying off year after year after year. Given that the dataset on which they are based is almost entirely retrospective and limited to just 3 or 4 independent 30 year periods, it’s hard to develop the kind of faith required to stay the course for long. Don’t tilt more than your faith will support. It might be evidence-based investing, but the evidence is a far cry from a 5,000 participant randomized, placebo-controlled trial.

Perhaps the best part of the book is one of the last appendices where they provide a list of mutual funds and ETFs that can give you exposure to these factors. You find lots of funds like Vanguard Total Stock Market Index Fund for Beta and DFA US Small Cap Value like you expect. But when you get to momentum- there are only two listed- an AQR fund and iShares ETF. For Profitability/Quality in US stocks, there’s just one recommendation- an iShares ETF. That’s a heck of a long book to come down to “buy these funds” in the end. The alternative, as they explain, is to buy multi-style funds, a la DFA and AQR, where they magically bake all of these factors into a
single fund. So really, that’s the recommendation of the book—go hire a financial advisor who has access to DFA and AQR funds.

The problem with that sort of advice is that sometimes we DIY investors find little ways to invest in DFA funds, such as my ongoing experiment in my kids’ Utah 529s where I’ve been running the Vanguard and DFA small value funds head to head for the last four years. So far, Vanguard is ahead by 2.4% a year, and that’s excluding a typical 1% advisor fee for a DFA advisor. Granted, it’s only been four years and granted, the last four years haven’t been all that kind to a small value strategy and DFA’s fund is smaller and more valuey than Vanguard’s. But it does give you pause before you jump on the DFA wagon, especially when you consider that small and value is where the historical DFA difference seems to be largest. But like I’ve said for a long time, if you’re going to pay for investment management, you might as well get someone with access to these funds.

Conclusion

In the end, if you’re an advanced investor who has been wondering about whether and how to implement these newer factors into your portfolio, you’ll find this book to have some limited utility. Berkin and Swedroe have done an admirable job compiling all of this information into one place so you can make a decision about whether you’re going to make any portfolio changes due to the information. Unfortunately, unless you’re willing to go hire an investment manager, you simply don’t have access to most of the recommended tools to implement these newer factors into your portfolio. As for me and my house, we’ll likely spend a few months or years thinking about adding that iShares momentum ETF to our plan, but that’s about it.
Buy Your Complete Guide to Factor-Based Investing Today!

What do you think? Have you read the book? What did you like about it? Do you tilt your portfolio? Do you use factors other than beta, small, and value? What has your experience been like? Comment below!