IMAP Independent Thought Podcast
Episode 27: Why it is hard for active managers to outperform.

Craig Lazzara, CFA is Managing Director and Emeritus Global Head of the Index Investment Strategy Group at S&P Dow Jones Index based in the USA and spoke with IMAP during his time in Australia

- Craig spoke to S&P DJI research showing that index investors have an above-average chance of achieving above-average investment results.
- He debates his view that most active managers underperform most of the time, with any out-performance tending to be temporary.
- The effect of transaction costs contributing to the net performance difficulties for active investment management
- The use of wider dispersion across assets as a way to measure the potential value of stock selection ability to construct an index-beating portfolio.

Moderated by David McDonald, CFA - IMAP

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David McDonald - IMAP (00:16):

So welcome to this podcast in the IMAP independent thought series.

Today I'm joined by Craig Lazara. Craig is the managing director and Emirate's Global Head of the Index Investment Strategy Group at S&P Dow Jones Indices. And he is based in the USA. I recently had the pleasure of listening to Craig present an IMAP event in Sydney. So, thank you for joining us yet again, Craig,

Craig Lazzara - S&P DJI (00:41):

David, thank you. I'm delighted to be back.

David McDonald - IMAP (00:44):

So today we're going to look at why it's hard for active managers to outperform. And perhaps just to start, Craig, there has been a phenomenal rise, not just in, in indexing, but also more recently, obviously, the growth of ETFs. So why do you think that is? Or is that something you could give us a bit more background on?

Craig Lazzara - S&P DJI (01:07):

Yes, there are good reasons for it. Let me say the conclusion first.

If you look at pretty much any relevant statistic that can be, I mean, for example, we, we track at S&P the value of assets linked to the S&P 500.

If you trace that graph over time, it goes, it's up and to the right. I think at the end of last year, we estimated roughly 5.7 trillion US was tracking the 500.

So, it's up dramatically over time.

If you look at ETF usage in Australia or ETFs in Asia or ETFs in the United States, all the lines go up into the right. So, there's no question that there has been tremendous flow of assets from actively managed into passively managed or index funds, ETFs being just a wrapper that is convenient to put index product in another product within.

Craig Lazzara - S&P DJI (02:07):

It's not an asset class, of course, in itself. Now why is that? And I think they're, they're kind of, and you can answer that question at two levels.

One level is simply to say it's to cite a series of observations that have been made in part by, by us at S&P, because we do studies of this, but going back literally 90 years in the US and the observations are all of, of the following nature.

One researcher looks at a database of actively managed funds and compares the results of those funds' performance to the return of a passive be market index that is appropriate for that style of investment.

So, in Australia, we might compare a Australian equity managers to a SX 200. In the US we might compare large cap US equity to the S&P 500, for example.

Craig Lazzara - S&P DJI (03:11):

And, and what you see very consistently, the study that we do is called SPIVA stands for S&P Index Versus Active. But other studies have similar conclusions.

What you see quite regularly is that the majority of active managers underperform by a benchmark that is appropriate to their investment style. And that is a conclusion that is, it's robust across time. It's robust across geography.

If you extend the observation period, in other words, if you look at underperformance rates over a one year interval versus a five year interval, or a 10 or a 15 or a 20 yar period, what you typically see, and we have seen this certainly in the US where we have the most data. What we typically see is that the underperformance rates get worse the farther back in time you go.

Which to me is evidence that what you're observing is a real phenomenon. It's not just a coincidence happened this year. It happens continually and reinforces itself over time.

David McDonald - IMAP (04:17):

Right. So, I mean, we can talk about the longer term, the persistent underperformance perhaps a bit later. But just to touch on, you mentioned it's across geography.

So, you've seen that underperformance here in Australia, in your US markets, in Europe, et cetera. And is it only equities or do you see it in, in other asset classes as well?

Craig Lazzara - S&P DJI (04:40):

It is not. Also, SPIVA covers fixed income as other studies do as well. And the results are quite similar. The majority of fixed income funds tend to underperform over time as well.

And I might say in the case of fixed income, I think the results are for lack of a better term chunkier in the sense that as you anyone listening to this podcast will know, the most important thing in judging the return of a bond portfolio is the duration of the portfolio.

What happens to interest rates and are you long or short duration relative to the benchmark against which you're compared?

Well, if you are in an environment like we've been in for the past year, when interest rates generally are increasing, if the majority of actively managed funds are long duration relative to their benchmark, the vast majority is going to underperform.

If the majority is short, the vast majority is going to outperform.

Now, what we see over time is that a, a majority tends to, to outperform, but I think that the "year by year" numbers can be different simply because of the imp, you know, the, the outsize importance of the of the duration decision.

David McDonald - IMAP (05:58):

Right. I know Craig, one locally, particularly one thing fund managers always suggest is that in small caps, it's easier to outperform because, you know, there's not the research or not as much coverage, et cetera. Is that something you find?

Craig Lazzara - S&P DJI (06:14):

We find the argument all everywhere and it's a plausible argument. It's not true. And there are two ways to get to that conclusion. When I say it's not an accurate observation, although it's extremely plausible it's not accurate because if you look at, say SPIVA results for US small caps and compare US small caps to the S&P 600 (the small cap index), the underperformance rates among small cap managers over time are more or less the same as for large cap, right?

It varies year by year, of course. But if you look at a 10 or 15 year record it's very similar. So, the empirical data don't support it. Now, the better, more interesting question is why, because the premise of the question is correct.

Craig Lazzara - S&P DJI (07:07):

I mean, you go down the cap scale and there is less research coverage. And so, you might well think that that translates into greater opportunity.

I think a more accurate statement of the situation is in the smaller cap space, mis-valuation is more likely than fair valuation because there is less research coverage by your active managers. so, mis-valuation is more likely than it is among larger caps.

But in order for there to be an advantage to the active manager, undervaluation has to be more prevalent, not just mis-valuation.

And there's no reason to assume that undervaluation is more prominent. In fact, I would argue and we've done this in some, some written work we've done, I would argue that overvaluation is at least as likely as undervaluation, because the way you get rid of overvaluation is by shorting the stock in order to short a stock, you have to

borrow it. That small cap stocks are famously hard to borrow and expensive to borrow.

Craig Lazzara - S&P DJI (08:24):

It's harder to put in a short position, which means they're more likely that large caps to be overvalued if there's a mis-valuation at all.

So, I think that's the theoretical or elegant argument, then there is the brute force statistics saying “Oh no” the small cap managers have just as hard a time as the large cap guys do.

David McDonald - IMAP (08:44):

Right? perhaps Craig, we can talk about some of the reasons why most managers underperform over time. I mean, cost is maybe the obvious and easy one to see it.

It's much cheaper to buy an index than to hire a team of analysts and so on. But some of the other ones, I must admit in listening to you last time, I was a bit surprised at first, for instance you mentioned that obviously the weaker managers lose money, people will take it away from you. You perform for 3, 4, 5 years, and then you suddenly think, well, okay, so that means the good ones are left, so they would do well. Right? But it doesn't work like that, does it?

Craig Lazzara - S&P DJI (09:25):

No, exactly. And the thing you have to remember is that that act certainly among professionals, active investment management is a zero-sum game. And what I mean by that is if all everybody listening to this podcast are all of the investors in the Australian stock market, and if I'm going to be above average, one of you is going to be below average there, there's no source of outperformance for the outperformers other than the underperformance of the underperformers.

Now, if you go back in time, say to the 1950s or, or so, you could make an argument. And in fact, there's a famous article called The Losers Game by a man named Charles Ellis that makes this very argument.

More elegant and eloquently than I'm about to summarise it. But what Charlie said was that in an environment like the 1950s, say in the US where professional investors are a minority of the assets, it's theoretically possible for a majority of the professionals to outperform, because the amateur,(I sometimes call them lovingly, the versified amateurs), the amateurs are the source of their underperformance can be the source of outperformance for the professionals.

But when the market becomes largely institutionalised or largely professionalised that implies, as I said earlier, there's no source of outperformance for the winners other than the underperformance of the losers.

You can put the adjective professional in there as well. There's no source of outperformance for the professional outperformers other than the professional underperformance.

Craig Lazzara - S&P DJI (11:08):

It's all the game is just being played among professionals in the market. Now, what that means is when money begins to flow from active to passive, which, you know,

began in a small way in the 1970s, I mean, index funds are only about 70 years old. But accelerated quite dramatically, obviously more recently.

But when money begins to move from active capacity, you might say, well who is it that loses the most money? Well, presumably it's the least capable active managers as you as you said. Right. Well, what does that imply?

Well, that implies that let's say a certain amount of money leaves active and goes into passive. The active managers who remain are in general more capable of higher average ability than those who lost assets. Well, that's, that's good, because that means the average level of ability of active managers has gone up. But remember the active manager is just competing one with another and so, right?

David McDonald - IMAP (12:14):

Yes, yes.

Craig Lazzara - S&P DJI (12:15):

It doesn't, their absolute level of skill has gone up, but their relative skill has not, and in fact, it's the analogy I like to say this,

I know I mentioned it an analogy. The lion catches the slowest zebra. The average speed of the herd now goes up because the slow one is gone. Well, that means if you're a zebra, it's harder to be above average because the slower members have been in their case eaten.

So, when the least capable managers lose assets and this is, this is from an indexer standpoint, a virtuous cycle, the next year even more money leaves active and goes to passive. And again, the average level of ability of the active managers goes up.

Craig Lazzara - S&P DJI (13:02):

Now I could anecdotally tell you from my career, the average active manager that I beat today is far more capable than his counterpart 30 or 40 years ago.

I mean we know more financial theory, they're better educated, they know, right? The sort of things we're talking about, which were very new 50 years ago, are much better understood now. So that's an advantage.

Trading is much easier, cheaper, quicker data analysis, much easier, cheaper, quicker, quicker, many tools that get you information much faster. You can react and transact in ways that no one could 50 years ago.

The problem is everybody has the same advantage. Right! So, the active manager today, what he really needs is a time machine. If only he could compete against counterparts from 30 years ago, he'd do really, really well. But he can't. And so, this, cycle is reinforcing, and it means that active management gets harder and harder because the people still doing it are better and better.

David McDonald - IMAP (14:10):

Yeah, I know, I do. I was thinking when you were talking about that, I remember when I did the CFA exams, which was a long time ago in Sydney, I think there was something like around about 40 candidates sitting the exam. And now it's in the thousands here from here in Australia. You know, I mean, it's the industry that's grown.

Craig Lazzara - S&P DJI (14:31):

I have a four-digit charter number, which means I'm really old.

David McDonald - IMAP (14:43):

Now changing the topic slightly, Craig, and the other thing in terms of out-performance and beating the average and so on you mentioned is the impact of skewness. You know, obviously stock performance is not a bell curve as you've said, which people might think.

Craig Lazzara - S&P DJI (15:03):

Exactly. If you imagine no one can see me waving my hands around here. But everyone knows that a bell curve looks symmetric, equal numbers of observations on either side of the median, and stock returns don't look like that.

Stock returns are a statistician would say positively skewed or skewed to the right. If you graph them, there's a long right tail. Now, you might suspect that that's probably true because a stock can only go down a hundred percent. It can go up a hundred, 200, 300, 400, especially over long periods of time. Stocks can go up a lot. I mean, if they're successful, and they can only go down a hundred percent.

So, there's this natural bias built into the distribution of stock returns. And, this is not unusual, by the way.

Craig Lazzara - S&P DJI (15:55):

I mean, if you take 50 people in a room and take the heights and the weights, they're skewed to the right because, you know, there's this sort of a lower limit.

No adults much shorter than five feet tall, but there's going to be somebody who's six feet or more, and pull up the average height, the same thing for weights.

And so, you see this very decisively with stock returns as well, especially over long periods of time. So, for example for the ASX 300, we did this study not long ago.

If you look at the 20 years between 2003 and 2022 the media stock in the index, the one in the middle was down 3%, but the average was up 111%.

Craig Lazzara - S&P DJI (16:44):

Now, how is it possible for the average and the media to be so different?

It's possible because there's some stocks that went way up and pulled the average up a lot. And such that only 7% of the stocks in the index outperformed the index.

And the S&P 500, we did the same similar exercise. I mean, the numbers are different, but the shape of the distribution is the same.

In the case of the, the S&P 500, only about 18% of the stocks in the index beat the index over the last 20 years. The reason that's relevant to what we're talking about is, I remember years ago you know, studying these kinds of issues, and talking with colleagues about them, and everybody's assumption at the time, including mine was, well, if a manager is able to consistently select above media performers, you select stocks that are in the upper half of the distribution, he'll do very well over time.

And it turns out that's not right.

Because being above median is not good enough.

The average is typically bigger than the median and an environment when 18% in the case of the S&P 500 or fewer than that in the case of the ASX in an environment

where so small, a fraction of the members of an index outperform the index active management stock picking is just much harder than you think.

David McDonald - IMAP (18:10):

So, you know, one of the, the trends recently, Craig has been the sort of best ideas of portfolios is the concentrated one. So, you know, if I pick those seven stocks that have done really well in the ASX and put them in my concentrated portfolio, I'm more likely to outperform, right?

Craig Lazzara - S&P DJI (18:28):

Yeah. Absolutely. And we hear this constantly…. Well not constantly, but I mean frequently from active managers who say the reason the SPIVA data and other data, like SPIVA, the reason that those data are the way they are is because we're not aggressive about when active management is not active enough, and if we should concentrate more on our best ideas, and I think there are two things at least to say about that.

Other than that, I disagree with it, but that's a third thing I thought.

The first thing is if you think back to the speed of results for any country, If I take Australia, the first six months of this year I think the number is 55% of all Australian general equity managers underperform the ASX200 and the S&P 500 was similar to that in the US like 60% underperform.

Craig Lazzara - S&P DJI (19:32):

So, what does that mean? That means that the average manager underperforms, and the average manager is presumably not highly concentrated, relatively more diversified, and yet he underperforms.

So, if it is the case, I'll make up some numbers. If it is the case that a manager, the typical manager who puts together a portfolio of say, 50 to 100 stocks that portfolio out underperforms, why do you think that that manager is going to be able to identify of his 50 to 100 stocks, the 10 to 20 who are going to be the best performers?

I mean that requires you to believe that managers have a degree of selection. That (a) they have this some degree of selection skill, and (b) that the selection skill they have is particularly acute at the extremes of the distribution.

Craig Lazzara - S&P DJI (20:25):

And there's no evidence that either of those things is true. So that's the first thing.

The other thing to say, I'll try to summarize this without a visual, because it's really easier to do with a visual. If you imagine that you're in an environment where a very small, let's say 20% of the stocks in the index let's say it's a five stock, make it easy.

There are five stocks in the market. One of them outperforms the other four underperform, which is kind of the classic definition of a skewed market, right? And you say, I can build portfolios out of these five stocks.

I can build a five-stock portfolio that's just an index fund. We know what that did, but I can build up a one stock portfolio, two stock portfolio, three stock or four stock portfolios.

Craig Lazzara - S&P DJI (21:12):

What you discover is that there are five stocks, there are five possible one stock portfolios, only one of them outperforms. And there are five possible four stock portfolios. Four of the five outperform, right? And so, what you see is that the likelihood of outperformance goes up as you become more diversified.

And the reason for that is that the likelihood that you'll own the one stock in this example, the one stock that outperforms goes up, the more stocks you have.

Again a simple example, but if you are lucky enough in building a one stock portfolio that you are the man! You pick that one stock, the potential return is very large. So, the expected return if you win, if you're successful with a one stock portfolio is much higher than for a four-stock portfolio, but you're much less likely to get that return.

Craig Lazzara - S&P DJI (22:27):

And so from an asset owner standpoint, as I think about how, how asset owners think about active management, my suspicion is that if you could show an asset owner a strategy that said, here's a strategy where you have maybe an 80% chance of outperforming, then the out performance will be very small, but there's a good chance it'll be positive, right?

As opposed to here's another strategy which mathematically has the same expected return but has an 80% chance of underperforming. But if you do well, you'll do really well. I suspect most of them would prefer the former distribution.

But in any event the moral of the moral of the story, if I call it that, is that concentrating in the presence of skewed returns, concentrated portfolios are less likely to outperform.

If they outperform it will be by more, but the likelihood of outperformance is smaller. And so, the active managers can't solve the SPIVA problem, simply by concentrating their portfolios that will make them less likely to keep up, (and make them not more likely).

David McDonald - IMAP (23:46):

Yes. So, I mean, that's interesting that the luck part of it. I guess picking that one stock reminds me.

I read the article you did comparing yourself with Michael Jordan playing basketball and you know, we're running a bit short of time, but I guess simplistically it was what if you both take one shot, there's a chance he misses a new score.

Craig Lazzara - S&P DJI (24:07):

That’s exactly right. This is maybe not the best thing I've ever written, but certainly the most fun. And I said let's suppose I play a game. I'm shooting free throws and it's me against Michael Jordan.

Now you can't see me on the podcast. I'm lucky to be five foot seven, and not a bigly good athlete.

And of course, Michael Jordan arguably the greatest basketball player in the history of basketball. Michael's free throw percentage when he was playing was 83 ½ %. And I just assumed for the purpose of this exercise that my percentage was 20%, if I practice, I could get myself up to 20%. So, there's no question, whatever of the two of us, he is better. Not only he is better, but he is also far better.

Craig Lazzara - S&P DJI (24:50):

And so, we start our contest we both take our first shot. There are four possible outcomes.

We both make it, we both miss, I make mine, and he misses highly unlikely, or the most likely outcome I miss, and he makes his shot.

Now, given the probabilities that we assumed the likelihood of Michael making his shot and me missing mine is 67%. So, 67% chance after one round, he's ahead.

What does that mean? That means after one round, little Craig has one chance in three of keeping up with Michael Jordan. That's ridiculous. <Laugh> there's no way in the world that I should be on the court with him.

But one chance in three that I'm keeping up, now what happens is after two rounds, the chance that I'm keeping up is something on the order of I think less than 20% after three rounds.

Craig Lazzara - S&P DJI (25:50):

I think it's eight or 10%. And I didn't bother to extend the decision tree any longer, the point of that is to say, and this is part of the reason why we like to look at longer term speed of data as opposed to just one year data.

The point is that even over, and here's a case where one of us has no skill at all, even in that case, it's over short periods of time with a small number of trials, it's possible for luck to dominate skill, but over time, skill persists, luck dissipates right over 10 shots. Michael's going to win every time. One shot, I've got a chance.

David McDonald - IMAP (26:31):

Yes. So, we should look at the active managers, assess them over a long period of time to make sure it's not like your story

Craig Lazzara - S&P DJI (26:39):

Exactly, exactly.

David McDonald - IMAP (26:40):

But I guess the, the bottom line of what we've talked about today is if you do look over the long time, it's most likely that they'll all underperform.

Craig Lazzara - S&P DJI (26:48):

Well, the vast majority will. That has been our observation, and other people's observation in markets all over the world.

It's a hard thing to do. It's hard to do it well. And the statistics demonstrate that, and I think not only is it hard because of the presence of passive alternatives, it is getting harder.

And so the those who use active management, I say this,) I think I said it in Sydney, and I certainly make a point of saying it otherwise, is if you choose active management, the odds are against you.

David McDonald - IMAP (27:23):

Right. Okay. Thank you, Craig. Look, it's been a fascinating discussion. I think we've probably could fill our time over again on this topic. So, thanks for your time.

And just before we end the podcast, I do want to highlight the IMAP 2024 Portfolio Management Conference, which has been held in Melbourne and Sydney in March 2023.

The conference provides you with an opportunity to hear from leading fund managers, economists, and other market experts on key trends impacting your portfolios now and over the medium and longer term.

You can get more information on the conference on the IMAP website.

Please visit the IMAP website **https://imap.asn.au** for all the details. Thank you.

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