Boot Camp #2: The Ultimate Buy and Hold Portfolio

Welcome to Boot Camp number two.

If you joined us for Boot Camp number one you know we spent our time laying the MOST IMPORTANT groundwork. We talked about equities—what they are, how they behave, and why, historically, equities have been better long-term wealth builders than bonds. Over long periods of time, equities have produced higher compound rates of return and a much better chance of building real wealth.

That's the good news.

The bad news is that deciding to own equities is only the beginning. Once you decide that equities belong in your portfolio—even if they make up only 20 percent of your total investments—you still have a very important decision in front of you:

Which equities are you going to own for a lifetime?

That decision matters more than most investors understand. It matters because equities are not one thing. They do not all behave the same way. They do not rise and fall together. They do not expose you to the same kinds of risk. And over long periods of time, they do not deliver the same returns.

So in this presentation, we are going to dig deeply into that question. We are going to talk about equity asset classes, why they matter, and how combining them intelligently can dramatically change the outcome of your investing life.

What follows is a discussion of ten equity asset classes that together form what we used to call—thirty years ago—the ultimate buy and hold portfolio. I believe this framework represents one of the most thoughtful, evidence-based approaches long-term investors can use.

The Mission — and a Reminder Worth Repeating

Before we go any further, let me be very clear about what we are doing here.

The mission of our foundation is to help do-it-yourself investors of all ages do the investing part of their financial plan as well as they possibly can. That's the mission. Education, not prediction. Process not promises.

I am a teacher. I am not an investment advisor. I am not your insurance agent. I am not your attorney or your tax consultant. I am doing my best to share information that can help you become a more efficient investor. But if you want advice tailored to your specific situation, you need to work with a qualified professional.

Everything we discuss here is based on historical evidence. And that brings me to a point I made in Boot Camp number one, which is worth repeating here:

There is no risk in the past.

We always know what we should have done. We always know which asset classes worked best. The challenge is not understanding the past. The challenge is using what we know about the past to make better decisions in an uncertain future.

Where the 10 Equity Asset Classes Came From

The framework I'm sharing with you did not come out of thin air.

In 1994, I attended a class taught by a group of academics and professionals associated with a fund company called Dimensional Fund Advisors. At the time, DFA was not particularly well known. Today, it is one of the largest and most respected firms in the investment industry.

What they taught us was simple, but powerful.

They showed us that if we want to build a portfolio that is both **highly productive** and **highly diversified**, there are **ten distinct equity asset classes** that, based on research going back 50 to 100 years, consistently produced a premium for the risk investors took.

Each of these asset classes behaves differently. Each one has long periods of strong performance and long periods of disappointment. And most importantly, they do not all move together.

That lack of coordination—the fact that they zig and zag at different times—is not a flaw. It is the very source of diversification.

What We Mean by an Equity Asset Class

Before we go further, it's important to clarify what an equity asset class is—and what it is not.

An equity asset class is not an industry sector. It is not technology, healthcare, financials, or energy. Those industries already exist inside every major equity assset class.

Equity asset classes are defined primarily by **company size** and **value versus growth characteristics**. These distinctions matter because they explain a large portion of the differences in long-term returns.

When we talk about asset classes, we are talking about groups of companies that share similar economic characteristics and similar risk profiles.

Let's start with the United States.

The Five U.S. Equity Asset Classes

1. The S&P 500 (Large-Cap Blend)

The S&P 500 is the starting point for many investors. It represents roughly OVER 90 percent of all publicly traded U.S. corporations by market capitalization.

Many investors own nothing but the S&P 500 (https://en.wikipedia.org/wiki/S%26P_500). And historically, that hasn't been terrible. Over long periods of time, the S&P 500 has produced a compound rate of return of around 10 to 11 percent.

But the S&P 500 is only one asset class.

It is a blend of growth and value stocks. It excludes smaller companies. And while it has delivered strong long-term returns, it has not been the highest-returning equity asset class.

2. Large-Cap Value

If you strip the growth stocks out of the S&P 500 and keep only the value stocks, you get large-cap value.

Large-cap value stocks tend to be more established companies trading at lower relative prices based on fundamentals like earnings, book value, or cash flow. Historically, large-cap value has outperformed large-cap growth over long periods of time.

That outperformance does not show up every year. In fact, there are long stretches—sometimes a decade or more—when value underperforms growth. That reality is part of what makes value investing emotionally difficult.

3. Small-Cap Blend https://www.investopedia.com/terms/s/small-cap.asp

Small-cap stocks represent smaller companies—often in the $3 to $6 billion range. These are not penny stocks. They are not speculative startups. They are legitimate public companies, many of which have been around for decades.

Small-cap blend includes both growth and value stocks. Historically, small-cap stocks have delivered higher long-term returns than large-cap stocks, but with greater short-term volatility.

4. Small-Cap Value

This is the gold ring of equity asset classes.

Going all the way back to 1928, **small-cap value** has been the highest-returning equity asset class we know of. It combines two premiums: the size premium and the value premium.

But small-cap value is not easy to own. And we'll come back to that in detail later, because understanding *why* it's hard to hold is critical to deciding whether it belongs in your portfolio.

5. REITs

REITs: Completing the U.S. Equity Return Story

Before moving beyond U.S. borders, there is one additional equity asset class that completes the domestic return picture: **Real Estate Investment Trusts (REITs)**.

REITs have historically produced long-term returns similar to the S&P 500. Their contribution to a diversified portfolio is not driven by higher expected returns, but by behavior. Because REITs often respond differently to economic forces than traditional operating companies, they have tended to zig when other equities zag.

When REITs are added to a diversified U.S. equity portfolio and rebalanced annually, the compound return remains competitive while portfolio volatility is modestly reduced. This improvement does not come from prediction or timing. It comes from adding another distinct source of equity risk.

With REITs included, the U.S. equity portfolio is now broadly diversified across company size, value characteristics, and real estate exposure.

Expanding Beyond the U.S.

The story does not end in the United States.

Academic research has consistently shown that adding international equities improves diversification without sacrificing long-term returns.

The same size and value characteristics that exist in the U.S. market also exist internationally.

The Four International Equity Asset Classes

International equities break down into four asset classes:

- Large-cap blend international
- Large-cap value international
- Small-cap blend international
- Small-cap value international

These markets do not move in lockstep with U.S. markets. There are long periods when international stocks outperform and long periods when they lag. Over decades, they add diversification and resilience.

Emerging Markets

The tenth and final equity asset class is emerging markets.

Emerging markets are volatile. They spend a lot of time at the top of the performance charts and a lot of time at the bottom. That volatility is uncomfortable—but when paired with disciplined rebalancing, it can work to an investor's advantage.

Building the Portfolio One Step at a Time

To understand how diversification works, we build portfolios incrementally.

We start with a simple assumption: **$100,000 invested in 1970**.

If $100,000 feels unrealistic, divide everything by 100 and think in terms of $1,000. The relationships stay the same.

Starting Point: 100% S&P 500

From 1970 forward, $100,000 invested in the S&P 500 grew to about **$35 million**.

- Compound rate of return: about 11 percent
- Standard deviation: about 17 https://en.wikipedia.org/wiki/Standard_deviation

That's a good result.

But now watch what happens when we diversify.

Risk vs. Volatility — A Crucial Distinction

Before we go further, we need to slow down and talk about risk.

Most investors think volatility *is* risk. It isn't.

Volatility is simply how much an investment moves up and down. Risk, in the context of long-term investing, is something much more important: **the risk of not meeting your financial goals**.

An asset class can be very volatile and still be low-risk for a long-term investor. And an asset class can feel very stable and still be extremely risky if it fails to deliver adequate long-term returns.

This distinction matters.

Small-cap value, for example, is volatile. It moves around a lot. But historically, it has delivered very high long-term returns. For a young investor with decades ahead of them, the *real* risk is not volatility—it is failing to capture those returns.

On the other hand, assets that feel safe and calm can expose investors to a different kind of risk: the risk of falling short.

Understanding this difference is essential if you want to build a portfolio that works over a lifetime.

The Power of Small Changes

Adding 10 Percent Large-Cap Value

By shifting just 10 percent of the portfolio from the S&P 500 into large-cap value—and rebalancing annually—the compound return increases by about **two-tenths of one percent**.

That sounds trivial.

It isn't.

That tiny difference adds roughly **$2.6 million** to the ending value of the portfolio. And the volatility remains virtually unchanged.

This is one of the most important lessons in investing: **small differences in return compound into massive differences over time**.

Adding 10 Percent Small-Cap Blend

Next, we add 10 percent small-cap blend.

The compound return increases by another tenth of one percent. Again, that sounds boring. But it adds nearly **$2 million** more to the portfolio.

This is not about excitement. This is about mathematics.

Adding 10 Percent Small-Cap Value

Now we add the gold ring.

With small-cap value in the mix, the compound return rises to about **11.6 percent**, and the portfolio grows from roughly **$39 million to over $46 million**.

And here is the key point: **the volatility barely changes**.

This is the magic of diversification.

Adding 10 percent in real estate investment trusts (retts)

With reits in the portfolio, the compound return is about $45.6 million. But the volatility is now well below the s&p 500.

What This Did to the U.S. Equity Portfolio

By the time all five U.S. equity asset classes are combined—the S&P 500, large-cap value, small-cap blend, small-cap value, and REITs—the portfolio looks very different from a simple market index.

The impact on returns is meaningful.

Compared to a portfolio invested solely in the S&P 500 earning 11%, the diversified U.S. equity portfolio produces a higher compound rate of return over long periods of time. (11.6% vs. 11) That improvement comes primarily from exposure to the size and value premiums, with REITs contributing diversification rather than higher expected returns.

Just as important, the increase in return does **not** come with a proportionate increase in risk. Volatility remains similar to that of the S&P 500 alone and, in some periods, is modestly reduced. The portfolio is no longer dependent on a single group of large U.S. growth companies to succeed.

At this point, investors have already improved the efficiency of their equity exposure—earning more return per unit of risk—without leaving the United States.

This sets the stage for the next step.

What Changed When International Equity Asset Classes Were Added

When all four developed international equity asset classes are layered onto the diversified U.S. equity portfolio, the improvement continues—but the nature of the improvement changes.

The increase in compound return is incremental rather than dramatic. Over long periods, international equities have delivered returns comparable to U.S. stocks, so the primary benefit does not come from higher standalone performance.

Instead, the portfolio benefits because international returns arrive **on a different schedule**.

There are long stretches when U.S. stocks dominate global markets, and equally long stretches when developed international stocks lead. By owning all four international equity asset classes simultaneously—and rebalancing consistently—the portfolio captures returns wherever and whenever they occur.

The result is a portfolio with a slightly higher long-term compound return, about .1% per additional equity asset class and meaningfully improved diversification. The return drove the return from 11.6% to 12% and value of almost $58 million. Risk becomes more evenly distributed across regions, currencies, and economic systems, reducing the chance that a single country or market environment determines long-term success.

At this stage, the portfolio has evolved from a U.S.-centric equity strategy into a globally diversified equity engine.

Emerging Markets: A Very Different Equity Asset Class

The Final Step: The Impact of Adding Emerging Markets

Emerging markets represent the final—and most volatile—addition to the portfolio.

When a modest allocation to emerging markets is added to the already diversified global equity portfolio, the effect on returns becomes more noticeable. Historically, emerging markets have delivered higher average returns than developed markets, but with substantially higher volatility.

The result is a measurable increase in long-term portfolio growth, pushing the long term compound rate of return to 12.3% and over $66 million.

As shown in Table A1a, adding the final 10 percent allocation to emerging markets increases the ending portfolio value meaningfully over multi-decade periods. That additional growth comes at the cost of higher short-term volatility, but the increase in overall portfolio risk is smaller than most investors expect.

Why?

Because emerging market returns have not been tightly correlated with either U.S. or developed international stocks. When combined with disciplined rebalancing, their volatility becomes a source of opportunity rather than instability.

In simple terms, the portfolio earns more money over time while taking on a manageable increase in risk.

This final step completes the construction of a fully diversified global equity portfolio—one designed not to win every year, but to maximize the probability of long-term success.

International Equity Asset Classes

Up to this point, every improvement in return has come from diversifying *within* the United States. That alone produced a meaningful increase in long-term results without increasing volatility.

But the evidence does not stop at U.S. borders.

When we extend the same asset-class framework internationally, the return story continues.

Developed international markets contain the same size and value dimensions that exist in the U.S., and they have historically rewarded investors for bearing those risks as well. Just as importantly, international equity returns have not moved in lockstep with U.S. markets, which further enhances diversification.

Adding International Large-Cap Blend

When we introduce international large-cap blend into the portfolio—again in modest increments and with annual rebalancing—the compound return remains competitive with an all-U.S. portfolio, while overall portfolio volatility declines slightly.

This is an important point.

International diversification does not improve results because international stocks always outperform U.S. stocks. They do not. Instead, it improves results because leadership rotates unpredictably between regions over time.

By owning both, investors avoid making the far more dangerous bet of being in the wrong place for a decade or longer.

Adding International Value and Small-Cap Stocks

As we expand international exposure to include value stocks and small-cap stocks, the pattern becomes familiar.

International value stocks have historically outperformed international growth stocks over long periods, just as they have in the United States. International small-cap stocks have delivered higher long-term returns than international large-cap stocks, with higher volatility along the way.

When these four international equity asset classes are combined with the existing U.S. asset classes and rebalanced annually, two things happen simultaneously:

- The expected long-term return increases modestly
- Portfolio risk becomes more evenly distributed across independent sources of return

Once again, the incremental return improvement may appear small on an annual basis. But over 40 or 50 years, those small differences compound into very large outcomes.

Emerging Markets: A Very Different Equity Asset Class

The final addition to the portfolio is emerging markets—and this asset class deserves separate treatment.

Emerging markets are not simply an extension of developed international stocks. They represent economies that are still in the process of industrialization and financial maturation. As a result, they are exposed to risks that do not exist to the same degree in developed markets: political instability, currency shocks, regulatory uncertainty, and uneven access to capital.

The result is extreme volatility.

Emerging markets frequently appear near the top of performance charts—and just as frequently near the bottom. They experience long periods of spectacular returns followed by long periods of disappointment.

That volatility makes them uncomfortable to own.

But when emerging markets are held as a **small, disciplined allocation** within a diversified portfolio—and rebalanced consistently—their volatility becomes a feature rather than a flaw.

Because emerging markets often move independently of both U.S. and developed international stocks, they introduce yet another source of diversification. Over long periods, this has improved portfolio resilience and return potential despite the discomfort along the way.

Emerging markets are not a core holding. They are a diversifying return engine. Ignoring them entirely means ignoring a distinct and historically rewarded source of global equity risk.

Seeing the Evidence: Table A1a

The long-term return data supporting these conclusions can be found in **Table A1a**, which summarizes historical returns across equity asset classes in the United States, developed international markets, and emerging markets.

Table A1a makes three facts unmistakably clear:

- No equity asset class dominates forever
- Size and value premiums have existed globally, not just in the U.S.
- Diversification works because different asset classes behave differently at different times

You can review the data here:
Table A1a: Ultimate Buy & Hold Equity Portfolio (50% US/50% Int'l)

Spend time with it. It provides the empirical foundation for everything we have discussed.

Why Small-Cap Value Is So Hard to Hold

If small-cap value has historically produced such strong returns, a reasonable question is: *Why doesn't everyone own it?*

The answer is simple—and uncomfortable.

Small-cap value underperforms for long stretches of time. Sometimes very long stretches. There are periods when it looks broken. There are periods when investors abandon it in droves.

It is emotionally hard to hold something that lags year after year while other parts of the market soar. It is hard to explain to friends. It is hard to explain to spouses. It is hard to explain to yourself.

And that difficulty is not accidental. The premium exists precisely because it is uncomfortable to capture.

If small-cap value were easy to own, it would not offer higher expected returns.

Rebalancing — The Behavioral Challenge

Diversification and risk management can work better if you rebalance.

Rebalancing forces you to sell what has done well and buy what has done poorly. It feels wrong. It goes against every emotional instinct we have.

When emerging markets are soaring, rebalancing requires you to trim them. When small-cap value is struggling, rebalancing requires you to buy more.

This is not easy.

But over long periods of time, rebalancing is one of the most powerful disciplines an investor can adopt.

Annual rebalancing allows asset classes to run long enough to benefit from momentum, while still maintaining discipline. Monthly rebalancing reduces volatility slightly—but also reduces long-term returns.

The difference is not theory. It shows up clearly in the numbers.

What This Means for Real Investors

So what does all of this mean if you are a real person with real money and real emotions?

It means that successful investing is not about finding the perfect asset class. It is about building a portfolio you can live with.

It means accepting that there will always be something in your portfolio that is disappointing you.

It means understanding that diversification is not about eliminating discomfort—it is about managing it.

It means committing to a process that you can stick with through good markets and bad.

And most importantly, it means recognizing that the biggest risk most investors face is not volatility—it is abandoning a sound strategy at the wrong time.

Final Thoughts

You are going to make these decisions—either by design or by default.

My goal is simple: **help you make them wisely**.

We cannot know the future. But history gives us a powerful guide. And if we respect that history—diversify broadly, rebalance sensibly, and stay invested—we dramatically improve our odds of long-term success.

And for long-term investors, that is what matters most.