

Speaker 1: [00:00](#) This conversation.

Adam: [00:01](#) Yeah, I hear you.

Speaker 3: [00:01](#) Here you go.

Adam: [00:01](#) So we're recording now.

Speaker 3: [00:03](#) Which is fine. Face it this way, so you keep an eye on that.

Adam: [00:06](#) Yeah. Okay, perfect.

Speaker 3: [00:08](#) [crosstalk 00:00:08]

Adam: [00:09](#) Larry, we were just chatting about the fact that you published your first book. What was the exact year that you ...

Larry: [00:16](#) I wrote a book beginning in 1996. It took two years and it came out in 1998.

Adam: [00:22](#) Right.

Larry: [00:23](#) It's now 21 years ago.

Adam: [00:25](#) 17 books later and seven editions?

Larry: [00:28](#) 17 ... Yeah. 15 original books, two second versions, and 2005 I updated the original "Only Guide You'll Ever Need to Running an Investing Strategy". Then I had written "Reducing the Risk of Black Swans", and then last year we updated that because we had a lot of financial innovation, the introduction of alternatives that were previously only available to Hedge Funds and the expenses that go with it. Stone Ridge and AQR have introduced not cheap but much lower than Hedge Fund costs that make these liquid alternatives and provide us with access to new and unique sources of risk and return, that I think dramatically cut the tail risk for people though who have the ability to take illiquidity risk and earn a premium for that.

Since most of these are investments which are tax inefficient, you're going to own them in your RIA account, and even at age 90, most people don't know their R&D is not even 10% and you can get 20% of these assets out in any one year for most of them. The AQR funds are there in liquids, so there's no problem there. There's an opportunity to pick up almost a free lunch-

Adam: [01:53](#) Absolutely.

Larry: [01:54](#) ... in the sense that you don't need a lot of your assets. Most people of wealth can take 5, 10, 15, 20% of their assets and make them illiquid and earn a premium. That's what the Harvard's and the Yale's have been doing for decades.

Adam: [02:10](#) Exactly.

Larry: [02:10](#) You're getting paid to give up liquidity. It's a natural risk for me.

## Alternative Sources

Adam: [02:15](#) Exactly. I want to go all the way back to mid '90s, early '90s, when you began in the ... when you transitioned away from your banking career and into wealth. I'm curious because you've taken a stand on alternative sources of risk premia for ... going on a couple of decades now. Back when you started talking about these and actually implementing these strategies inclined portfolios, these would have been thought of as relatively exotic approaches, right? So, it took quite a bit of courage I think at the time - what gave you the courage and conviction to make that leap?

Larry: [02:56](#) Well, I think there's a good story here that's really helped me. I think of myself as one of the luckiest people on the planet in terms of timing, being in the right place. I almost feel like the character in that movie Zelig to some degree, who is always in these important points in history, he's popping up. I went to school to be a security analyst and portfolio manager, which is ironic because I'm now sort of antichrist.

Adam: [03:25](#) Of traditional security analysis, yes.

Larry: [03:28](#) Of traditional security analysis, and I got out of school in 73, I graduated at the top of my class from one of the better MBA programs in the country in NYU, and I couldn't get a job because Wall Street had collapsed-

Adam: [03:42](#) Right.

Larry: [03:43](#) ... and we had seen the end of the fixed brokerage commissions era. So, commissions were collapsing and the stock market had crashed, and the bankers ... investment banks were hiring people with 10, 20 years experience for not much more than you were having to pay an MBA right out of school. I ended up taking a ... going for an interview because I was going to get married and needed a job. I was waiting to hear from a couple of investment banks at the time, but I started ... to get other jobs, so I decided I'd go to try get a job. I had one offer from IBM, to be a computer salesman. I know nothing about computers and didn't then either, but CBS was interviewing on campus at NYU, and CBS owned the Yankees and I was a die hard Yankee fan.

I said, "I don't care if I'm going to drive a bus. I'm going to see if I can get a job with the Yankees", right? I get on ... I get dressed up, put on my suit to go for the

interview, get on the train, opened my New York Times, and there's the headline. It says, "CBS sells the Yankees." I said, "All right. I'm all dressed up, I might as well go to the interview." I go in there. Eventually, I get offered a job there in their accounting area, and I don't want to be an accountant and everything. But the day before I was about to take the job offer from IBM, I got a call from this young guy named [Don Gold ( I think ) who was the brand new assistant treasurer international at CBS. Now, CBS had hired him away from International PayPal. He was brought over by their new chairman, a guy named Arthur Taylor who was taking over from Bill Paley, famous guy. Why did they need him? Because we had just had the era of floating exchange rates. Brenton Woods had collapsed-

Adam: [05:39](#)

Right.

Larry: [05:39](#)

... and nobody knew anything about managing foreign exchange risk, and he called me up and said, "Larry I'd love to talk, everyone gave you rave reviews. I need somebody to work with me." I told him, I said, "I have to give IBM an answer. I can come down today, but if I ... and if it works great." He said, "Great." I got on the train subway that day, I called IBM and said, "I have to wait till Monday. I'll give you my answer on Monday." Met the guy, turns out he was the protege of the chairman, exciting new area. I said, "All right, what the heck?" I took the job. Well, two years later ... That was sort of my first revolution. I'm helping to manage all of the foreign exchange risk and interest rates are going crazy.

Adam: [06:28](#)

Absolutely.

Larry: [06:28](#)

Double digits.

Adam: [06:29](#)

What an incredible time to come into that business for rates and currency.

Larry: [06:32](#)

I'm meeting all of the top bankers and economists and my training wasn't economics and finance. I was loving it. Two years later, Citicorp called me up and they offered me a job. They were just forming an international finance consulting unit. I was all of 23 years old, but two years of experience in the land of the blind, the one eyed man is king. They hired me to do that and I joined them and I worked with a great team there. Then two years later, they decided to open up an office in San Francisco and a couple of very senior people turned down the job. I'm 25, I think I was the youngest vice president ever at the time at Citicorp, and they request ... those senior people turned down the job. They offered it to me. I went out to run a foreign exchange trading room. I had never traded a day in my life. I had to run and fund an off shore bank and manage the interest rate risk, never done that, and advise some of the largest multinational corporations in the world. I'm managing all kinds of financial risk, and I'm 25.

Adam: [07:39](#)

Incredible, yeah.

- Larry: [07:41](#) Then, while that happened, and I'd never managed people, I had to go build the team, and manage all that. Then what happened was Citicorp and Salomon Brothers became the big innovators in a whole new revolution of what became known as **weapons of mass financial destruction**. These derivatives to hedge interest rates, ceilings, floors, collars, swaps, all this stuff and also on foreign exchange rates, helping companies manage these risks, and S&L industry was blowing up. That was the second big revolution and finance that I was involved with. It was really just Citicorp and Salomon Brothers were the only two players at that time. I did that for about eight years. Then my boss left Citicorp, went to Citicorp Homeowners and called me up and said, "Larry, mortgages are the hot new thing."
- Adam: [08:35](#) Right.
- Larry: [08:36](#) They had just issued the first private mortgage backed security. Lew Ranieri had worked with them - Salomon Brothers and Citicorp – there was only Fannie Mae and Freddie Mac at that time. So he called me up and said, "Larry, come join me" I'm all of 35 and time to do something different. There was a third big revolution. We became the biggest issuer of private mortgage backed securities. Then I left to join Prudential Home Mortgage as vice chairman. I was in charge of credit, interest rates, risk, funding, liquidity, everything. I had to manage risk for the largest mortgage company in the country, at the time was \$45 billion. When I joined the industry 10 years before, a billion was the largest originator.
- Adam: [09:23](#) Right.
- Larry: [09:23](#) That was a big revolution. Then the company got sold and I was going to retire and go back and try to teach. I find the job at some university as a lecturer and stuff. Then my friends told me what they were doing in this new area of **registered investment advisors**, giving advice, and they were financial planners. **But they didn't know anything about managing money and risk-**
- Adam: [09:23](#) Right.
- Larry: [09:51](#) ... and everything. I said to them, "Look, I think we have a great fit here. I want to teach, I could teach you and all your clients about managing all kinds of financial risks." My undergraduate degree was studying corporate finance. It was actually the first corporate finance programs because there was no corporate finance until ... and those guys came along in the mid - late '60s, and before that, corporate finance was in an accounting class. Right?
- Adam: [10:20](#) Right.
- Larry: [10:22](#) This got me back to my roots and soon as I step in, what do I ... what happens? **Fama-French have just published their papers.**

- Adam: [10:29](#) Okay. So this is early '90s?
- Larry: [10:31](#) I joined in 95, so their paper came out in 93, their ... introduced in their funds in 94, and we go and say, "Guy, go hear their president. We've got to adopt this. This is the right strategy, it all makes sense." That was the fourth big revolution, just coincidences, timing, being in the right place, CBS owning the Yankees. Mortgage industry took off. I was very lucky, and I think the combination of those experiences is really giving me a lot of unique perspectives, enabled me to think about managing risks in different ways than others, learning never to treat the unlikely as impossible, dealing with the peso problems-
- Adam: [11:19](#) Yes.
- Larry: [11:20](#) ... and those kinds of things, and helping companies avoid all kinds of mistakes of overconfidence, and they're thinking about outcomes and deterministic ways rather than-
- Adam: [11:31](#) Probabilistic.
- Larry: [11:32](#) ... probabilistic ways. All those experiences really helped me and I think have allowed me to contribute by giving back, and that's what I've enjoyed doing as ...
- Adam: [11:47](#) It plunged you into several really key roles where you had to take on enormous responsibilities in a brand new field. You overcame that and-
- Larry: [11:58](#) I had great teachers.
- Adam: [11:58](#) ... built it into a successful ... Which was great, but then you go into wealth management and there's an explosion or proliferation of new concepts and new ideas, the group, Fama, Booth, right? The head of DFA-
- Larry: [12:14](#) Yeah, David Booth ...
- Adam: [12:15](#) ... had commercialized these concepts, right? But obviously they were brand new. Nobody had accepted them as the gospel that we've sort of all ... I accept them as today, and so it was a pretty big leap of faith.
- Larry: [12:27](#) Yeah, it certainly was a leap of faith. I came from the active world. I mean, we were active in managing foreign exchange risk and interest, I sold consulting services and market timing strategies. Here's the interesting thing that, looking back, I learned. I used to give speeches and forecast the economies and interest rates and exchange rates and everything. When I got a forecast right, of course, I took credit for my brilliant, insightful and-
- Adam: [12:56](#) Sure.

- Larry: [12:57](#) ... thoughtful analysis. When I got it wrong, I blamed it on some unexpected event-
- Adam: [13:01](#) Some counterfactual, yeah.
- Larry: [13:03](#) ... that nobody could have foreseen. At the end of the day, you're a genius or ... and just unlucky on occasion. Well, eventually, hopefully smart people recognize that's not what's really going on.

## The Transition

- Adam: [13:15](#) What caused you to recognize that? How did you make that transition? Is there any-
- Larry: [13:18](#) Just overtime experiences, learn that ... and the evidence when you read it, that they're just ...
- Adam: [13:25](#) So overwhelming.
- Larry: [13:26](#) There just aren't really many good forecasters. Maybe there's a handful of people in the whole world, and they're hard to identify until after the fact.
- Adam: [13:37](#) Yeah, for sure. Just getting back to, you've entered this new domain, private wealth, you're going to be the investment arm for this planning organization, you recognize the opportunity that Booth has put together with DFA, and then this factor revolution eventually turns into something absolutely gargantuan. Now it's sort of common knowledge, these factors seem to be almost common knowledge. Is there something today that is an analog of that new revolution that you observed, you came into in the early '90s, that takes the same level of courage and conviction today to be able to step into the breach, but there's so much scientific evidence and background supporting it? But the-
- Larry: [14:32](#) Well, it's a great question. I think, I can say two things here on this subject, and I don't know if that exactly answers your question. But number one, what I saw in my previous world are investment bankers who create products that can be used for good or evil by just selling stuff to exploit people. I was a consultant in selling products for Citicorp. We worked with a lot of S&Ls, for example, and managing their interest rate risk. I would walk into an S&L who had say a 13% mortgage, okay?
- They wanted ... they were concerned that they had issued this 13% mortgage and they wanted to lock in their funding costs at say 10% to keep that spread. They swapped and created this fixed rate CDs, if you will, over say a 10 or 15 year period. I walked in, I said, "Do you know what Salomon just sold you?" The borrower, if rates fall, is going to prepay and you've just locked in this 10% rate. This is a recipe potentially for disaster. But Salomon Brothers and other people who would ... never explained that.

- Adam: [15:50](#) Of course not.
- Larry: [15:50](#) Right? Because they ... in those days the spreads were huge. They were making several percent on transactions, not 10 to 20 basis points.
- Adam: [15:59](#) Right, the incentives were just so high.
- Larry: [16:02](#) That's what we see today. There's a lot of good research on investing in factors that matter, but so many people create garbage products that are just meant to be sold. They really have no business being out there. In the literature, you're aware there is probably 600 factors that have been identified. We know once you get beyond five or something like that, the incremental value can't be anything important, right?
- Adam: [16:31](#) Even if they're completely uncorrelated?
- Larry: [16:33](#) Yeah.
- Adam: [16:33](#) Yeah. The marginal benefit, it diminishes.
- Larry: [16:35](#) It's close to zero, and you have the extra expense and the complexity. We know many of them are subsumed or they're results of data mining and stuff. So we wrote our factor book, "Your Complete Guide to Factor Based Investing". We tried to educate the public there and said, "Out of these 600 factors, how can we protect you from that? Well, we'll give you a systematic way to think about it, make sure that factor has evidence of persistence, pervasiveness, robustness, implementability, intuitiveness, and then you increase the odds that you're likely to be investing correctly." We could only really identify five. Some people argue there are others.
- Liquidity, you can make a case for it certainly. A lot of people like low beta on there. I'm not a fan of low beta, although I completely understand the logic. But my problem with little beta is it's regime dependent, and that's what's not focused on. No one explains this to people. We'll just touch on it briefly. Low beta predicts one thing, not two. It does not predict the premium, it predicts low beta, when it's in the value regime. Low beta stocks are cheap relative to the market, it predicts a premium. When it's in the growth regime, which it is now because popularity ... use cash flows into it. It predicts negative premium.
- Now, you may be willing to accept that, well, negative premium to get that low beta, but you should not expect the premium. There's better ways, I think, to get the low beta, just lower your equity allocation and take more term risks. Low beta is pretty well explained, I think, by value in ... Which is by the way, REITs are very similar in that way. It's more small value and term risks explain REITs. REITs really aren't needed in a portfolio in terms of treating them as a separate asset class.

- Adam: [18:42](#) Just to translate or make sure they ... tracking what you're talking about, I think what you're saying is that when low beta portfolios load also on the value factor, then they predict positive performance, but when they load negatively on the value factor, in other words, they load on the growth factor, then they predict negative, and for negative ...
- Larry: [19:04](#) Low beta becomes a free lunch when it's in the value side, right? You're getting less risk and a higher expected return. Today, that's not true. I just wrote a piece which is going to appear on a Wes Grey's Alpha Architect site, which I think is the best website for those of us in the industry who want to stay on top of the literature-
- Adam: [19:27](#) New researching.
- Larry: [19:28](#) ... and Jack Vogel does a great job every week. He's got a short video. I watched it religiously, trying to put these into plain, ordinary English. What's behind the papers? One of the things I talk about is this curse of popularity. Whatever is popular has generally godawful returns. There's one exception. You know what? You probably know what that is.
- Adam: [19:53](#) Nope. Tell me.
- Larry: [19:54](#) I'm sure you do. It's called momentum. Popular stocks are high momentum stocks-
- Adam: [19:54](#) Right.
- Larry: [20:01](#) ... and that's the one anomaly in finance that is not only an anomaly from a risk perspective, there's really no good risk story there. Although there's crash risks with momentum, there's no good risk story behind the phenomena. But all the other anomalies in finance are addressed by this popularity fact. There's a wonderful new book by Roger Ibbotson and Thomas Idzorek. I think his name and two others, that's available on the Internet. It's published by the CFA and it's this ... I call it the curse of popularity, whatever is popular is godawful returns.
- Adam: [20:40](#) Right. They describe popularity using several different characteristics, and they use that as a risk model.
- Larry: [20:45](#) That's exactly right. They have built this PAPA, P-A-P-A model I think.
- Adam: [20:50](#) Right, right.
- Larry: [20:52](#) I then write ... I wrote up what the literature had found going back to their original work in the '80s on this subject. But then I wrote a companion short piece asking the question, "what's popular today?" It's not a big surprise because of the '08 bear market. What's popular today is low beta and quality.

- Adam: [21:15](#) Right?
- Larry: [21:16](#) I said, "Let's check," and I looked at the two largest ETFs, QUAL and USMV. QUAL I think, that's over 12 billion of assets and USMV has like 22 billion, I think, if my memory serves, and both of them look like big growth funds, especially, USMV. Yeah, you may have safety in them, and you may be willing to sacrifice returns if that's what you're looking for, but you should no longer expect what has historically been good size premium. The quality premium has been about three and a half percent and it's ... there is no risk story to that ... to be a purely behavioral ... because quality companies have low standard deviation of earnings.
- Adam: [22:11](#) Low leverage.
- Larry: [22:11](#) Low leverage-
- Adam: [22:12](#) Higher ...
- Larry: [22:12](#) Well, operating on ... There cannot be a risk story there. Now everyone may have discovered it, right? But it has been persistent and pervasive, and we know there are limits to arbitrage. But the amazing thing is, quality holds up or has in larger stocks, where there aren't those limits to arbitrage.
- Adam: [22:12](#) Absolutely.
- Larry: [22:33](#) Term ... Sorry, the low beta or a low volatility is the other one. I think the strategy is fine. You want to own quality in value, so you screen the junk out of value, those lottery stocks, you screen out what I called the value traps and you greatly improve the value premium. I would avoid low beta. The way to get low beta is just lower your equity allocation, and tilt towards the other factors to drive your returns up. That's the way I-
- Adam: [23:08](#) Well, let's introduce this idea of ... It's one thing to have a good understanding of the factor of literature and it's a whole other thing to have a good understanding about how to implement those factors in strategies, right? Because it's also often you've got these single factor products that emphasize a certain factor that may be a target factor, but has all of these unintended bets, right? So, the quality and low beta funds that you're describing, clearly they do target this low beta or quality factor, but there are also short ... some of the other factors that we know are so highly predictive of future returns, right? There's short value.
- Larry: [23:49](#) Right.

## Multifactor Approaches

- Adam: [23:50](#) How do you think about these multifactor approaches? Multifactor product?

- Larry: [23:55](#) It's a great question, and it goes back in the literature, in value is actually short momentum-
- Adam: [24:02](#) ...
- Larry: [24:02](#) ... unless you do something about it. We actually were one of the people who was pushing Fama and French to begin incorporating momentum. My version of the story, I don't know if it's 100% accurate, because I can't read people's minds. But Fama was adamant about not incorporating momentum because there is no risk story.
- Adam: [24:02](#) Yeah.
- Larry: [24:25](#) I believe it was French who finally convinced them to say, "We have to stop banging our heads on the wall or against the wall. We don't have to target momentum but we can screen out negative momentum-"
- Adam: [24:37](#) Right.
- Larry: [24:37](#) "... and reduce the risk. We don't have to be buying things as they enter the value regime." Now what Fama and French never, I would say, admitted if you will, is that they were always benefiting from momentum but wouldn't say it.
- Adam: [24:37](#) Right.
- Larry: [24:53](#) That came about because they very intelligently improved on indices which have to sell something as soon as it leaves an index. What they did to reduce transaction costs and improve tax efficiency, was introduce a buy and hold range. Well, if you have a buy and hold range, you're getting momentum as small stocks become larger and value stocks become growthy and they migrate. You're holding them for a little while longer and that's momentum. They were benefiting, but now there was screening out negative momentum. A growth stock that's dropping at the value and crashing they used to buy and they found out, doing the research, that was acting as a drag. So, they stop buying-
- Adam: [25:36](#) That's going to be substantial positive attribution for them over the years.
- Larry: [25:39](#) What that did is, instead of having a negative, say a DFA fund, might have loaded, say 0.6 on value and minus 0.4 on momentum, still gave you an above market return, but if you could go from maybe 0.6 on value to 0.5 on value, and drive momentum to zero-
- Adam: [26:00](#) Right.
- Larry: [26:01](#) ... you end up-

- Adam: [26:01](#) To huge ...
- Larry: [26:01](#) ... with a much better and the most and less tracking error to the market as well which we know is a problem for many investors. We all have always thought about how do you incorporate these things into one portfolio? If too many investors make the mistake of thinking of each of element isolation like an asset class.
- Adam: [26:24](#) Yap.
- Larry: [26:24](#) That makes no sense because if you have value on one fund, the momentum on the other, the value fund could be buying a stock when the momentum fund is shorting it, you got two trades, two expenses and no position.
- Adam: [26:40](#) Exactly.
- Larry: [26:41](#) You need to incorporate some way of doing it either with weighting schemes which I think are very good way to address it. I know AQR does that, or you could use negative screens, you don't get the positive momentum from that, but buy and hold range give you some of that and you get rid of the negative momentum.
- Adam: [27:00](#) Right.
- Larry: [27:01](#) The other thing I think is important is something I've been looking at, and I just wrote a piece on as well in the literature. Yeah, you really have to stay up on the literature because just like anything else, the world changes. 50 years ago companies were mostly manufacturing companies, and so book-to-market gave you a good measure of value. Today, so much of the value of companies are in brand names, technology, which unless you acquire it, isn't on the balance sheet, and so you could buy companies. Let's say even a Coca-Cola, you telling me the brands aren't worth anything? All right? So that has value. Book-to-market especially, ignores companies with negative equity. What I was ... you would think ... I think most people would be shocked when they look at the data. They say, "Why do you want to buy a company with negative equity?" Not only do negative equity companies make money, but they outperformed the market by a significant amount.
- Adam: [28:10](#) Yeah.
- Larry: [28:12](#) If you screen them out because you're looking at book-to-market, you miss a real value effect. You need to look at things like EBITDA, enterprise value, your cash flow to enterprise value, price earnings. I think the higher you go up on the earnings with this, the less ability to manipulate things-
- Adam: [28:34](#) The cleaner signal.
- Larry: [28:35](#) ... the better. Yeah-

- Adam: [28:35](#) Yeah.
- Larry: [28:35](#) ... you get a cleaner signal. One of the reasons we chose to work with Bridgeway was one, by being smaller we could get deeper size and value than DFA which had gotten much larger. But they also moved away from price to back in 2011, and incorporated other value metrics. DFA finally threw in the towel in 2013 when they began incorporating Robert Novy-Marx's work on profitability.
- Adam: [29:05](#) Right.
- Larry: [29:06](#) The world is changing, you have to stay on top of the literature. Old Strategies may no longer work, and so part of my job of course is making sure we're following the strategy, the research and taking us wherever it leads to boldly go-
- Adam: [29:23](#) Exactly.
- Larry: [29:23](#) ... the ...

## Diversification

- Adam: [29:25](#) 2018 is a really good example of ... we all think about diversification, not just in terms of asset class diversification, but to what extent can we add these other uncorrelated, persistent, pervasive, intuitive, economically relevant, factor premia as well to portfolio stabilizing and have less reliance on procyclical equity market beta? 2018 diversification catastrophe, right?
- Larry: [29:55](#) Yeah.
- Adam: [29:55](#) Like it's just an unusual situation where almost all classical and alternative premia all struggled the same time. It's been actually a pretty tough decade kept by a very tough year for diversification in general. I mean, what should investors learn from that? What are you taking away from that? Is it informing how you're positioning going forward at all?
- Larry: [30:19](#) Yeah, I think it's a really important topic, Adam. I just finished drafting a new speech, which I hope I'll be giving in the next few years, in conferences like this. I got to thinking about it in discussions with clients. I call it "What do you do when an investment strategy performs poorly?". You may have read the piece I wrote for Advisor Perspectives. People say, for example, well, Larry, your value stocks have performed poorly for the last decade. Why do we need to invest in value? What I point out is the following, first of all, we have decades of evidence on value that goes back 90 plus years. It's pervasive that it survived various economic regimes. More importantly, or in addition, we have evidence of its pervasiveness. Buying what's cheap, relative to what's expensive, has outperformed all around the world and virtually every country in the world, and of course asset classes, whether it's stocks, bonds, commodities or currencies.

What you have to understand is, if there is a risk story behind any factor, let's assume that's the case, then there has to be the risk that it will underperform for a very long period of time. Here's the pushback I get, "Larry, I'm retired. I don't have 10 years or 20 years to wait." I said, "That's exactly backwards thinking." It's backwards thinking because, why do you want to put all of your eggs in one basket when it might be the one basket that blows up? What I point out is ... What I think shocking material to most people. I mean, I was even surprised to see this until I looked at the data. We actually have three periods of 13 years or longer when the S&P underperformed totally riskless T-bills.

The longest period is 17 years, from 1966 to '82 slight under performance. We have 15 years from 29 to 43 and we have 13 years from 2000 to 2012. Now if my math is right, that's 45 years, adding them up, out of the 93 years of data we have. That's almost half of the time you're going these long periods. Why anyone would want to load up a portfolio and a total market portfolio that's 60, 40 stocks and bonds. Most people if you ask them, they think they've got 60% of their risks in stocks or market beta, and it's not true, it's like 90% because stocks are so much more volatiles. What I then show them is in those three periods, when the market beta was negative, in each of those cases the size and value premium were huge, 4 to 5% in each of those periods.

Adam: [33:33](#)

Right.

Larry: [33:33](#)

Now, we just went through a period where value did poorly, but by the way, it was down maybe 2% a year, not five. By the way, internationally value outperformed in that period. There was no harm if you globally tilted. But people focus in the U.S because that's what they're familiar with.

Adam: [33:53](#)

Yeah.

Larry: [33:55](#)

What I tell people is this, I believe an investment strategy should be based upon these core principles. This is based upon all of my experience in life, and this'll be my talk tomorrow. It's all laid out in my 2018 "Black Swans". First, the basic premise should be ... that you should have a belief that while markets are not perfectly efficient, we know that isn't true and likely will never be true just because limits to arbitrage exists, and people are humans and they make behavioral mistakes. But you should operate as if they are highly efficient.

If you believe that to be the case. The second premise should then follow from the first, which is ... then all risky assets should have similar risk adjusted returns. If not, cash is going to flow, arbitragers will move money out of the high expected returning into the high, expect the returning and out of the low drive prices into a new equilibrium. If you believe that, then why do you want to concentrate in any one factor and make that bet? To me, the logic is simple. You should invest in as many unique sources of risk as you can identify. We think that there are the three

or four or five big ones in equities and then you can diversify across those factors across asset classes.

Adam: [35:27](#)

Yep.

Larry: [35:28](#)

We use the AQR style premium or risk premia funds. Then there are three other sources of risks which are very logical. Each of them has ... or two of them have some correlation to the equity premium or economic cycle risk, so you have to understand that, but they're not perfectly correlated. One of them has no correlation, and that's reinsurance. Reinsurance had a pretty shitty year in '17, had really bad year in '17, not a good year in '18. But guess what? What happens when insurance companies have losses? What do you think happens to the premiums?

Adam: [36:09](#)

They raise up.

Larry: [36:10](#)

They raise them.

Adam: [36:10](#)

Yeah.

Larry: [36:12](#)

In 20s ... What people fail to understand is this. In 2017 the fund we used had a zero loss estimated return at 17%, now no one expects zero loss.

Adam: [36:25](#)

Sure.

Larry: [36:26](#)

You might've expected, say 8% average. By the way, the median is above the mean because you have most years, you get little losses. The fund will make maybe 11 or 12% but in a really bad year it could lose 15 you get-

Adam: [36:42](#)

Strong negative skew.

Larry: [36:43](#)

... 8% average, Right? You get a strong negative skew. Most of the years you're going to get a little more than eight but the average is 8. Well, now because of the losses and the fact that the riskless rate has gone up, they collect premiums they want, put it in, say a one year treasury, very liquid instrument. That's gone up two and a quarter percent. That alone pushed it over 17 and the fact that premiums have jumped, California fire premiums, even if you can buy it, are already up over 20% likely headed higher.

The Japanese and far east typhoon premiums are going to jump, we estimate 10, 15%, U.S hurricane gets ... and that's negotiated in March or April, U.S hurricane risk is June. That's going to go up, we think it's going to jump to about 21% for quota shares risk. If you subtract historical 8% maybe think risk is higher, it's even 10. Well, that's a pretty good return for an uncorrelated asset with a volatility historically of 10.

Adam: [37:56](#)

Especially given the expected returns on traditional asset classes, right now.

- Larry: [38:00](#) Are lower.
- Adam: [38:00](#) Yeah.
- Larry: [38:00](#) Then a second one is alternative lending, which makes consumer loans, small business loans and corporate loans to prime borrowers. Here you clearly have some economic cycle risk.
- Adam: [38:14](#) Yeah.
- Larry: [38:14](#) But it's not like buying junk bonds. In 2008, prime loans would have on credit cards were about breaking even. That's with 10% unemployment-
- Adam: [38:14](#) All right.
- Larry: [38:26](#) ... the worst recession ever. Here, because this fund uses a little bit of leverage to try to recover its costs, we think the fund might lose 6, 7, maybe 8% in a really bad year. But that's hell of a lot better than minus 40 50 or 60.
- Adam: [38:42](#) Yeah.
- Larry: [38:42](#) On the other hand, we think the expected return is in the six or seven range, which is about the same as stocks for the U.S anyway, and you've got to find vol.
- Speaker 1: [38:53](#) Right.
- Larry: [38:54](#) That's a Sharpe of over 1. Now there are other risks, you don't have liquidity, and these loans are the kinds of things the Yale's and Harvard's of the world have been investing in for decades, but consumers couldn't. You can't do it in a mutual fund form because you can't make a three or a five year loan and have the reality liquidity.
- Adam: [39:13](#) Right.
- Larry: [39:13](#) That's why there is interval structure payment. The last is the most ... also a very natural premium, but it's going to correlate with equity risk. So is the variance for a supreme, which we know has been a massive story. People hate volatility, 90% are put in calls, expire worthless. We think this fund has that 8, 9% expected return. Last year when volatility was spiking in every asset class, right? Oil stocks were going crazy.
- Adam: [39:44](#) Yap.
- Larry: [39:45](#) Returns were jumping all over, right? So, it had a bad year and people flee and guess what, what happens to the premiums? They're now much higher and the funders off to a very good start. I think so far this year it's up over 2% for a fund ...

Adam: [40:01](#) Pretty awesome - volatility collapsed in the first month or so.

Larry: [40:05](#) Then we think that fund likely has a 9, 10% return expected now. But you have to live with those bad years and no, even sometimes it's going to correlate.

Adam: [40:15](#) Right.

Larry: [40:15](#) Even uncorrelated assets correlate like reinsurance did.

Speaker 1: [40:19](#) Yep.

Larry: [40:19](#) The interesting thing though with for example with alternative lending is, you can have bear markets and stocks and no increase in unemployment. Think of the long-term credit prices in the summer of '98, stocks dropped 25% that quarter and unemployment didn't go anywhere.

Adam: [40:36](#) Right?

Larry: [40:36](#) 2011 we had big crises and unemployment didn't go in. These things have been ... would have returned very nicely. All right? Last year stocks crashed terribly in the fourth quarter and unemployment went down.

Adam: [40:51](#) Right.

Larry: [40:52](#) We think that fund is likely to crank out consistently. I mean, it's had almost zero volatility for the last several years. It was facing a headwind last year because interest rates went up one and a quarter or 1% and it still earned 5%.

Adam: [41:10](#) Yeah. It's pretty low duration assets.

Larry: [41:12](#) That's 1.3 years.

Adam: [41:14](#) Yeah. Right, yeah.

Larry: [41:14](#) How much farther do you think you're going to get? Yeah, all right. By the way, none of these assets have any inflation risk, so you're not only reducing the volatility, we think each of them is in the 5 to 10 volatility independently because they're uncorrelated. We think an equal weighted portfolio of them has a volatility of 5?

Adam: [41:34](#) Right.

Larry: [41:35](#) One quarter that is stocks and we think it has an equity risk return. Uncaught, but you need the discipline to stay the course and not worry about if insurance had a bad year. It's awful, global warming and know the scientists at the reinsurance

companies are totally unaware that global warming is an issue and ... pricing not risking they are just dummies who are pissing away their capital. Right?

Adam: [42:01](#)

Clearly.

Larry: [42:01](#)

Yeah.

Adam: [42:02](#)

Yeah, obviously. I had somebody articulate what I think is a really neat metaphor for the evolution of psychology for investors as they face these types of experiences. He articulated at us, each increment in time when you're underperforming, whatever your emotional benchmark is, is a closest regret and the accumulation of each of those slices in time. The accumulated, some of that is doubt. Then on the other side, there's a bank of it is faith, right?

Larry: [42:42](#)

Right.

Adam: [42:43](#)

As long as faith continues to outweigh doubt, then an investor will stay the course, right? So, I think you've done such a great job of creating this or cultivating and perpetuating this faith so that investors have maximum probability of sticking with these long-term premia through the doubt and through the regret in order to realize a long-term return.

Larry: [43:10](#)

I think that's a great analogy. To me, there's one key to having faith - that's knowledge, and what's sad in our country, despite its importance, money I think is probably the third or fourth most important things and people ... after your family, your health for some may be their religion. It's not money of course itself, but what it can do for you, and a safe, secure retirement, nice vacations, whatever it is, having a good education for your kids. But unless you get an MBA in finance, I don't know anyone who's taken a single cost and capital markets theory.

Adam: [43:48](#)

Right

Larry: [43:48](#)

How are they going to learn these theories and stuff when it's what's sad or compounding? The problem is the average American would rather spend the hours glued to some reality TV show. They're reading books like mine or Wes Gray and Jack Vogel's or John Vogel's, William Bernstein. Those books don't sell, they'd rather read some Harlequin romance or watch Game of Thrones - maybe it's entertaining, but it's not going to improve your financial condition.

Adam: [44:19](#)

Right? Yeah. Well, I mean, your corpus is absolutely mountainous and it's a huge gift I think to most investors and really appreciate you sharing your ... the evolution of your own experiences, and how your thinking's evolved and what your current thinking is and how people should continue to think about their own investments ,and just thanks. Thanks again for sitting here.

Larry: [44:46](#)

Yeah, my pleasure. Great to be with you anytime, Adam.

Adam: [44:49](#)

Thank you. That was great.

Larry: [44:51](#)

Yeah. Good, hopefully people enjoyed, get something out of it.

Adam: [44:51](#)

I think it will be -