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eVALUATION:

Investing Insights brought to you by the students of NYU Stern

LETTER FROM THE EDITORS

"We're in the middle of a revolution caused by indexing." - Jack Bogle, Vanguard founder[1]

In light of the recent rise in passive investing, over the past semester the eVALUATION team has been researching the growing trends toward passive management and the continued merits of active management. In this issue we present in-depth discussions on the "Active vs. Passive" debate. While we leave the ultimate answer to this Active vs. Passive question up to you, we strive to present detailed and multifaceted views and opinions to keep our readers well-informed of key industry trends and help you assess this topic constructively going forward.

The rise of lower cost ETFs and the shift toward passive investing has been a controversial topic for active managers facing performance challenges in recent years. According to Morningstar, more than one third of mutual fund and ETF assets are now passively managed, up from one fifth five years ago. [2] Passive funds are seeing record inflows andthe ETF momentum is expected to continue, as PwC forecasts that passive investments will reach $22.7tn by 2020. [3] This is a profound change within the industry, and in this new age of shifting investor preferences and lower cost competition, active managers will need to continue to adapt and sharpen their strengths.

We are proud to introduce the seventh issue of eVALUATION, focused on the Active vs. Passive debate, in addition to our highlighted student investment ideas and recent news from Stern's Investment Management & Research club. We hope that you enjoy this issue and the varied perspectives on this highly debated industry topic. Finally, we would like to thank our interviewees for their time and contributions, as this would not be possible without their valuable insights.

Happy Reading!

eV Editors - Devesh, Diana, Joe & Neha

1: Bloomberg Markets, Vol. 25 Issue 6. December 2016 / January 2017
2: Morningstar Direct Asset Flows Commentary
3: PwC: Asset Management 2020: A Brave New World

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Lasse H. Pedersen – Principal, AQR Capital Management

Mr. Lasse H. Pedersen is a Principal on AQR's Global Asset Allocation team, leading research on proprietary quantitative forecasting models to identify opportunities in equities, fixed income, currencies and commodities. He is also a finance professor at Copenhagen Business School and New York University's Stern School of Business. He has served on the board of the American Finance Association, the Economic Advisory Boards of NASDAQ OMX and FTSE, and the Federal Reserve Bank of New York's Monetary Policy Panel. Lasse won the 2012 Bernácer Prize for the best European economist under 40. His research has been published in leading journals and cited by central bank governors. Lasse has served on the editorial boards of several journals, including The Journal of Finance, and as a research associate at the National Bureau of Economic Research and the Centre for Economic Policy Research. He earned a B.S. and an M.S. in mathematics-economics from the University of Copenhagen and a Ph.D. in finance from Stanford University.

eVALUATION (eV): I was reading your research (*Sharpening the Arithmetic of Active Management Management*) on active vs. passive investing and it's pretty interesting. Could you please give a summary of the research for our readers?

Lasse H. Pedersen (LHP): So the starting point is this observation by Bill Sharpe, a Noble prize winner, that under some conditions active management is a zero sum game. So that means some people outperform and some people have to underperform. Therefore, the whole group of active managers must do the same as a group of passive managers before fees. His argument is that all the passive managers hold the market in aggregate and so they get the market return and the market can be viewed as an average of active and passive. If an average of two things is equal to one of the two things, then the two things you're taking an average of must be the same. So, before fees active is the same as passive in aggregate. Since active charges higher fees than passive, active must always lose to passive after fees.

(eV): What is your point of view about the issue?

LHP: It is very important for investors to understand fees. I think Sharpe is absolutely right that the index funds have been a tremendous innovation for investors in giving them access to equity markets at very low cost. At the same time, I think his point goes too far. It is not correct in my opinion that active always underperforms after fees because Sharpe's argument ignores the fact that passive investing is not a buy-and-hold strategy. In order to get your market cap weights, you must buy your portfolio to begin with, you have to keep trading as stocks are included in an index, or deleted from an index, or as there are IPOs and seasoned equity offerings - so passive investors are not investors who never trade, they are just investors who make very predictable trades. When they make those trades, they could in fact lose to active investors, for example if active investors are smart about how they buy the right IPOs or how they trade around index inclusions. Do to these effects, active could in fact as a group

outperform passive before fees, and, therefore the relative performance after fees depends on the magnitude of the value added by active vs. their fees. In other words, active would have a chance to outperform, but whether they do so overall is an empirical question.

eV: Passive investment seems to be no more restricted to just following an index or a market portfolio. There are lot of passive investment funds which are replicating the strategies of active funds. So, do you think that has provided a new challenge to the active investment industry?

LHP: I think the meaning of passive has been sliding. The meaning of passive used to be that you try to hold market-cap weighted portfolio of some universe of securities, which is a portfolio with minimal turnover (but, as mentioned before, the turnover is not zero). But you're right, now another notion of passive is that you're mechanically tracking an index which could have a high turnover. So that is very far from being passive in the sense of trading little, but it means that you are trading according to pre-specified rules.

I think there are often a number of hidden costs related to those strategies that people need to realize. There are obviously transaction costs, especially if large amounts of capital are being traded in predictable ways. The index may or may not be well specified. At the same time, if these strategies are well implemented, they can present an opportunity for investors. To the extent that those "passive" rules do similar things to what active managers did in the past, I suppose it could create some challenges and competitive pressure. The question is where those types of funds make the market more or less efficient. I think it could go either way in principle.

eV: How is active investment contributing to the efficiency of the market if passive investors are replicating the same strategies?

LHP: In general, for the market to be efficient, somebody has to make the market efficient. And that somebody is the active investor. As securities becomes cheap compared to the fair value, active investors will buy and push the prices up and vice versa when securities become expensive. Now, to do that in a smart way, somebody has to actually spend some resources on deciding whether securities are too cheap or too expensive and do investment analysis and so forth. And that has been the role of active. Now, to the extent that that can be captured through an index, investment in such an index would presumably increase efficiency. However, it's certainly also possible that those indices would not trade the right things at the right time. In fact, investors may make many of the same mistakes that they make when investing in individual stocks when they move money around among induces.

For instance, many investors are chasing recent performance when looking at individual stocks, and they may chase performance in indices of different types in the same way. Hence, we may just see the inefficiencies play out among indices as capital ebbs and flows based on investor fads, and these inefficiencies then translate into inefficiencies among individual stocks.

eV: In your research, you categorized investors into informed and non-informed investors. Do you think the non-informed investors who are restricted because of their constraints and liquidity requirements will

continue to generate negative returns relative to informed active investors?

LHP: I think in general, the performance of an active manager depends on how well informed they are and how good they are at processing that information minus their fee. So, if one manager has an information advantage, then she would tend to perform better before fees. Investors must think about how large fees are subtracted, but I definitely think that more information should help.

eV: There has been a discussion that there is an industry cycle between active and passive. Assuming that, what do you think will be the next catalyst for change in the cycle?

LHP: I am not sure I agree with the premise. If you look at the data, there has been an almost continuous rise of passive over active in last several decades. I think investors didn't used to have easy access to very low-fee passive investing and as a result, if they wanted help with asset management, they had to go with an active approach. Based on the ideas that came out of academia, we saw the rise of passive investing. I think it's been a very investor friendly form of technological innovation in the financial sector that has been really helpful to investors in lowering their costs. For that reason we've seen a gradual rise of passive investing, especially in the US, but to a more limited extent outside of the US.

I think we will see a further rise in passive investment, perhaps especially outside the US, but the question is when this rise will end? You may get an answer if you come back to the debate in Sharpe's article "The Arithmetic of Active Management." If you take Sharpe's logic to the extreme, then you could actually come to the conclusion that passive should grow until it's 100%. The reason you'd come to that conclusion is that Bill Sharpe's argument that passive will beat active after fees does not depend on how efficient or inefficient the market is. So, based on his argument, you could say that passive will outperform after fees, so money should flow from active to passive as we've seen historically. If this happens more and more, there are fewer active managers around who can make the market efficient, so that likely makes the market less efficient. You might have thought that makes it easier to be active, but in fact Sharpe's argument doesn't rely on whether the market is efficient or not.

I do think passive is really helpful and will continue to grow for a while. But I don't think it is going to grow to 100%. It is going to grow to a number strictly less than 100% because, as I said, there is a role for active. Active is very important, we cannot run a capitalist society without having prices that make sense and somebody has to get the prices to correct. That somebody is the active managers.

Based on Sharpe's argument, passive should still outperform and you might imagine passive taking over the world. I don't think that is going to happen. I do think passive is really helpful and will continue to grow for a while. But I don't think it is going to grow to 100%. It is going to grow to a number strictly less than 100% because, as I said, there is a role for active. Active is very important, we cannot run a capitalist society without having prices that make sense

and somebody has to get the prices to correct. That somebody is the active managers.

eV: You talked about international economies and that passive has not been that dominant in other economies like Asia and Europe. Passive investing is becoming more and more efficient every day and it's becoming harder to find opportunities in developed markets. Do you think active investing should probably focus more on other parts of global economies such as developing markets?

LHP: I think active plays a role in all markets, US and outside, but you are right that it is easier to beat a less efficient market. If you consider the provision of really low-cost passive investing, you have large returns to scale. The reason that Vanguard can charge such a small fee is that they have such a large asset base over which they can spread their cost. If you have a small country or a country where it's hard to raise a lot of assets, then it's very difficult to provide an index fund with such a low cost because there are some fixed costs that need to be recouped by the asset manager, and different countries have different institutional barriers for global players to enter. So that's why I think we've seen a slower growth of index funds outside of US.

eV: Moving from geography to asset classes – do you think similar changes will be there in the various asset classes for active management industry? Which security segment do you see active management focusing on?

LHP: Well as I mentioned before, part of the reason we have active is that for companies and governments to finance themselves, they need to issue securities. To issue securities, we need to put a price on them, and that requires active management. Now, if you look at fixed income markets, specifically the new issues of bonds, whether its corporate bonds or government bonds or municipal bonds, it's about 20% of the market of all bonds. That's a huge amount. So, the notion of being a passive fixed income investor is not that clear because basically most passive strategies will need a turnover of least 20%, often much more; some bond indices have turnovers close to 100% per year. One way to think about this is that a typical bond is a 5-year bond so if you buy it, 5 years later as it matures you need to buy a new one. And so which one you buy and how much you pay for it is something even a passive investor will need to decide. And so, that means active managers in fixed income have scope to provide a value added. Of course, fixed income is much less risky, so their prices tend to vary less, so that pulls this in the other direction. I think we see a role for active investing in really any market, and where the opportunities are bigger we'll have to follow.

eV: Talking a little about the forecasting models that your research focuses on, how do you see the future of that in the light of the fact that algorithmic trading has been rising in the last 5 years?

LHP: Algorithmic trading is a way of applying all the research on financial economics and return forecasting. Buying those insights. So the fact that the technological advances has made that easier of course is helpful. But on the other hand, the fact that people are competing to do it can reduce profits. So, I think there is competition and some of those strategies will see the profits being competed down, but I don't think it will be completely competed away because somebody needs the compensation for protecting the risk of alternate strategies.

eV: What would you recommend to a student of investment management? Do you think there is a risk of getting into the active investment industry to build a career?

LHP: I think there's going to be competition both from the rise of passive investing and also a technology-driven competition among the active, including different forms of "fin-tech". That being said, I don't think active is going to go away. In fact, there's going to be a role to play for people setting the right price for different securities. Students should definitely always pursue their interests and pursue their dreams and asset management remains an exciting industry.

eV: Thank you so much Mr. Pedersen, it was a pleasure talking to you.

"To begin with, you'll need assets."

Zayd Hammam – Founder and CIO, Gansett Companies

Mr. Zayd Hammam is the Founder and CIO of Gansett Companies, a New York-based distressed private credit investment firm. Prior to founding Gansett, Zayd was a Principal at Atalaya Capital Management, a $3 billion credit opportunity fund. He began his financial career as a special situations analyst at Mentor Partners and Société Générale Asset Management. Zayd is also a Partner at Rhino Investment Management, a London-based specialized real estate debt investment firm. Zayd graduated from the University of Pennsylvania where he received degrees in Electrical Engineering (Moore School) and Finance (Wharton).

eV: Your career since the beginning seems to have been focused on distressed/special situation credit opportunities. What were your motivations to build a career in that field over other areas?

Zayd Hammam (ZH): For me, getting involved in distressed debt was less by design and more by natural inclination. I was an Analyst at an event driven fund in 2008. I was intrigued by the failed-bank assets being sold by the FDIC and

started personally spending time in that arena. I dipped my toe and found an incredible vein of opportunity. And I loved doing it. As a result, the last 8 years of my investment career have been spent in distressed private debt. I set up Gansett two years ago to have a vehicle that invests almost exclusively in this strategy.

eV: The global uncertainties in recent years must have provided opportunities for distressed investments. In your opinion, how has the sector performed in comparison to passive investment management?

ZH: We invest in distressed, non-traded debt. For our strategy, 2008-2012 was very fruitful in the United States as banks were selling hundreds of billions of real estate loans at a time when capital was not plentiful. For that time period, we meaningfully outperformed any benchmark that I know of.

The opportunity set since 2013 has shifted to Europe, where there is more than one trillion of non-performing loans on banks' balance sheets. The jury is out on how the 2013-present vintage in Europe will perform, but we are optimistic.

eV: Most consider the recent rise of passive management a part of industry cycle. What do you believe will change the cycle in opposite direction and any estimates on when?

ZH: I believe that, over time, many strategies become cheaply replicable. That doesn't mean that new strategies don't pop up that allow active managers to generate outsized profits.

For instance, we believe that Gansett's investment strategy is not easily replicable and will generate attractive returns for many more years. Gansett is an opportunistic private investment firm focused on buying distressed private credit secured by corporate and real estate assets. Our strategy encompasses three primary criteria: (1) small size; (2) illiquid; and (3) distressed. In terms of small size, we typically aim to invest less than $25 million into an individual deal, which generally translates to corporate opportunities in the lower middle market. Smaller opportunities are appealing mainly due to the fact that there tends to be less competition from the large, institutional hedge funds and private equity firms.

We operate with a very lean team and cost structure, which allows us to find profitable opportunities at this end of the market. In terms of the second criteria—illiquidity—we focus on buying non-publicly traded debt. This generally means two things: a) that the loans we buy are held on the balance sheets of the original lender to the business or property, which means that prices are not readily available to the market, and b) sometimes the "market of buyers" consists of us and maybe one or two other firms.

We invest with a long-term view and generally expect to hold our investments to the loan's maturity date or the conclusion of a legal process. Therefore, by not underwriting to selling the loan on the secondary market at some future date before maturity we are able to capture the value of the illiquidity discount provided on the buy. Finally, the "distressed" criteria is a function of what we know and what we are good at doing. Distressed situations add another layer of complexity which many investors in this segment of the market do not understand (this ties in to lack of competition). We know how to find and buy loans, and execute our business plan once invested.

Altogether, our strategy and process is probably more akin to the private equity model compared

to a hedge fund investing in public securities. The deals that we invest in generally take weeks to source, do diligence, analyze, negotiate, and close. This type of process gives us a lot of comfort in our ability to protect our downside and allows us to be disciplined, methodical, and patient investors.

eV: What changes do you expect from active managers to tackle the challenge of passive investors? Do you see further fee cuts as a competitive strategy?

ZH: I think the biggest challenge is not so much active managers vs. passive investors. Thanks to successful programs at Stern and other academic institutions, the knowledge advantage held by active managers has been greatly diminished. How do you charge 2% and 20% when you have the same knowledge as somebody who will work for a salary? The only way to be able to charge huge fees for any prolonged period of time is to have strategies that are difficult to replicate.

How do you charge 2% and 20% when you have the same knowledge as somebody who will work for a salary? The only way to be able to charge huge fees for any prolonged period of time is to have strategies that are difficult to replicate.

We have patient capital, and thus do not have the pressure to put money to work in off cycles. We believe too many distressed or opportunistic investors can find themselves in trouble when they start overpaying or stretching for riskier deals in order to simply get deals done. We tend to underwrite very conservatively and remain disciplined in assessing any risks of an investment. Domestically we are not particularly active right now, but we feel it allows us to better preserve our capital.

Additionally, at an individual company level, distressed situations, or more importantly opportunities to buy at distressed prices, can still occur in economic boom times. There are many reasons and factors that can motivate a seller to sell a loan including regulatory pressure, seller distress, M&A consolidation, or end-of-fund issues. We try to make sure that we are that seller's first call when liquidity is needed.

eV: In terms of geography and industries, where do you see most alpha-generating opportunities in the debt markets?

ZH: Private debt vehicles such as direct lending funds, BDCs, and mortgage REITs are becoming an important part of credit distribution all over the globe. There is a strong likelihood that these strategies will outperform traditional leveraged loan or high yield bond markets.

eV: What recommendations would you have for someone looking to start a career in investment management in terms of which field to pursue and why?

ZH: Life is short and the investment field is broad. Find a job that suits whatever you find most interesting. If you love technology, become a technology investor. If you love programming, become a quant. If you love complexity, think about a structured asset class. If you like selling, think about originating loans at a private lending company. If you like analyzing companies, go to a long/short equity fund. The chance of thriving is

much higher if you are enjoying what you're doing.

eV: Thanks a lot for sharing your thoughts and giving us your time, Mr. Hammam.

Michael Weinberg – Chief Investment Strategist and Senior Managing Director, Protégé Partners

For more than two decades Michael has invested directly at the security level and indirectly as an asset allocator in traditional and alternative asset classes.

He is the Chief Investment Strategist at Protégé Partners, where he is a Senior Managing Director, and on the investment, risk and management committees. Michael is also an adjunct Associate Professor of Economics and Finance at Columbia Business School, where he teaches Institutional Investing: Alternatives in Pension Plans, an advanced MBA course that he created.

He spent nine years at FRM, a multi-strategy hedge fund solutions provider where he was a portfolio manager and headed the global equity business. Prior to that, Michael was a portfolio manager at Soros, the macro fund and family office, and at Credit Suisse First Boston. Before that he was a Real Estate analyst at Dean Witter.

Michael is an advisory board member for the NYU Stern Investment Management and Research Society, Woodlake Group, PeerIQ, and YJP, a young professional organization. He is a member of AIMA's Research Committee and will join its board in September 2016. Michael is a member of The Economic Club of New York, the NYU Family Office Council, and the Money Marketeers. He is a volunteer at the Columbia Business School Hermes Society and the Chair of the Value Investing Committee at NYSSA.

Michael is a published author, having written articles for The New York Times, Institutional Investor, CFA Institute and CAIA. He has been interviewed by the Wall Street Journal, Financial Times, CNBC, Bloomberg and Reuters. Michael is a frequent panelist, moderator, and lecturer for investment banks, institutional and family office organizations and business schools including Institutional Investor, Pensions & Investments, SALT, Harvard and The London School of Economics. He has a BS from New York University, an MBA from Columbia Business School, and is a CFA.

eV: Active Investing has been the essence of your career. Why and how did you decide to make a career in active investing over passive investing?

Michael Weinberg (MW): Though John Bogle of Vanguard Funds, Charley Ellis of Greenwich Associates, and some others have changed the world with index funds, most business school students who (like myself) are passionate about investing believe they can and will beat the markets. I was, and still am, one of them, starting

my career after NYU Stern undergraduate on the sell-side in equity research at Dean Witter, long ago acquired by Morgan Stanley.

Though, at Stern, we read Burton Malkiel's *A Random Walk Down Wall Street*, Princeton is a long walk from Wall Street, whilst NYU, whose campus used to be on Wall Street, is a short walk from Wall Street. Perhaps that's why we don't see the same randomness in the markets that Malkiel does. In fact, the smartest investors we know are adept at recognizing patterns in the randomness.

I learned to short stocks and started running a hedged portfolio while I was at Dean Witter. I was taught by Patrick McCormack, who subsequently ran money for Julian Robertson in a Tiger affiliated fund. Having been taught by Robertson and his first-generation protégés, I decided to get an MBA at Columbia Business School and use that opportunity to transition to the buy-side, where I could formally invest for a hedge fund.

After CBS, I was fortunate to have my first-choice opportunity to join Soros Fund Management, where I was running portfolios for George Soros and Stanley Druckenmiller. Clearly, Soros is a firm whose active investing has beaten passive investing over multiple decades. After Soros, I ran a portfolio for Credit Suisse First Boston, CSFB, where that firm also espoused and practiced active management. Subsequent to CSFB, I shifted to allocation, investing in hedge funds for Financial Risk Management, FRM. I view the active selection of hedge funds which, in turn, actively select securities to out-perform the markets conceptually similar. Just as one evaluates securities based on qualitative and quantitative metrics, one evaluates managers similarly. My current firm, Protégé Partners, founded by Jeffrey Tarrant, follows a similar philosophy, though focuses on seeding, small, emerging and capacity constrained strategies.

In summary, my 23-year investment career has focused on active management. As a portfolio manager of hedge funds and an allocator to hedge funds, I have historically and successfully applied security and manager selection methodologies to out-perform indices relatively, absolutely, and on a risk-adjusted basis. That said, I believe my education, experience, and background are unique and lend themselves to this skill-set. For much of the world, that does not have a similar skill set, passive investing is probably more sensible.

eV: How do you think the two fields - active and passive investing - have changed over the last two decades?

MW: The rise of passive investing has had a dramatic impact on active investing. According to Morningstar, over the nearly 40 year stretch between 1976 and 2015, index funds went from a negligible percentage of the market capitalization, close to zero, to 34% of the market. According to a Goldman Sachs research note, investors are now trading 25% more through index funds than in individual stocks.

A manager that we know estimates that passive investing has diminished the available alpha to active managers by 25%. For example, behavioral finance routinely concludes that investors make errors that are sub-optimal and result in lower returns. Smart active investors are potentially able to exploit these errors and benefit from them with higher returns. However, when there are less of these investors making these errors due to index funds, which are theoretically mechanical or at least more mechanical, there is less of a source of returns. Said another way, the low hanging fruit has

essentially been picked. Hence, there is diminished available alpha for some smarter or superior active investors to gain from other less smart active investors.

eV: How are Protégé Partners and the industry tackling the rising interest of retail investors in ETFs and index funds?

MW: Protégé Partners invests in hedge funds that are able to exploit inefficiencies created by the rising interest of retail and institutional investors in ETFs and index funds. For example, often or traditionally, ETFs are capitalization weighted. These may gain large flows which direct more capital to the most weighted constituents. These, in turn, may become more over-valued. The opposite may transpire with smaller capitalization securities that are under-weighted or not in the indices, which may become more under-valued. Hedge funds may invest and profit from this either from a trend-following perspective, expecting the over/under-valuation to continue, or a mean-reversion perspective, expecting it to invert. Similarly, there are inefficiencies created from leveraged ETFs from which hedge funds may find opportunities to invest.

eV: Markets were not expected to rise significantly this year. Do you think the surprising rallies have made the situation worse for alpha generators?

MW: Though the premise of this question, that markets were not expected to rise significantly this year, is far from a given, we don't disagree that many smart investors, ourselves included, were surprised by the magnitude of the beta-driven rally in the indices. For those active managers that have under-performed the sharp rise in the market: yes, it likely has made the situation worse for them because it is another data point that fuels the pro-indexing and anti-active management argument. For long-only, the argument would be, "Why pay high fees for continued under-performance?"

Behavioral finance routinely concludes that investors make errors that are sub-optimal and result in lower returns. Smart active investors are potentially able to exploit these errors and benefit from them with higher returns. However, when there are less of these investors making these errors due to index funds, which are theoretically mechanical or at least more mechanical, there is less of a source of returns.

For hedged strategies, we would argue the value proposition is in the quality of the returns, for example on a risk adjusted basis, rather than just absolute returns. In addition, the value is the down-side protection afforded by the short portfolio and possibly dynamic balance sheet management, which helps preserve capital in bear markets and potentially compounds at higher rates of return over a full market cycle. Lest we not forget a sage from Omaha's first rule: Don't Lose Money; and his second rule: Don't Forget the First Rule. Actively hedged strategies are much more conducive to this than active or passive long-only strategies.

eV: There have been many political and economic uncertainties in the global markets in recent times including the effects of Brexit, US elections, and slower Chinese economic

growth. Shouldn't that type of volatility have provided more opportunities for hedge funds and other active asset managers?

MW: We would take what is perhaps a somewhat contrarian perspective and assert that these political and economic uncertainties have created opportunities for hedge funds. For example, we know of a REIT hedge fund that was successfully long UK based commercial REITs that sold off dramatically post-Brexit, as the proverbial baby was thrown out with the bath water. However, these specific REITs were largely impervious to the impact of Brexit due to long-term below-market leases and other nuances. These securities subsequently rebounded tremendously and provided out-sized returns to the manager.

US elections are another example that have, perhaps, counter-intuitively created opportunities for hedge funds. For example, there has been a massive post-election sell-off in fixed income instruments in the US. One manager that we know has used this opportunity to invest in the depressed equity of mortgage servicers; companies that service residential mortgages. As rates rise, prepayment risk diminishes and the present value of these service contracts tends to increase, as cash flow and profitability extends beyond prior expectations. This could lead to higher than expected earnings, 'cheaper stocks' and possibly even multiple expansion, all of which are likely conducive to higher stock prices.

A slower Chinese economy similarly provides potential opportunities on both the long and short side of the portfolio for active hedge fund managers. For example, managers may short Hong Kong or US listed Chinese securities if they do not believe the deteriorating fundamentals are 'priced' in the securities. Or they may short derivatives of this theme, for example companies in countries, such as emerging markets, that are driven by exports to China. Another example that hedge funds may take advantage of is shorting Chinese mergers due to the government's crack-down on external capital flows. Some of these deals that may have previously closed may now be at risk of closing.

eV: Do you think smaller hedge funds, something Protégé Partners focuses on, are more susceptible to the cyclical nature of active investing?

MW: If anything, we would argue that smaller hedge funds have larger opportunity sets than larger ones and are able to be more nimble and opportunistic despite the cyclical nature of active investing. Smaller hedge funds may go where the better opportunity sets are. For example, if there are material under-valuations in micro or small capitalization securities, smaller hedge funds may invest in those, while larger ones are likely over-capitalized for these opportunity sets.

eV: There have been concerns around closet indexing and the negative effects that has on market efficiency. What are your thoughts?

MW: As active managers, we are not proponents of closet indexing, as we are investing in managers that are truly active and not in this category. As discussed earlier, based on our belief that indexing, and particularly excessive indexing, creates inefficiencies for active managers to profit from, so do closet indexers. They are of course an awful proposition for their investors who are effectively getting the worst of both worlds, index like performance with active management fees. This is a near guaranteed recipe for under-performance for those investors.

eV: What do you see as the ideal scenario for the investment world - how could both the alpha generators and traditional asset managers be value generators for investors?

MW: Other than the fictitious Lake Wobegone, where all are above average, in the real world of investing, by definition there will be those that are average and under and out-performers. We started the interview mentioning Charley Ellis, and will finish it with him. For many investors who are insufficiently equipped to invest themselves or select active managers, they are likely best served, as Charley says, "winning the loser's game" by investing passively. This should minimize their fees, trading costs and classic behavior finance errors. In turn, that should consequently maximize their returns. However, we believe that the most sophisticated and resourced investors are likely well served investing actively. Each of the aforementioned constituencies may in this way optimize respective utility curves and risk-adjusted returns.

eV: It was great talking to you. Thank you so much for your time, Mr. Weinberg!

". . . and help my parents to pick the right investments for my college education."

Sid Choraria – Vice President, APS Asset Management

Mr. Sid Choraria is a Vice President at APS Asset Management, a hedge fund founded in 1995 by Wong Kok Hoi. APS manages $3bn in assets focused on Asian equities employing a primary, investigative bottom-up approach. Previously, Sid worked at Goldman Sachs in Hong Kong in the Technology, Media and Telecom Investment Banking Division. His experience includes working at Merrill Lynch and Morgan Stanley in Hong Kong. During his MBA, Sid worked at Bandera Partners, a long-only fund based in New York focused on small and mid-cap stocks. Sid is a member of Value Investors Club, an exclusive community of top money managers and analysts. He was awarded the Best Analyst Excellence Award in 2015 and has consistently won multiple research awards judged by over 70 global fund managers/allocators over the last 4 years. Sid received his MBA in Finance from New York University Stern School of Business in 2011 where he was recipient of the Harvey Beker Scholarship.

eV: How did your NYU Stern MBA lead you into an investment management career?

Sid Choraria (SC): I got hooked on value investing during the 2008 financial crisis when I was an analyst at Merrill Lynch in Hong Kong.

Having studied the early partnership letters of Mr. Buffett, I decided to attend the Berkshire annual meeting in Omaha that year which was life-changing. During the crisis, I bought a concentrated portfolio of stocks that paid for most of my MBA at NYU (2009-2011), which was instrumental for me. At Stern, I took several forensic accounting and investing related courses. At the same time, I gained experience at Bandera Partners working with alum, Andy Shpiz (MBA '96), and Jeff Gramm (Columbia Business School adjunct value investing professor). At NYU, I was a portfolio manager for the Michael Price small-cap endowment fund, and meeting legendary investors like Michael Price on campus was motivating to pursue investing.

After my MBA, I was recruited by Goldman Sachs in investment banking in Hong Kong, which was a great training ground in analytical rigor. In 2013, I left Goldman to pursue investment management and wishfully wrote to Warren Buffett with a research write-up on a Japanese company I thought he should look at. To my surprise, he wrote back saying "keep your eyes open". It was inspiring and good advice to look for compounders in Asia. Soon after a former colleague introduced me to Wong Kok Hoi, the founder and CIO of the company I now work for, APS Asset Management, a Singaporean hedge fund established in 1995 which focuses on Asian equity investments and manages $3bn in assets. What appealed to me about APS is working with veteran investor and CIO, Wong Kok Hoi and other experienced PMs and the investigative research approach the firm conducts in an inefficient market.

eV: There are some who believe that the market is efficient, leading to all stocks being valued correctly. Do you believe this to be the case for either Asian or American markets, and do you find either to be less efficient?

SC: Benjamin Graham has said that in the short run, the market is a voting machine but in the long run, it is a weighing machine. At APS, we firmly believe that to be true. In our view, Asian markets are significantly more inefficient than developed Western markets. This is because fundamental research tends to be preached more than practiced, and we tend to find analysts placing blind faith in reported numbers and over reliance on secondary research. Some clever CFOs would produce the financials that they knew the classical security analyst would like to see. Asian markets also tend to be short-term focused, and therefore taking a longer view on a business is a competitive edge for us.

Asian markets from China, India, Japan, South Korea to Indonesia are disparate and complex – political, regulatory, culture, languages spoken – and having a long history investing in the region has enabled us to appreciate the differences and nuances and systematically exploit the inefficiencies.

eV: How are you able to find opportunities that the market does not recognize? What is the time frame you generally see for how long it takes for the market to recognize undervalued companies, and what is your time frame for investing?

SC: The APS philosophy is centered on investigative research, knowing your companies very well and rigorous valuation work. We also tend to have a long-term horizon for both our long and short ideas. Understanding intimately how business models and companies make their profits and cash flow is crucial to avoiding torpedoes and generating alpha. We also try not to do what others do. Be that as it may, doing

what most others do, by definition, the value add can't be meaningful because we take similar finance courses in business schools, study the same CFA syllabus and therefore use about the same tools. To produce meaningful alphas in investing, one has to be an independent thinker and not look for the popularity vote. When investors all rush in, you had better dash for the exit.

Ideas can come from popular and unpopular industries/stocks, new industries/maturing industries as well as company specific leads for our short and long books. Investment theory treats all alphas the same, but as practitioners, we have found that alphas produced by different companies behave differently. This distinction is important because it determines how you research the companies, including when you should sell them.

Opportunistic alpha stocks are the last category, often driven by a special event like M&A, spinoff, or restructuring.

eV: We have seen a significant movement from active management to passive management. What is APS doing to combat this and convince clients to remain with the fund instead of switching to a passive approach?

SC: At APS, we have a long investment track record of generating alpha across all of our long only and long/short strategies. Alpha is a zero-sum game – in other words, one manager's loss is another manager's gain. By simply buying a passive index, you could end up buying stocks that everyone else is buying, and thus by definition would not generate alpha over the long run. In China for instance, we have zero exposure to the banks and old economy stocks

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We classify alphas into 4 buckets. Structural alphas are produced by companies with structural strengths or riding on a structural trend like cyber security. The alphas can be durable and hence we resist selling them early. Dynamic alphas, as the term suggests, are unstable. They are strong when the cycle is good and strongly negative when there are headwinds. Economic alpha stocks are essentially deep value stocks. Growth rates may be average but they sell at a fraction of their intrinsic value with assets on balance sheet. When they report a strong year of profits we must not be fooled into believing that they have morphed into structural alpha stocks.

which may look cheap on a headline multiple, but are value traps. Yet, they account for a significant portion of the index.

During our research process, we put on 4 different types of hats. First, putting on a businessman's hat, we analyze a business for sustainable strengths and hidden weaknesses and aim to understand the company culture. Like for a businessman, short-termism has no place in our research process. Second, we put on the Sherlock Holmes hat to investigate areas needing independent checks. Checking the integrity and competency of management using independent

sources is imperative. Owners and management are sometimes not what they seem.

Even audited numbers can be inflated or fabricated. Investigating for financial shenanigans is tough but we have a good track record at it. Investing in either a passive or active strategy that does not kick the tires, could result in a what you see and what you hear is not what you get. Third, the Benjamin Graham hat is obvious to NYU MBA students - with this hat, we want to make sure we don't overpay even for companies we like a lot. We believe you can understand a company's business better by studying 5-10 years of balance sheets than a single year's income statement. Income statements, can be easily cooked but hidden skeletons do show up somewhere, sometimes in the small print, in the balance sheet if you try hard enough to find them. Our short book is composed of some of these companies. Finally, the last hat is about portfolio construction and creating an alpha-diversified portfolio.

We believe some of the above makes us distinctly different from other active and passive strategies and this has been instrumental in our ability to deliver strong and consistent alphas across our funds.

eV: Is the shift away from active management towards passive management something that you see continuing into the future?

SC: For hedge funds that have failed to generate alphas for clients yet charge a hedge fund fee model, yes, it is a matter of time that there will be a shift away to active managers with a repeatable process of generating alpha or to passive investing. However, in Asia, active stock pickers like APS have an advantage. Driving the trend is the fact that local corporate culture and market peculiarities have to be taken into account in your investment decisions. The markets are inefficient in Asia and there are under-researched companies and other nuances investing in this region's developing markets, which create greater opportunities. Investing in passive strategies can also be risky in Asia because major stock indexes are sometimes heavily concentrated in big, state-run companies. For instance, in Hong Kong, the city's biggest exchange-traded fund tracks a blue-chip Hang Seng Index that has more than a 50% weighting in financial and energy companies, which we avoid. We take concentrated positions in our stocks, and the portfolio looks very different from a passive index.

eV: You have received some awards for research work. What advice would you have for aspiring investment analysts and NYU grads?

SC: I've been fortunate to work with a CIO who believes in independent thinking and investigative research. My advice to aspiring analysts is to pick any business and get to know it intimately, much better than your peers, other analysts, and investors. The only way to success is developing a serious edge. This is a competitive business. If one is to achieve a decent amount of success, you must stand out from the pack. There is a place for active managers/stock picking vs. the trend to passive investing. Unfortunately, most analysts will not do serious research work because it is hard work. Most will be happy to follow the crowd, but this provides an opportunity to differentiate oneself.

eV: Thanks a lot for sharing your thoughts and giving us your time, Mr. Choraria.

Professor Aswath Damodaran – New York University Stern School of Business

Prof. Aswath Damodaran holds the Kerschner Family Chair in Finance Education and is Professor of Finance at New York University Stern School of Business. Before coming to Stern, he also lectured in Finance at the University of California, Berkeley. Professor Damodaran received a B.A. in Accounting from Madras University and a M.S. in Management from the Indian Institute of Management. He earned an M.B.A. (1981) and then Ph.D. (1985), both in Finance, from the University of California, Los Angeles.

Professor Damodaran's contributions to the field of Finance have been recognized many times over. He has been the recipient of Giblin, Glucksman, and Heyman Fellowships, a David Margolis Teaching Excellence Fellowship, and the Richard L. Rosenthal Award for Innovation in Investment Management and Corporate Finance. Professor Damodaran is the author of several highly-regarded and widely-used academic texts on Valuation, Corporate Finance, and Investment Management.

eV: Okay, let's dive in. What are your thoughts on active vs passive investing?

Aswath Damodaran (AD): Let's start with the fact that you can't fight: the amount of money under passive money management has risen dramatically. There's not a question of whether a shift to passive investing is happening, but how quickly.

So now that the pace of disruption is picking up, the question is: why? First, I think that anybody who argues that active money management can collectively beat the market has forgotten basic math. Let's say 40% of money is passively managed in index funds. There's no transaction costs, and they make what the market makes. The remaining 60% is actively managed with all the costs of active money management. Mathematically, active management collectively has to earn the market return, net of the costs of active money management, including transactions costs and management fees.

When confronted with this reality, the response that you get from active managers is that while it is true that active money managers don't collectively beat the market, there are subgroups that beat the market, and that they happen to be part of one such subgroup. In the early days, it used to be that professional money managers were winners and individuals were the suckers, but when you look at individual versus institutional performance, you get an ironic result. Individuals who manage money actively actually do a little better against the market than institutions that manage money actively. The focus has shifted to investment styles, with value investors, growth investors, high frequency traders and market timers all offered as winners. If you go to Morningstar, they break down performance by investment style, into market capitalization (small, midcap and large) and

focus (value, growth and core). That is nine different classifications, and in every category, a passive index fund with that style beats active investing and by a lot. If this were a baseball game, the mercy rule would have applied and active money management would have returned to the dugout.

The next excuse becomes 'even though no subgroup works, there must be individuals within that subgroup who are special and can beat the market'. If that's true, you should get winners continuing as winners and losers continuing as losers. But that is debunked by the data, as well. Morningstar ranks active money managers by quartiles, and you can see what percentage of managers in the top quartile stay in the top quartile. If you have consistent performance, you should see ranking stickiness, with top managers staying top managers, mid rank managers staying mid rank, and poorly performing managers remaining poor performers. The results actually indicate mostly randomness as top managers in one quarter are just as likely to be the worst performers in the next period, as the best.

Active money managers can't collectively beat the market, no subgroup can beat the market, and there is no evidence that individuals can beat the market. So now defenders of active money management are grasping for straws, pointing to legendary investors from the past as evidence that active money management works. I believe that if you bring up Warren Buffett as your defense of active money management, you've already lost the argument. Pointing to the exception is never a good basis for winning an argument.

Passive money management has won and that brings us to final question: why? Active money managers are, for the most part, bright people. They hire the very best from the very best business schools. They have the best data and the best models. How come they don't beat the market?

- The very first reason was given decades ago by Charley Ellis. His argument was that as professional money management has become the rule rather than the exception, professional money managers increasingly trade against other professional money managers, with access to the same resources, and that the game becomes more difficult to win. He called active portfolio management the "loser's game". That loser's game has become even more of a loser's game now because there are so many more players in the game.

- Second, the investment world has become a much flatter place, in the sense that competitive advantages have dissipated. There was a time when if you lived in New York, you had a decided advantage, as an investor, than if you lived in Des Moines. The SEC offices were physically accessible, and if you wanted to get a 10K you had to go to the office and physically check it out. Today if you want an SEC filing you go to the website and download it. Everybody has access to the data. The world has flattened out, so that the competitive edge you had as an active money manager has become less and less, and this is especially true as the SEC has cracked down on information disclosure by companies. This is increasingly starting to happen around the world. In fact, S&P maintains a service called SPIVA that reports the percentage of active money managers who beat the market, and they do it by country. While the conventional wisdom is that active money managers have a decided

advantage in emerging markets, when you look at it in India or South Africa, more than 50% of active money managers in those countries make less than passive investors in those markets.

- There is a third reason, which is that so much of active money management is built on the presumption of the mean reversion. You buy low PE stocks and low price to book stocks, expecting things to go back to the average, and historically these strategies seem to work, but all of those strategies were developed in the US in the twentieth century when the US had the most predictable, stable economy in global history. Mean reversion worked great because you had a very solid, very stable system where everything reverted back. To me, 2008 changed the game, creating a structural break in the system. Active money management is built on mean reversion. The system has structurally changed, so mean reversion is no longer working. Mean reversion based investing strategies, which is what so much of active investing is based on, is not working. People are frustrated, and of course, they find things to blame. They are convinced that their poor performance is because central banks have conspired to destroy the basis for their money making strategies.

- Then there's a final factor. I firmly believe that to be a successful active money manager, you have got to bring something to the table, something that other people are not bringing, and you have to have a core philosophy: a set of beliefs about markets that's deep and well thought through. If you have a core investment philosophy, whenever an investment strategy stops working, you can go back to that core philosophy. It is what Warren Buffett has done time after time for most of the last 50 years. Most active money managers don't seem to have a core philosophy. If you don't have a core philosophy, you will chase whatever worked last year and abandon them quickly, if they do not work.

Am I surprised that active money management is in trouble? Not at all. I think it's been a long time coming, and I think a great deal of the damage is self-inflicted.

eV: As we go along and more money switches to passive do opportunities arise?

AD: Markets have ebbs and flows. So, let's say 80% of the money goes to passive management and in fact prices become less informative. There's going to be a point where there are going to be opportunities that open up for active money management. However, those opportunities will require serious research and analysis, not the facile screening that passes for much of stock picking today. There will be a payoff to active money management. I suggest to people that they do a very simple screen. Look at those sectors where ETFs and index funds own the largest percentage of stock. Start looking for mispricing. Maybe there's something that happens because of passive investing which leads to fundamentals getting ignored. Then you step in as an active investor.

The active money management of the future is going to be very different. The infrastructure that we've built for active money management was for the twentieth century. For a stable market where mean reversion was all you needed to make money, you could build ocean liners that were built around screening for cheap stocks. For the markets of the future, you will need smaller vessels that can change direction quickly and adapt to shifting circumstances.

eV: Where do you think it's going to come from?

AD: It could come from individuals, and I think it's going to be small, very mobile active investors. It's not going to be labor intensive and that's going to be the problem. Active money management is not going to be able to hire the thousands and thousands and thousands of people that it has historically, with its bloated cost structure. The costs have to come down. To succeed people will also need different skill sets: the capacity to screen data and make it information, the ability to process this information to value markets and assets, and the willingness to take positions on investments, where there are lots of uncertainties about the future.

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eV: You're known for valuation. Do you think the market does a good job of valuing stocks?

AD: The market does, for the most part, do a good job. If you think about it, there are tens of thousands of companies that the market has to attach prices to each day. That said, I think it makes mistakes. I am an active investor, but I tell people I'm an active investor because I have faith. I have faith that I can value assets, and I have faith that the market will eventually come around to my point of view, but the essence of faith is I can't prove that it will work. I can't even prove it to myself, let alone prove it to others. The essence of faith is I have to be okay not getting rewarded for being righteous. If I get to the end of my life and find out that I could have made more money investing in index funds than picking stocks, I'll be okay with that.

eV: Say you're an individual with a long time horizon and the majority of active management has a short time horizon. Do you think any opportunities can be found this way?

AD: You have to bring something to the investing table, to take something away. Your advantage may be that you have a long time horizon, but it is easy to tell the world that you have a long time horizon and much more difficult to actually act as if you have a long time horizon. Many people say they have a long time horizon, but three months later if the stock is moving in the wrong direction, they will sell. You need patience and you need faith, two qualities that are elusive. It also could be that you value liquidity less than the rest of the market. If you have the capacity to buy assets when others want liquidity the most (as is the case during a crisis), you have the basis for significant excess returns. It could be taxes. Maybe you're taxed differently than the rest of the markets, and while this may seem outlandish, each of us has at least a portion of our portfolios where this is true, on your 401K or your Roth IRA.

eV: Many active managers say that when stocks don't all trade together or when there's a big decline they can beat the market. Do you think there are times when

active money management outperforms passive?

AD: This is the impossible dream. Of course, there will be time periods when active money managers beat the market, but that is with the benefit of hindsight. Assume, for instance, that you find out that active money managers have beaten the market in periods where economic growth was higher than expected and inflation was lower than expected. I am not sure how you make money off this realization, since you will then have to be able to forecast economic growth and inflation first.

eV: Do you expect passive managers to be very profitable as more money switches?

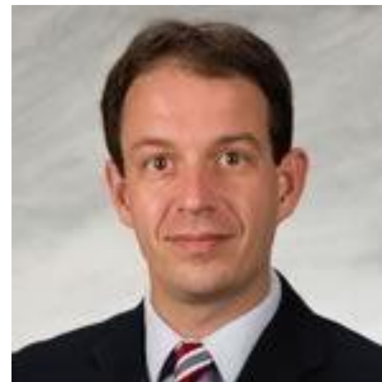
Active money management is ripe for a disruption, but making money on disruption is difficult. Fintech companies are going to be able to disrupt the active money management business, but they are not going to be able to make money unless they find their own edge in investing.

eV: Do you think this shift towards passive holds true for both equities, and bonds?

AD: It cuts across all asset classes. The only reason active institutional investors have done better in some markets like corporate bonds and currencies is that it has been historically more difficult for the rest of us (individual investors, small investors) to trade in those markets because of how the markets have been structured. That is changing, though, and as it is the advantages that institutional investors had is dissipating.

eV: Thank you, Professor Damodaran, for your time and insights!

Professor Martijn Cremers - University of Notre Dame Mendoza College of Business



Prof. Martijn Cremers obtained his PhD in finance from the Stern School of Business. He is currently a Professor of Finance at the University of Notre Dame, and previously was a faculty member at Yale School of Management from 2002 – 2012. Professor Cremers' research focuses on empirical issues in investments and corporate governance. His academic work has been published in top academic journals such as the Journal of Finance, the Review of Financial Studies and the Journal of Financial Economics. His research has also been covered in newspapers like the Wall Street Journal, the Financial Times and numerous others. His paper "How active is your fund manager? A new measure that predicts performance" (published in 2009 in the Review of Financial Studies) introduced a measure of active management named 'Active Share', which is based on a comparison of the holdings of a fund with those of its benchmark. The 'Active Share' measure has become widely used in the financial industry and was e.g. incorporated in Morningstar Direct and FactSet.

We are excited to interview Martijn Cremers whose research brings an interesting perspective into the relation between underperformance and Active Share and shows which subset of active managers have historically outperformed.

eV: How did you begin to get interested in this topic? What motivated you to begin looking at "closet indexing" and active vs passive investing?

Martijn Cremers (MC): Active Share was the simplest measure that Antti Petajisto and I could come up with in order to measure how different the holdings are for a fund relative to its benchmark. I got interested after talking to Antti and reading an article in the Wall Street Journal that discussed the Fidelity Magellan fund, which at that time was the largest U.S. equity fund. The article argued that this fund was a 'closet index' fund because its returns were highly correlated with S&P 500 returns. Fidelity's response was, and I'm paraphrasing, 'no, we're not, we're just very well diversified.' I remember thinking: why not just compare the holdings to see how different the fund is from the S&P 500 index? It turned out that, at that time, the holdings of the Fidelity Magellan fund were largely overlapping with the holdings of the S&P 500, and that this was true for many other supposedly actively managed funds as well.

eV: Do you think common investors should trust their money to actively or passively managed investments?

MC: It depends. The main result from our research is that it seems useful to distinguish among different types of active management. Broadly speaking, I'd say that the academic research has shown that the average fund underperforms passive benchmarks, and that expensive funds underperform more. Our research suggests that both of these main results are due to funds with low Active Share. Once you focus on the subset of high Active Share funds, we no longer find evidence for average underperformance or that funds are too expensive. So, for investors who believe in individual stock picking, starting with a subset of high Active Share managers seems to make sense. But only as a starting point. If common investors don't have much time or don't have a top-notch financial advisor, investing in passive funds may be better, as picking good active managers requires time. Finally, I think it makes sense to combine active and passive investments, in a so-called core-satellite investing approach, combining a core of passive funds with satellites of high Active Share funds. But my main advice is to avoid funds that are expensive relative to their Active Share, unless you like to underperform.

eV: Your recent paper *"Patient Capital Outperformance: The Investment Skill of High Active Share Managers Who Trade Infrequently"* seems to indicate that patient active managers who hold portfolios sufficiently different from the market (high Active Share) can outperform. Could you talk a bit about this for our readers? Is it feasible for investors to use this to select fund managers who will outperform or do you believe that patience and active share cannot be predicted ahead of time?

MC: Our main result is indeed that among high Active Share funds, on average only those also pursuing patient strategies significantly outperformed over the last 25 years. High Active Share funds with impatient strategies did not underperform either. Economically, our results

are consistent with the 'limited arbitrage capital' theory, which says that (in equilibrium, or over longer periods of time) only strategies that are more difficult, costly or risky to pursue can be expected to outperform over longer periods of time, as without such frictions, it is easy for more money to flow in and arbitrage away any alpha.

One good example of a friction is the mismatch between the period of time that the manager's performance is evaluated, and the period of time over which an investment opportunity may be realized. For example, consider a stock that is undervalued, but where it may take 2 to 3 years for the market to recognize the stock's value, and thus where the stock will outperform over the next 2 to 3 years. Even if a stock picking manager can successfully spot this opportunity, the manager will also recognize that the stock may underperform in the next 1 to 2 years, which the manager will care about if the investors in the fund that the manager runs care about the fund's performance over the next 1 to 2 years. Therefore, patient active strategies require more trust in the manager and more patience from the investor. Empirically, we find that patience and Active Share tend to be fairly stable manager attributes. I make my academic data freely available on http://activeshare.info.

eV: Did you notice any potential shortcomings with managers who hold for longer durations? Does this affect risk or volatility?

MC: Most managers who hold stocks for longer durations are not very active, i.e., patient managers tend to also have low Active Shares. It is the combination of patience and high Active Share that is rare, more difficult, and historically quite successful. High Active Share managers don't have to be more risky or volatile.

eV: In recent years, we have seen a significant shift of money from active management to passive management. As more money moves to index funds, how does that affect the competitive environment for money management? Do you believe that this opens opportunities for active managers?

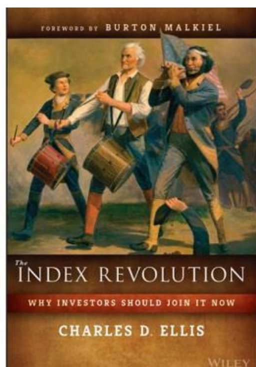
MC: We just published another paper in the Journal of Financial Economics about those questions, titled "Indexing and Active Fund Management: International Evidence," where we consider explicit indexing, closet-indexing and truly active management in equities across over 30 different countries. As our abstract explains, "We find that actively managed funds are more active and charge lower fees when they face more competitive pressure from low-cost explicitly indexed funds. Moreover, the average alpha generated by active management is higher in countries with more explicit indexing and lower in countries with more closet indexing. Overall, our evidence suggests that explicit indexing improves competition in the mutual fund industry." In other words, high Active Share managers appear to be more successful in countries with more explicit indexing, which are also the countries with more competitive environments.

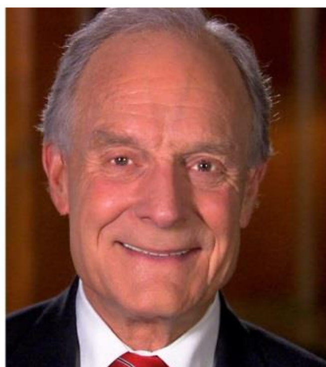
eV: Thank you for speaking with us!

Among high Active Share funds, on average only those also pursuing patient strategies significantly outperformed over the last 25 years.

Featured Interview:

Charles D. Ellis Author: *The Index Revolution Why Investors Should Join it Now*





Mr. Charles D. Ellis is one of the most widely respected experts in the world of investing. He is a consultant to some of the world's largest pension, endowment, and sovereign wealth funds. For three decades, he was managing partner of Greenwich Associates, the leading strategy consulting firm in institutional financial services world-wide. He has written 17 books and well over 100 articles, mostly on investing, is a popular speaker on key issues, and taught advanced courses on investment management at Harvard Business School and at the Yale School of Management and the investment profession's in-service workshop at Princeton.

He served as a Successor Trustee at Yale University and on the Yale investment committee for 16 years. He has served on the governing boards of the Stern School of Business, Phillips Exeter Academy, and the Robert Wood Johnson Foundation, and chairs the board of the Whitehead Institute. He has served on 14 investment committees. A graduate of Exeter and Yale College, Ellis earned an MBA with distinction at Harvard Business School and a Ph.D. at New York University in addition to the CFA charter. One of 12 people honored by the profession for lifetime contributions, he was chair of the CFA Institute.

eV: Reflections on your career in the industry – what got you interested in investing to start?

Charley Ellis (CE): The straight answer I was lucky, I didn't have a job coming out of Harvard Business School specifically that I wanted to take. A friend of mine said you know you might enjoy talking to a friend of my father's; he's looking for somebody to come and work for him. I thought he was talking about the Rockefeller Foundation. I was interested in the possibility of foundation work so I agreed to meet with him. He was an absolutely wonderful guy and half an hour into the interview I realized he's not talking about a foundation he was talking about something else but I'm not sure exactly what it is. He was talking about investing for the Rockefeller family in the small little group that did that. I knew I could learn a lot from him and I had a lot to learn so that's how I got started. It was a wonderful experience. I later realized I better earn more because my then wife was going to have a child so I decided to get a job that paid more and I went to Donaldson, Lufkin & Jenrette. They paid more and it was a wonderful opportunity because I was sent to cover the accounts in Boston which was great because in those days Boston was the hotbed of terrifically talented active investors.

eV: Could you share with our readers some of the key themes from your new book, *The Index Revolution: Why Investors Should Join It Now?*

CE: I would encourage readers who haven't seen the book to read it because I think they would find it interesting and enjoyable. The reality is 50, maybe 60 years ago, active investing was a completely new idea. Everybody had a slide rule, almost nobody had a computer. If you wanted to know the price of a stock you called a broker who probably would remember, if it was a well-known stock, what the price was and probably would be able to tell you roughly if it was up or down. They were just introducing a new stock price quoting machine from Scantlin Electronics that you could punch a stock exchange symbol in to and you would find out exactly what the last price was. There was no measuring investment performance. Trading on the New York Stock Exchange was three million shares a day; they stopped using Saturdays to bulk up the business a little bit. The idea of being in the brokerage business was if you breakeven on that and if there's a good underwriting every year or two and you could make some money on that. Nobody thought they were going to make a significant income, certainly not a fortune, by working on Wall Street. Partners of Goldman Sachs got paid $100,000 a year and they were glad to get it.

Every single part of investment management has changed and if you look down the list of all the things that have changed it's simply amazing. Mike Bloomberg was still in business school, there were no Bloomberg machines and there wasn't anything like it. Now there are 325,000 of them all over the world. And if you say well you can have at least three or four people that can afford to have a Bloomberg terminal that means three times 325,000 and you are talking about a million people who are actively involved day after day after day in investing, trying to figure out who has made a mistake or an error that I can capture. They are all looking for the same thing: the mistakes of others.

50 or 60 years ago maybe 5,000 people, probably 2,000 of them in New York, 2,000 in London, and 1,000 sprinkled all over the rest of the world were doing this. Every country invested only in its own country unless you were in the United Kingdom or Canada. Canada didn't have much technology to speak of so they bought some US stocks to get technology exposure and diversification. The British had a long history of colonial power so they tended to invest a little bit here and there around the world, but Australia invested in Australia, the Japanese invested in Japan, and Americans never invested outside the United States. That has changed massively, so today everybody invests everywhere and everywhere in the world people are investing wherever you are. Even in Vietnam, a communist country that's only had a call market stock market for five years, I was giving out CFA certificates there because I was doing a lot of work in Vietnam in those days and I was in Ho Chi Minh City and there were thirty people who had passed their examination which was a transformation. How many CFAs were there 50 years ago? Zero. The idea hadn't even come up. Today they're all over the place, there are approximately 120,000 CFAs and another 200,000 people are studying to take the exams.

Think about it: your cell phone has more computing power than the IBM 360 computer did in the 1960s (a very advanced computer at the time) and that's why you can do all those wonderful things with it. This changes things a lot and everyone has it so we are all in one gigantic network communicating with each other. We don't realize that we're all in one network because you only communicate with 200-300 people, but they communicate with

200-300 people who communicate with 200-300 people and pretty soon everyone is in a network whether they know it or not. The speed with which jokes go around the world is the same speed with which useful information goes around the world. It used to be that you made your best bet by doing your homework for 3, 4, or 5 weeks on a company, and then you'd go out and meet with the management and you'd meet with 7 or 8 different executives. They would answer any question you asked, they were so glad you had come, and they would tell you everything that they could tell you that was at all helpful and you'd come back and study a little bit more and then you'd write a report if you were in Wall Street or you'd buy stock if you were working for an institution. That doesn't happen today, it's against the law. The SEC has Regulation FD for Fair Disclosure which says that if you tell anybody anything that can be used in investing, even mosaic theory investing, you have to tell everybody everything simultaneously. That's an enormous change.

What else has changed? It used to be that about 9% of trading was done by professionals and they weren't all brilliantly hard working professionals. It was trust companies around the country, insurance companies, and other so-called "sleepy outfits." Now trading is 99% institutional, so every time you step up to buy a stock or sell a stock you are buying from or selling to an expert. They don't try to be nice guys; they're trying to catch any mistake that anybody makes. It's a little bit like me going into the front line of the NFL football players and saying I'll be the right guard today. Sure, have fun, you may live.

Every single part of active investing has changed. One of the big results is that it's really hard for anybody to know something that everybody doesn't already know and the chances of being able to outperform the competition are very, very low. If you look at the data on mutual funds when you add back in the mutual funds that got buried because they had done poorly, over the last 10 years 83% of active mutual funds have fallen short of their target. You know Russian roulette, you put one bullet in one chamber and aim it at your head, well this is like putting bullets in six out of the seven chambers of a big gun. Every single part has changed, including the talent level. When I came into the business in 1963 almost nobody had an MBA. Now almost nobody has an MBA because they've got a PhD instead. You change each individual factor that's a big deal. You change three or four factors, and that becomes a very big deal. You change 15 different specific identifiable factors and it's overwhelming. It's a completely different phenomenon then what we used to do years ago when everybody was so enthusiastic about this exciting new world called active investing. It was exciting and it was fun and we delivered tremendous value to our clients, but those days are behind us. Only problem is we all get paid so well that nobody wants to stop and it is so much fun that nobody wants to stop. There is no other line of work in the world that is not only great fun but really well paid.

**An excerpt of Chapter One of "The Index Revolution: Why Investors Should Join It Now" is available in the August 2016 issue of Institutional Investor.*

eV: Do you feel that there's no place for an actively managed within an investor's portfolio today?

CE: No, there are different reasons. If somebody says I believe in active investing and I want to have an active part of my portfolio, it's not me to

say you shouldn't do it. I have friends who go to Las Vegas on a regular basis. I wouldn't go to Las Vegas to gamble because I know that the slots and the roulette wheels and the tables are all set for a percentage to be left with the house every day and if you are good enough as a counter that you could win, they've got guys that look through the glass ceiling above you and say, "I think we ought to take a walk outside don't you?" There's a big guy on your left, a big guy on your right, you walk with them out and you aren't allowed to come back in again but everybody else can play. Everyone will knowingly lose, which to me does not appeal.

eV: In terms of the active management investment industry, how do you see the future of the industry playing out given a more secular shift to indexing that has started, is continuing and is likely accelerating?

CE: There are different ways of looking at it. First, I don't think everyone is going to stop active investing by any stretch. I believe many people will keep doing it; part of the reason is because they hope they can do it successfully and I understand it. That's part of what makes America such a wonderful country because people are out there trying to do things. That's why you go to school because you want to get better. It's a very important belief all of us have. It just happens to be that using the data as the basis that belief shouldn't apply to investment management. That's going to be hard going for many people that just can't believe that if you worked harder you couldn't find ways to do better because that is part of who we are, and I don't think that's going to disappear, it's in our DNA.

Increasingly people will use indexing. The only real problem indexing has today is that dreadful term "passive." Can you imagine how you would feel if your friends all agreed that they would introduce you every time to a guy you might be going out with, "I just want you to meet this wonderful woman, she's passive." It would get to you, you wouldn't like it, and you would want to do something about it. Could you imagine saying, "I'm voting for so and so because she's passive." That's just not who we are. You can count on if we stop using the term passive you'll see more people willing to index and if you do index that doesn't mean that your work as an active investor is over. It actually increases your clarity with which you then do the really important work of active investing.

The most important thing that any of us can ever do is to know for sure: who we are as investors and what are we trying to accomplish. Who we are is: how much do you know about investing? How much time do you want to spend on investing? How much are you comfortable with market risk? How much do you want to spend of your time not playing tennis or studying law or whatever, but want to spend on a regular basis trying to keep up with the skillset of the other active investors? Because they are putting in 70-80 hours every week and how much are you prepared to put in? Most of it is how much money do you have, what are the purposes with which you want to use money, how much do you need to save to get there, how should you invest in order to get there. If you are thinking in terms of your children and it's going to be 20-30 years before they are going to college that is one kind of time horizon. If you are thinking about yourself and your tuition at Stern for next semester that's another kind of investing. If you are going to invest for your near term tuition bills you would probably put it into Treasury

bills, but if you are investing for future generations to get their education you'd probably put it entirely into stocks. So you have to think about who are you, how much money do you have, what's your objective and how much time do you have, and when you go through thinking about all those different factors, I believe that every single person is as an investor unique in the same way your DNA is unique and allows us to identify you 500 years from now and the iris of the eye is so unique, even though there are only half a dozen different colors, that you can be identified worldwide by a computer just taking a picture of your eye as you walk through an open gate at the customs entry. It's really important for us to recognize who we are. I'm in my late 70s; you and I have really different reasons for investing and different ways of thinking about it, and we should invest differently. If you get that part right, then you're off to doing something really worthwhile because it would make a big difference. If you were to put half of your savings aside for future generations entirely in stocks but if you are thinking about your own self today and your bills at Stern and you'd put that entirely in cash, well that's the extreme difference we have because of differences of time. If someone is exceedingly wealthy they don't worry about stock prices going up and down.

The active investing part of figuring out who you really are and what's the investing strategy for you is terribly important, and the nice thing about indexing is it takes care of all the trivial details so you can concentrate on the important stuff. When you go to the airport to fly out to California for a trip all you have to worry about is that you get there on time and get to the right gate to get to San Francisco. Somebody else is doing all kinds of things to be sure the machine works, the fuel has been set right, the ticketing at the kiosk is easy to do, that people put your bags in the right place and take them off in the right place so that you can pick them up when you get to San Francisco. There are lots of people doing lots of things and that's a lot like indexing.

eV: How does the industry move toward this thought process of shifting toward active client goal setting and goal meeting in light of the growth of indexing? Do you see the industry consolidating further and greater need for work on financial advisory?

CE: This work is difficult to scale, it's very custom tailored work and you can't do it by the thousands, it is individual client by client work. There will be a lot of increased work in investment advisory. The investment consultants that work with institutions will be one part of it, but also the Registered Investment Advisors (RIAs) will be all over the country and will do a very substantial business because they are solving the one problem that most people think they need a lot of help on: "What should I be doing?" If you were going to Asia and you'd never been before you might like someone telling you I'd go to Bangkok but I wouldn't go to Kuala Lumpur.

eV: Is there further room within the advisory community, alongside the shift to indexing, for technology to displace even more of the human connection role in investing?

CE: I think you will see a good deal more of technology (be it Rebalance IRA with Wealthfront, Betterment, or robo-advisors), particularly for people that have $100,000, $200,000, $500,000; but for people who have $1 to 2 million, services will still make good economic sense for the seller and therefore you could get better value from a customer. You can

blend the robotic capability with an individual for results as well. If you were to survey airline passengers and ask them do you ever have a question about flying, do you ask the pilot who is an expert on flying or the flight attendant? Most people who are investors now really could use help from both the "experts" and the "attendants." Most investment advice can come from well-trained, competent "attendants" with occasional special help from experts.

eV: For students reading this interview and thinking about their own wealth management, what are the positives about indexing they should consider?

CE: If you think about this from the perspective of you are now indexing and somebody came along and said I would like to make a case for you changing from this commodity product to a custom tailored service called active investing. When they finished telling you about the service you would check to see if you had gotten this right: you want to charge me 10x as much and on average you are going to earn a lower rate of return plus I'm going to have more taxes to pay because you turnover the portfolio more, plus there will be an uncertainty due to I don't know whether that portfolio manager is going to stay with your firm or not, I don't know if your firm is going to stay independent or get acquired, and I'm going to be taking more risk because the portfolio is designed to take more risk. Just remind me one more time what the benefits of leaving indexing and going into active investing are? The benefits of active investing become very hard to identify.

eV: Will we still see a huge preponderance of active investing products in the marketplace?

CE: Both managers and investors will be reluctant to move to purely indexing products. If you were to see the research done by Greenwich Associates every year they ask over a thousand different institutional investors by what magnitude do you expect to outperform the market. The answer year after year after year is 100 basis points. Now, I can understand why each individual person would have thought they would have been able to add value by choosing the right managers, but realistically if you had a thousand very large funds they've chosen all of the managers of the entire country one way or another and they are expecting of all of the managers 100bps of outperformance and there is no data to support that yet year after year they say the same thing. If you were to ask every bride and groom just as they are about to walk down the aisle whether they think they will have an above average marriage the answer would be certainly. If you ask people are you above average as a friend, dancer, good listener, clear speaker, driver, all kinds of standard generic characteristics of behavior 80% of people will identify themselves as being above average. This has been true for years, which is why behavioral economics is so fascinating. People will not give up easily on the belief that they must have found a manager who is above average, so it's going to be a long, long gradual decline but do I believe that it will continue declining? I sure do. It will likely be a combination of both individuals and institutions heading toward indexing, institutions probably will do it sooner than individuals.

eV: Given that it will take a long time for indexing dominance to play out, it would seem that it would take a long time for changes in market efficiency to play out. At what point do you think the markets will

become more or less efficient as this shift toward indexing plays out?

CE: First of all, none of us know because we've never tried this before. People tend to think look that if 50% of all assets were in indexing wouldn't that be enough? If 50% of the assets are indexed and indexing turns over at less than 10% a year and that's 5% of the trading activity you still have the other part of today's trading activity moving along and that's where the pricing is set. The real question is not the percent of assets that are indexed in my view it's the number of people who are now involved in indexing who quit and said I'm not going to be an investment manager anymore and I'm going to leave this field and we are nowhere near that. If we go back 50 years ago we had 5,000 people involved in active investing, today we have over a million active investors. It's going to take a long time before you persuade these people to leave. It's an unbelievably well paid field and they love it because it's fascinating, interesting, and exciting. It's the largest most exciting game there ever was. Candidly, it's almost addictive because it's so darn interesting. The other people involved are fabulous; they are wonderfully bright, articulate, engaging, full of ideas, and they are willing to play too. You have to make the people in the field boring, the work not interesting and the compensation lower before you find people that say they have something they would rather do, and I don't think that's going to happen for a long, long, time.

It will be a long, long time before we get that many strong arguments against not doing active investing despite the rational case being clear. There is no way this is a cyclical phenomenon, this is a secular change. The fact that institutions represent 99% of the trading is not going to go back to 9%. The fact that the SEC requires that public companies distribute information at the same time is not going to go back to inside information being fine, Mike Bloomberg is not going to unplug all those machines and all the smart people that come out of Stern and other schools, really interested in getting into investment management are not going to get bored to tears and say to hell with it.

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eV: What advice would you give to students that are looking to build a career in the investment industry? Would you encourage students to consider careers in this field and how should they position themselves amidst the realities of trends in the industry?

CE: I think they should be realistic and know the reason they are interested. If the reason is that they want to make a lot of money then I would be pretty heavy handed in discouraging them, not that they wouldn't make a lot of money right now but 15-20 years from now I've got some reservations about whether they would still be. If they say "Charley you went into the field because you loved it and found it interesting, that's why I want to go into it," then I would support this. Candidly I never thought about what kind of

compensation I would get, I was only thinking about it in terms of how interesting it was. As long as we have people who are investors there will be a tremendous need for investment counseling and they will also want to have people paying attention to investments themselves. The industry is not going to disappear it will be there for a long, long time; it's just not going to be as glorious and wonderful as it has been in the last 10-30 years.

Individuals that are going into the field should be very careful to think through and be sure that they are being honest with themselves and have no problem with what the reality is. I don't think any of us should do anything for money. I'm very much in favor of people being candid with themselves and going after what they want to do. If they want to be professional in the investment world, particularly when you tilt toward helping people figure out who they are and what kind of investments they should be having, can be a terrific field. It is deeply interesting, a wonderful crowd of people, and clients candidly are very appreciative of what you can do for them. People shouldn't go into this line of work or any other line of work just because there is a financial offer. Do something where you are going to grow personally and are going to have the time of your life. The best line of work is always the same: I'd do this if they paid me nothing – that's the right way to do it. Be very candid about the reality of the work, the reality of themselves and find a perfect match. If you are smart enough to be able to go to Stern and smart enough to go, if you're that smart you really ought to be doing something that you want to be doing.

eV: Given that you started your own business what advice would you give to students that are looking to start their own business and entrepreneurship advice in general?

CE: The best thing you can do is earn an MBA, think seriously about going on for further studies after that, but at least an MBA. Then secondly, work for really wonderful organizations where you can learn a lot about yourself, about how to do things for real (textbook learning is wonderful but it's not the be all end all), and get good practical experience for maybe 10 years. Find 1 or 2 people that you'd love to work with because they are such wonderful people. Find an area where you know something special and you see real change taking place, where if you went into it you and your 1, 2 or 3 close associates or partners have got an idea that you could make things really better for other people. Go for it! If anybody can talk you out of it, let them, because if you don't have an absolute determination to be successful in starting a new firm you will fail because it's really hard. Yes, there are people that are in the story books that had this really great idea and shot the moon and had fabulous experiences – this is very rare. Most people like most restaurants don't succeed, they have to do it again and again, but it's a wonderful way to make a life and a career by developing a good firm.

eV: Thank you for speaking with us Charley, we greatly appreciate your time and insights!

Julie Abbett – Executive Director, J.P. Morgan

Ms. Julie Abbett focuses on the J.P. Morgan's ETF execution sales model through strategic partnerships within the ETF market. Julie joined J.P. Morgan from Deutsche Bank where she headed up the ETF execution Sales effort covering the RIAs, ETF Portfolio Managers, and traditional asset manager clients. Prior to Deutsche Bank, Julie was Senior Vice President and Head of Portfolio Management at IndexIQ managing a suite of liquid alternative exchange traded funds. Before IndexIQ, Julie was a Quantitative Equity Portfolio Manager at Deutsche Asset Management (DeAM)/DB Advisors for over 9 years. She holds an MBA degree from NYU Stern and a BA from the University of Connecticut.

eV: Describe your role at J.P. Morgan and your thoughts on the ETF industry overall?

Julie Abbett (JA): I focus on forming partnerships with our clients and offering services that to as an extension of their team. We really try to understand their business strategies and goals. The ETF technology is a more efficient way to deliver investment management strategies both indexed based as well as proprietary models. This type of fund wrapper gives investors the ability to trade intra-day, obtain holdings transparency and realize better tax efficiency. These features as well as lower costs have led to the impressive growth we have seen in ETFs. The DOL fiduciary rule will further propel growth in this space. We continue to see new issuance especially in fixed income and strategic beta space.

eV: In your view, what are the challenges you believe the investment management industry currently faces as funds shift from active managers to ETFs? How is the growth of indexing changing trends in products clients are asking for?

JA: Investment Managers will continue to see fee compression as investors move to lower cost options to get both cheap beta and factor based strategies. Active managers will see pressure to differentiate and add active outperformance.

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eV: Do actively managed products still have a place in client portfolios alongside ETFs? What is the value add that ETFs can provide for your clients?

JA: Yes, there is always a place for active managers with skill that can add idiosyncratic sources of outperformance. Both actively managed as well as indexed products can be combined together to maximize performance and minimize risk.

eV: How has your degree from Stern impacted your career and any advice for our students?

JA: Early on in my career, I was focused on what people thought and looking the part for the job. What I learned is if you really focus on what you are passionate about and become an expert, people will respect that and want to work with you. People are drawn to positivity, energy and the desire to make a difference. My degree gave me the knowledge and confidence I needed to drive my career to the next level. It helped me in my transition from portfolio management to driving sales for the ETF execution business.

Christopher Gannatti - Associate Director of Research, WisdomTree Investments

Mr. Christopher Gannatti began at WisdomTree as a Research Analyst in December 2010, working directly with Jeremy Schwartz, CFA®, Director of Research. He is involved in creating and communicating WisdomTree's thoughts on the markets, as well as analyzing existing strategies and developing new approaches. Christopher came to WisdomTree from Lord Abbett, where he worked for four and a half years as a Regional Consultant. He received his MBA in Quantitative Finance, Accounting, and Economics from NYU's Stern School of Business in 2010, and he received his bachelor's degree from Colgate University in Economics in 2006. Christopher is a holder of the Chartered Financial Analyst designation.

eV: Can you talk to us about your background?

Christopher Gannatti (CG): Everything started in 2006, I graduated Colgate University and started to work at Lord Abbett, a great firm over in Jersey City. I lived in Jersey City for ten years, taking the PATH train into New York to go Stern nights and weekends. At Lord Abbett, I was essentially in a role that was very focused on the sales side of the business which was a great entree into financial services and starting to understand the different types of roles. When I was at Colgate admittedly I had no idea what all the options even were in financial services. You kind of think, "oh there's a portfolio manager" and that's really the glamour job and you don't think of all the other roles that could be interesting and exciting. Lord Abbett was a great proving ground, introduction, and avenue to learning how to speak to people and present initially and get all the pieces initially in place. It was interesting two years in to have the Global Financial Crisis occur, which clearly mattered in the sense that it changed how everyone was

thinking about finance, as well as how people were pursuing their career shifts and changes.

From a timing perspective applying and getting into the Stern program in 2008, right in the thick of things, I couldn't have asked for better timing. What Stern really provides is that perfect inflection point in that you want to make a shift, and the shift I wanted to make was from a more sales-focused role to a more research-focused role. The hardest thing to do when you go out and start pounding the pavement on the interview trail is to prove that you are credible because it's really hard to work in research, it's a lot of work. What Stern was able to do is help me to show prospective employers that this wasn't just some decision that I rolled out of bed last Sunday morning, this was something I took the time to go to a really respected program, took the time to go to all the classes, to get the three different concentrations. All the different pieces came together and it was really helpful in getting interviews because in 2010 it was not an easy feat to get interviews in financial services.

eV: Could you provide background on your current role at WisdomTree, day to day responsibilities and how you help clients achieve their goals and objectives?

CG: Out of the gate, I started out as a research analyst, working for Jeremy Schwartz who I still work for to this day. He was Professor Jeremy Siegel's head research assistant. Professor Siegel is renowned worldwide in the financial markets. It's funny that one of the first books I read while at Lord Abbett, that they recommended you to read, was *The Future for Investors*, and that's actually the book that Schwartz and Siegel worked on together, so it's kind of funny and weird that I end up working for and with the two Jeremys that were responsible for the work behind *The Future for Investors*. From the very beginning, it was a lot of writing working as a research analyst. WisdomTree only had about $8bn in assets under management in December 2010 when I started. We had probably about 55 strategies at that point, now we have almost 100. What's happened in the time that I've been at WisdomTree is the firm has grown a lot.

Today we have about $40bn in assets under management. With great growth comes great opportunity—in 2010 there were only four people on the equity research team, today there are 16, and I have five direct reports, so I've assumed some management responsibility which is always interesting and adds a layer to anyone's career. Some of the really cool things that I never thought I would get to do is that I have co-hosted a radio show on Sirius XM with Professor Jeremy Siegel. I would never have imagined getting to do anything of that sort. I've actually been on live television twice, in Canada. I would never have imagined going on live television anywhere but I actually went abroad and was able to do it twice in Canada talking about the markets. Of course, we all grow up and in the background of various rooms might be CNBC or Bloomberg or something of the like and people at the desk talking about the market and I was able to actually do that twice which is really cool. The final of the three very surprising things I would never have thought I would get to do is travel to Israel twice, Colombia, Mexico – and this is all for business. Seeing not only cities in the U.S. but the world and it's been remarkable that WisdomTree has been able to give me the opportunity to do that.

The position that would be most similar to what I'm doing would be somewhat of an investment strategist or equity market strategist. There's a writing component where you'll write short

pieces as well as long pieces. There is a presenting component where you'll travel to different places and do presentations for all types of different clients, and then there is the managing. There are certain skills that you see people on your team as wanting to have and to the extent at which you can guide them to obtaining those skills such as speaking to clients on the phone, presenting, writing. You want to make sure everyone is working hard and actually doing their job. Hopefully, if you hire the right people that goes without saying. Then it becomes more how do I facilitate the growth of these people's careers such that the firm gets more work out of them in the short-term, but they feel great about the job they are doing every day in the long-term. Trying to continually have that balance is key.

eV: Thoughts on the ETF industry overall (growth in the industry, interesting trends you are seeing)? How is WisdomTree differentiated within the ETF space?

CG: Exchange traded funds, for a number of reasons especially after 2008, have taken the lion's share of net new money that investors are putting to work in markets. The nice thing about exchange traded funds is that it would appear that almost any idea that someone would think of could be represented somewhere within the almost 2,000 ETFs listed on U.S. markets. One of the big trends is that there is a huge proliferation of additional issuance of ETFs that represent new and potentially exciting investment ideas every single year. The asset flow is another huge trend in the sense that you're seeing an increasing number of asset managers wanting to at least have both. Traditional mutual fund only shops ultimately saying to themselves look, I can either have an ETF franchise alongside my mutual fund franchise or I can essentially be in a position where I have a trickle of assets continuing to come out of mutual funds and going into ETFs.

The traditional reasons a lot of people go into ETFs are: tax efficiency, transparency, the liquidity of being able to daily trade and of course the big one which we hear a lot these days is the lower cost, especially relative to the actively managed funds. There is a perception, truer in some cases rather than others, that a lot of the active managers really aren't all that active in that they have such large bases of assets that they ultimately end up buying a set of securities that looks very similar to their index benchmark. They don't want to underperform too much and at a certain point, it's difficult to manage an ever increasing pool of assets that in some cases could get into the hundreds of billions of dollars. When ETFs suddenly hit the scene they could be available at a fraction of the cost and now ETFs can do a lot of things that you would have formerly thought only active managers can do.

We have certain strategies at WisdomTree that essentially are hedging currencies but adjusting the hedge ratios of different currencies on an individualized basis relative to the dollar on a monthly time period frequency. It is difficult to find any active managers who are even doing anything remotely similar to that—not only selecting what they perceive to be great stocks but also factoring in a full-on currency overlay type of institutional strategy. That is something that someone can access by simply trading a WisdomTree ETF and it will do it all for you. There are other strategies that allow you to hedge market risk. It's amazing in the sense that even in 2010 when I started speaking to clients there was a perception that if you are buying an ETF it was a market cap index and that's it. What ETFs are doing is raising the bar because their

capabilities have expanded so much. There's always room for great active managers and there always will be room for great ones, but average managers and slightly under average managers are going to see the pinch in the sense that now investors have so many choices that they can lower fees in many different ways. Investors can access so many different markets simply using an ETF, which they can see what's inside it every single day, it's going to make it very tough for those active managers that might look and feel very much like their benchmark index.

eV: Is the true strength within WisdomTree the diversity of product and innovation that you're able to offer within this market?

CG: 100% correct. Essentially, WisdomTree launched in 2006. There's a term that started in 2012 – "smart beta" – and in 2006 there was no such term. It's a very snappy, nice, easy to use phrase. Certain people in the industry have very strong opinions, either positive or negative, about the term but the nicest thing for us now is it creates an easy way for us to say "index funds that are not market cap weighted." In 2006 we launched fundamentally weighted indexes which now have a greater than 10-year live history. We are in a position where we are doing something that is viewed as completely unique. In 2006 there were very few alternate options if you didn't want a market cap weighted index. The industry was dominated by market cap weighted indexes. Of course, we wanted to differentiate ourselves and provide something that could outperform over time. So the motivation is very similar to an active manager—you're taking a benchmark, applying a process, and you're trying to outperform over time. The one difference is that we create an index and are following the published index rules and an active manager is continually trading in and out of securities and doing active manager research. So there are two avenues to try to get to the same place which is: sustained outperformance of market benchmarks.

Since that point in time we've seen a lot of additional entries into fundamentally weighted indexes and other smart beta approaches, but what's exciting is that there are still many new frontiers when you go beyond just equities. One example is when you go beyond fundamentally weighted fixed income. A simple question that anyone would understand is "why would you put the most weight in the biggest debtor?" The biggest debtor doesn't necessarily have the best possibility of making good on the interest payments, everybody knows that, but the market cap weighted debt index puts the biggest weight in the biggest debtor and that may not make the most sense. So there is an opportunity for fixed income indexing, an area that we were essentially an entrant into this year and that's an opportunity for a significant amount of future growth.

Alternatives are another area, I never speak to any investors who say "we absolutely love our alternatives exposure—it's inexpensive, it does exactly what we want it to do all the time, we always know what the manager is doing and investing in." Nobody says that and the feeling in alternatives is that there is a lack of transparency in the sense that the investment process is unknown, one can't see the holdings, and you don't know if they are using leverage. You can't always analyze exactly where the risks are, and if it's a private type vehicle sometimes there is a lock-up period where you can't even take the money out of for a set amount of time. So if you can execute alternatives in an ETF that is another incredible area where you directly combat a lot of what are perceived to be the issues. Of course,

great alternative managers, great fixed income managers will always have a place but again, it comes back to those average managers charging a lot for what they're doing which is very similar to the index. Ultimately that's where there could be a lot of opportunity for future growth, and you hit the nail on the head, WisdomTree needs to be innovative and it needs to be different because if you are not innovative or different you see it with the S&P500 in the sense that there are multiple providers for the S&P500 and everybody is trying to continually lower the price. If all you're going to do in provide the S&P500 it had better be the cheapest option otherwise why would anybody buy it? There's no good reason.

eV: Given that backdrop what challenges do you believe that the investment management industry is facing overall as we shift to some of these lower cost products and within the commoditized products prices just keep driving lower and lower? What's your view on the future of the industry and some of the challenges?

CG: 2008 is a great microcosm and stress test in the sense that before 2008 there was a certain number of hedge funds and after 2008 the number of hedge funds was significantly reduced. When markets are just persistently going up everyone is happy to simply say, "Oh yeah my portfolio is amazing!" but when things get a bit volatile it garners people's attention and people suddenly start asking "why am I paying this fee, what's going on here, why is there that big capital gains distribution when the return wasn't large as well?" All these things that people feel when times are a bit riskier and change is on the horizon it gets people thinking and when they think they can't help but say look there are certain active managers that add value and they are always going to have a place, otherwise I should be using the lower cost ETFs. In the ETF world, a key thing is you always present a story. We always have our story of why we think we can outperform and obviously you do your research and if your research doesn't look good you don't show that research. We all know that asset management comes down to a lot of marketing and you want a favorable story to look good for any potential investor. The key though is, does the real-time track record that you experience match up with the story. That's one of the hardest things out there because there is no short-cut in getting actual outperformance relative to competitors and a benchmark.

We were excited at WisdomTree because this year in our core funds we were able to do a 10-year retrospective looking back at 10 years and figuring out if we actually outperformed, why we outperformed, and by how much. Fortunately, the answer was "yes", if it had been "no" I might not be doing this interview. Now with all the new players in the space, even if they are trying to show simulated performance or back-tested performance of what "could be" the next big new idea, and it very well could be, but there is a great deal of skepticism for anything other than live results. Live results are what people experience and what matter. It is advantageous to be at a firm where you have a 10-year period of history that you can look back on and show how you performed in 2008. Having live results and staying in the business for 10 years or more in today's extremely competitive environment is a key thing. A lot of managers can't raise assets or other things befall them and they are not around for long enough to generate a significant track record. To be at a firm with that history behind us has been a great experience.

eV: Is the shift toward indexing a secular change following 2008, or a cyclical phase?

CG: Investors can now access almost any strategy that they can imagine and pay on average between 10 and 40 basis points for it in many categories. Having that option now raises the bar. There will definitely be a secular shift in that you're seeing almost a repositioning where it makes sense to start from a basis of—here's my low-cost option and any manager or strategy that I use that's different than my low-cost option needs to prove that it has the distinct potential to add value. Otherwise, why not just use the low-cost option? It's a question that absolutely makes sense. There's a big tailwind for decisions to be made. You see this time to time on the media where people will throw up dispersion and correlation and try to make a case that now will be the time for active management and now will be the time where active managers are going to come back and they're going to start to outperform and earn their fees. It's tricky to ultimately make such a statement because it's true you can come up with a nice mathematical story to show that the returns on a cross-section of stocks are actually more different than more similar, and your chances of adding value by picking the better stocks mathematically speaking you'll probably say yes that goes up. However, timing the right moment to be an active manager against the time to not be an active manager is very difficult to do.

I'm always a little bit wary of anything that depends on timing because we all knew at the start of this year that in the events in Japan should have the side effect of weakening the yen. For the first eight months of the year though the yen was up 20%, but we all knew that the factors should weaken the yen and yet it did the opposite. In 2013, we all knew that interest rates were rising and that the start of this year that the Fed was going to hike rates three or four times. So many things don't end up actually happening. We all knew that Brexit was a sideshow, until it wasn't. We all knew that Donald Trump wouldn't get elected until here we are. Anything to do with making accurate forward-looking predictions and saying OK, now it will be the time for an active manager is very difficult. That's why what we try to do at WisdomTree is try to provide tools for a more broad based portfolio and fully understand that we'll have some strategies just sitting out there and not attracting assets immediately because we know that we can't predict that we'll launch this and immediately get funds coming in. However, if we have a thoughtful approach to gaining access to a particular investment thesis it's always valuable for us to put it out there and even if it's not favorable at that time it's generating a track record and people are starting to see how it works. The early adopters are coming in and people are saying "Oh wow we can trade in and out of this, there is liquidity" and then suddenly when market conditions align you're not sitting there and saying "oh we should launch this", you've already thought ahead, the tool is out there, it's proven itself a bit and now people are ready to invest in it in a big way. This is exactly what happened with currency hedging for international markets for WisdomTree over the last few years.

eV: In thinking about when active managers will show the performance to show that they deserve their fees, to what extent does market efficiency play a role in your view?

CG: People always talk about the work from Fama and French and their seminal work on

factors and premia from the early 1990s. Ultimately what you have is the existence of these premia: the value premium, the size premium. People could argue that's what active managers are ultimately tapping into and that one person is a value guy, one person is tapping into momentum and you can quantitatively show which factors the style of an active manager is playing into. There has always been an argument that if enough people know the style, it is going to go away.? Because you would think that now everybody knows that there's this opportunity for outperformance and they are all going to buy into it and it's going to change the pricing and no longer will there be an opportunity for said continued outperformance. The interesting case, of course, is the value premia, which we've all known for decades, and yet behaviorally it's so difficult to execute that ultimately the value premia remains. It doesn't mean that value styles outperform every single year, value has underperformed in a majority of years since WisdomTree started. The same can be said in a way that we all know that you have the S&P500 and other market-cap weighted indexes out there. What's clear is that people are lowering their overall expenses, lowering their costs and going into ETFs. Now the mutual fund industry still vastly outstrips the ETF industry, it's somewhere in the neighborhood of $2-2.5 trillion in U.S. listed ETFs and $7-8 trillion in U.S. listed mutual funds.

We are still some distance away from ETFs being the majority of the industry but what people are really going to do, at least a large percentage of them, is instead of trading in and out of mutual funds they will trade in and out of ETFs. Many people are treating these products as stocks that they are going to decide to trade in and out of over time. That behavioral issue is hard to imagine changing because we are now increasingly becoming a society where with a click of a button or a tap of phone screen we can change anything we want about our universe. We are becoming a society where that on-demand nature would be making people's holding periods shorter and shorter. As long as behavioral finance is still with us, we are in a position where investors will make cognitive or behavioral errors and it's in those errors that active managers will find opportunities to exploit. Over time the cognitive behavioral issues coming to the floor will create a lot of the dislocations and opportunities in the market.

As long as behavioral finance is still with us, we are in a position where investors will make cognitive or behavioral errors and it's in those errors that active managers will find opportunities to exploit.

eV: Concluding thoughts on the industry and any advice for students aspiring to build careers in the investment management profession on a long-term view despite the short-term characteristics within the markets?

CG: The first thing I would say and this comes most loudly and eloquently stated from Charlie Munger. It's very simple – literally read as much as you can – and that can be about anything because investment management is so flexible and there are different ways to go about it and look at it. You just need to have that curiosity

within you and you need to execute that curiosity and one of the best ways to execute that curiosity is to continue to read, to question, and in a fun way have that desire within yourself to continue to do research and learn about all sorts of different things because you never know where those connections could come. Even in a subject that doesn't seem investment related, all of a sudden it can inspire you with a particular thought and suddenly you're having a conversation with a potential employer or in a networking scenario and you're the guy that has the most interesting stuff to say in a room and suddenly it's paying dividends in a handsome manner.

The second thing is to try to understand as much about history as you can because there are so many parallels to different things that happen and it's tempting to say that this time it's different or we've never seen anything like this before but history just has so many examples of different thoughts and there are so many different things that you can learn from that can make people really stand out because so few people actually take the time to really study.

I benefited from having a very open mind. I was originally thinking investment research was being a portfolio manager and anything that wasn't being a portfolio manager wasn't investment research. If I kept that mindset then I never would have even applied to WisdomTree because I would have said "What's WisdomTree? I don't even know what an ETF is." I didn't know what an ETF was necessarily at the start of the whole process, I had just the mindset of "look this firm is willing to take a chance on me and I'm willing to learn as much as I can and add as much value as I can."

The final thing - and I'm always surprised by this because we do interview a lot of people – is try to study a firm in a unique way. What everybody does is talk to the career center, study the financial statements, know specific things about a company, know what the market is generally doing. You can't not know what the market is doing in an interview, that just looks bad. At the same time if you are just saying the same stuff and operating off of the same playbook that everybody else is operating off of the interviewer in his mind is kind of just falling asleep because he's meeting another guy saying the exact same thing. When someone says something unique or has an interesting question they stand out, and that creates the desire within someone to be a champion for that person that they are hiring. At the end of the day if you want to get a job within investment research that's what you need. You need a champion on that committee of people that is responsible for hiring that new employee. The best way to do it is to be unique and make yourself stand out. There will always be opportunities because if you look at the baby boomer generation and a ton of people are retiring. We're also still in a low-interest rate environment and people need all different types of returns and they need the investment managers to help them achieve those returns. The markets if anything are getting more and more complicated and different political things are happening that need to be analyzed and thought through. There are just so many opportunities out there. If you are having an initial problem getting interviews or getting a job, if you just stay committed and stay doing the job and keep trying to get interviews you will get a job, it's just a question of can you withstand the difficulties of trying to do it.

eV: Thank you for speaking with us Chris, we greatly appreciate your time and insights!

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BUY Hanesbrands, Inc. (NYSE: HBI)

Stock Overview

- 52 Week Range: $21.44-31.36
- Market Cap: $8.14B
- Dividend Yield: 2.03% ($0.44)
- Beta: 0.58
- Short Interest: 10.03%
- Current Price: $21.53
- **Target Price : $30 (39% up)**
- Time Horizon: 12-18 Months
- P/E (FY 17) : 9.97x
- EV/LTM EBITDA: 12.04x
- ROE: 41.2%
- ROIC: 14.2%
- ROA: 7.9%
- Rev Growth 3 Yr. Avg.: 8.2%
- NI Growth 3 Yr. Avg.: 37.6%

Business Description: *Hanes is world's leading manufacturer and marketer of innerwear and active wear for men, women, and kids. Its flagship brands include Hanes, Champion, Maidenform, DIM, Playtex, Bali, Lovable, Wonderbra, and Gear for Sports. The company's revenue segments are innerwear (46% of net sales), activewear (27% of net sales), direct to consumer (7% of net sales), and international (20% of net sales). With 53,000 employees worldwide, the company has 50 manufacturing facilities, 37 distribution centres, 252 Outlet Stores, and has Walmart (23% sales) and Target (15% sales) as its primary retail partners. The company's CEO is Mr. Gerald W. Evans Jr. who has been working with the company for last 33 years with Mr. Richard A. Noll as Executive Chairman. The company was founded in 1901 and based in Winston-Salem, North Carolina.*

US Market Leader by Volume in

- Intimate Apparel
- Men's UW
- Socks
- Kid's UW
- Hosiery
- T-Shirts
- Activewear
- Fleece

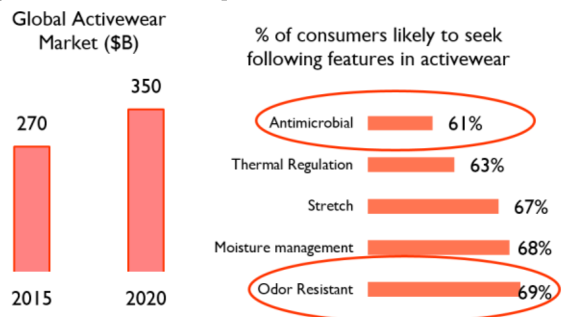
Market Leader by Volume in

Men's UW (France)
Men's UW (Brazil)
Men's UW (Germany)
Men's UW (Mexico)
Women's Intimates (France)
Women's Intimates (Spain)

Segments	Activewear	International
Revenue Share	27.24%	19.76%
YoY Annual Change	+9.8%	+41.2%

Investment Thesis

Revenue Expansion Through Innovation: Hanes has been a part of the daily lives of American for decades and yet has managed to grow its revenue at a 3-year average of 8.2% (vis-à-vis 4.4% growth of its competitor VFC Corp). One of the major reasons for this distinction is Hanes' innovation over the years including tagless t-shirts, X-temp innerwear, wonderbras, and comfortflex fit bras. As the next step in innovation, the company has launched apparel with FreshIQ technology targeting the active and athleisure wear segments. The FreshIQ technology, first of its kind in innerwear, odor control antibacterial technology mixes activewear features with innerwear. These features are some of the most in-demand features for a market expected to grow in the near future with odor resistance the most important feature requirement for consumers. The activewear market is expected to grow from $270B in 2015 to $250B in 2020. Advertising testing shows for the product has shown strong purchasing intent for the product.



Accretive Acquisitions with Lean Focus: With 4 recent complementary acquisitions, the company has expanded into activewear in US (Knight's Apparel and GTM Sportswear) and in Europe (Champion Europe) and innerwear in Australia (Pacific Brands). Already a leader in various segments in US and Europe, the company's foray into activewear segment in these geographies combined with innerwear expansion is a major catalyst. Pursuing a leaner and focused approach, the company also shed the non-core units of its acquisition from Pacific Brands (Dunlop Flooring for $25 million and Tontine pillow and

quilt business ~$10million). The international expansions have also reduced the company's effective tax rates to a meagre 9.5% in 2015 and 6% in Q3 2016 – the rate is expected to remain around 7-8% in the next 12-18 months.

Cost Advantage: The company's cost advantage is two-fold, improving its gross margins as well as its operating margins:-

1. Low Raw Material Cost and Safe Inventory Levels: Cotton, the major raw material for Hanes is trading at lower end of its 5-year average. With increase in global and US cotton production forecasted, rise in cotton inventory in exporting countries, and a strong dollar, prices of cotton are expected to fall further. At the same time, the company is safe from inventory write-offs at a low cotton price level due to a relatively safe inventory turnover ratio of 1.92 times (5-year average of 2.2 times) compared to 3.16 times of its peer VF Corp (VFC).
2. Internal Manufacturing and Supply Chain: Hanes' world-renowned internal manufacturing and supply chain provides cost synergies from the acquisitions to materialize in the next 12-18 months. In the past, without as many acquisitions, the company has managed to grow its net income at a 3-year average of 37.6% (6.8% for the industry and 4.3% for VFC). For the next few years, Hanes' EBITDA margin of 17% is expected to expand further by 100-200 basis points and EPS is expected to grow 12-13% in the next few year (a conservative estimate assuming a 5-year historical average of 16%)

Debt Level: One of the major concern for retail investors regarding Hanes remains the 3.1 times debt to equity (due to acquisitions) – higher than 5-year average of 1.7 times. Yet, the company has seen its cash balance rise continuously from $35M in 2011 to $450M in Q3 2016, Free Cash Flow increase from $78M in 2011 to $431M in last twelve months. The company's financial health remains safe considering that less than 8% of company's debt is due for next two years, has successfully managed higher debt levels in past (8.07x in 2011 and 11.51x in 2012), and the synergies from new acquisition should lead to further higher cash flow and profitability. Lastly, the extremely low tax rate ensures that after tax returns for shareholders should also improve significantly.

Risks

- ***Competition in Activewear***: Although the company is one of the leaders in athleisurewear segment competition from Nike, Under Armour, and Lululemon can lead to headwinds in domestic revenue expansion.
- ***Future M&A***: The company has successfully found accretive M&A opportunities so far, but may struggle to find similar opportunities in the future.
- ***Foreign Exchange***: 20% of Hanes' revenue is international. A stronger USD will negatively impact its financial performance.

Valuation Assumptions

USD mn	FY 2016E	FY 2017E	FY 2018E	FY 2019E	FY 2020E
Revenue	6,133	6,593	7,120	7,725	8,343
%YoY Growth	*7.0%*	*8.0%*	*8.0%*	*9.0%*	*8.0%*
EBITDA	648	830	991	1,078	1,248
%YoY Growth	*11.0%*	*13.0%*	*14.0%*	*14.0%*	*15.0%*
FCF	455	659	723	738	896
%YoY Growth	*7.0%*	*10.0%*	*10.0%*	*10.0%*	*11.0%*

Company Name	Market Cap	TEV	TEV/EBITDA LTM	NTM TEV/Forward EBITDA	P/Diluted EPS Before Extra LTM	NTM Forward P/E
Hanesbrands Inc. (NYSE:HBI)	9,664.1	12,830.9	13.3x	11.03x	20.5x	12.11x
PVH Corp. (NYSE:PVH)	8,978.4	11,614.4	11.0x	10.76x	13.6x	15.93x
Columbia Sportswear Company (NasdaqGS:COLM)	3,953.1	3,559.4	11.5x	10.96x	22.6x	20.74x
V.F. Corporation (NYSE:VFC)	22,677.9	24,810.3	12.3x	11.43x	19.8x	16.49x
Gildan Activewear Inc. (TSX:GIL)	6,417.5	7,064.0	14.1x	11.75x	19.7x	16.36x
Superior Uniform Group Inc. (NasdaqGM:SGC)	275.3	314.1	12.9x	12.13x	22.0x	21.23x
NIKE, Inc. (NYSE:NKE)	87,301.7	84,573.7	17.0x	14.79x	23.5x	21.80x
High	87,301.7	84,573.7	17.0	14.8	23.5	21.8
Low	275.3	314.1	11.0	10.8	13.6	15.9
Mean	21,600.7	21,989.3	13.1	12.0	20.2	18.8
Median	7,698.0	9,339.2	12.6	11.6	20.9	18.6

Summary

Unlike other apparel stocks, Hanes' major products are replenished goods and not primarily dependent on fashion demands. Company's global supply chain expertise combined with value-adding acquisitions leads to a higher than average EPS growth. Trading at 10x forward PE (18.8x for industry) and close to 52-week low, the stock is fundamentally undervalued and a strong value buy with a **conservative target of $30**.

SIMR Recent Events (Fall 2016)

2nd Annual Stern Credit Competition Summary

Credit continued to be one of the hottest asset class in the US and global markets this year. The higher demand for US corporate bonds, narrow average credit spreads, the Fed rate hike, and distressed debt investing were some of the most discussed topics among students and professionals in the industry. NYU Stern's Investment Management and Research Society (SIMR) continued this discussion in its 2nd Annual Credit Competition held on November 11th 2016.

The keynote speaker, Mr. Sheru Chowdhry, Co-Portfolio Manager of Paulson & Co. shared his expertise investing in distressed credit, structured credit, and other event-driven strategies. In discussion with NYU Stern's Professor of Private Equity Finance and Management Practice, Prof. Gustavo Schwed, Mr. Chowdhry also shared his thoughts about the investment opportunities in the current macro scenario, his career path to Paulson, and how current students should pursue their careers in the investment industry.

Mr. Sheru Chowdhury (left) and Prof. Gustavo Shwed (right)

Team from The Wharton School presenting in the final round

The discussion was followed by two rounds of credit pitches which were judged by eight esteemed judges from the industry: Mr. Nestor Dominguez – Co-Head and Portfolio Manager of Credit at Carlson Capital, Ms. Diana Monteith – Director of Converts and Special Situations at Loomis Sayles, Mr. Mark Puccia - Managing Director of Corporate Ratings at Standard & Poors, Mr. Zayd Hammam - Founder and CIO of Gansett Companies, Mr. Michael Weinberg - Chief Investment Strategist at Protégé Partners, Mr. Sumit Roy - Senior Portfolio Manager at Magnetar Capital, Mr. Navin Belani – Senior Vice President of Credit at Putnam Investments, and Ms. Jane Xiao – Senior Investment Analyst at Loews Corporation.

The competition saw participation from students from top business schools pitching credit investment ideas ranging from investment grade to high yield bonds. NYU Stern's team was represented by Neville Commissariat ('18), William Li ('18), Pramit Mukherjee ('18), and Shirley Tian ('18) who pitched a Buy recommendation for 14%/L+11.26% Surplus Notes of MBIA Insurance Corporation due in 2033. After two exciting rounds, teams from The Wharton School and Columbia Business School emerged as joint winners. Wharton students pitched a Buy recommendation for Scientific Games' Subordinated Notes due in 2020 while Columbia students presented a Buy

recommendation for Concordia International's 9.5% Senior Unsecured Notes due in 2022. Some other pitches included:

- Buy recommendation for 7% Senior Secured Notes of Avaya Inc. by students of Kellogg School of Management
- Buy recommendation for 6.875% Senior Unsecured Notes of Hecla Mining due in 2021 by students of Chicago Booth School of Business
- Buy recommendation for 7% First Lien Notes of Avaya Inc. due in 2019 by students of Yale School of Management
- Buy recommendation for 4.375% Senior Unsecured Notes of Masco Corporation due in 2026 by students of MIT Sloan School of Management
- Buy recommendation for 7% Senior Unsecured Notes of SunCoke Energy Partners due in 2020 by students of Johnson Graduate School of Management, Cornell University
- Buy recommendation for 6.25% Senior Unsecured Notes of Sensata Technologies due in 2026 by students of UCLA Anderson

Stock Pitch Competitions

NYU Stern held its Annual Stock Pitch Competition on October 7th. Over two rounds first-year MBA students pitched long and short recommendation from a list of stocks that included Michael Kors (KORS), Trip Advisor (TRIP), Southwest Airlines (LUV), and WebMD (WBMD) among others. After two rounds of pitches and Q&A, the top four winners of the competition were Karan Vazirani (URI: Long), Simon Walenski (RIG: Long), William Li (LUV: Short), and Abhinav Sharma (LC: Long) respectively.

NYU Stern's part-time investment cluborganized the **S&P Langone Stock Pitch Competition** on December 3rd which saw a team of Mohnish Zaveri, Diven Sharma, Arthur Khaykin, and Marvin Jiwan win the competition with a recommendation for Lear Corporation (LEA: long)

During the fall semester, first-year MBA students at Stern also participated in a number of inter-school competitions:

- Simon Walenski, Devesh Kumar, and Jerry Diao **reached the finals of UNC Alpha Challenge** where they pitched Transocean (RIG: Long), AirLease (AL: Long), and WageWorks (WAGE: Short)

- Karan Vazirani, Abhinav Sharma, and Elise Jia participated in Columbia Business School's Stock Pitch Challenge where they pitched Hospital Corporation of America (HCA: Long)

- Joe Martoglio, Shirley Tian, and Tina Kou represented NYU Stern in Darden at Virginia Investing Challenge where they pitched Yelp (YELP: Long)

- Neville Commissariat, William Li, and Pramit Mukherjee represented NYU Stern in Cornell Johnson's MBA Stock Pitch Challenge where they pitched Wayfair (W: Long), AirLease (AL: Long), and Standard Motor Products (SMP: Short)

eVALUATION – GET INVOLVED!

Our mission is two-fold, (1) to broadly spread awareness of research and investing to interested parties and (2) to foster a greater connection between NYU students and alumni in the investment community. On that front, if you would like to get involved, or provide us with feedback, please don't hesitate to reach out. In addition, if you would like to be added to our newsletter e-distribution list going forward, please send us your contact information. Thanks for reading!

Visit our student club affiliation, Stern Investment Management & Research Society, on the web:
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Stern Investment Management & Research Society (SIMR) Alumni

Fall 2016 Editors

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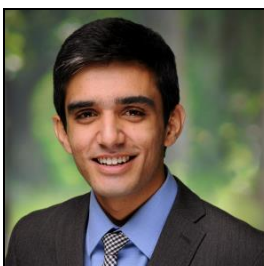
Diana's contributions to the eVALUATION newsletter are based on her own personal opinions, and are not endorsed by Franklin Templeton Investments nor represent FTI information or viewpoints.

Diana Keenan (diana.keenan@stern.nyu.edu)



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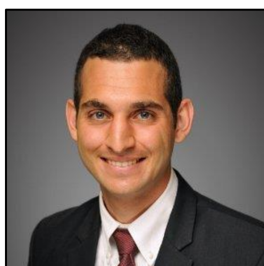

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Special Contributing Editor

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