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The investment industry’s demand for data scientists is outstripping supply. Some data scientists are commanding multimillion-dollar salaries. In Silicon Valley, fresh-out-of-school salaries for data scientist jobs top $100,000 plus benefits and equity stakes, and once employed, new hires are contacted daily by recruiters with half-million dollar offers to switch companies. The talent shortage could reach as many as 250,000 data scientists by 2024, according to “The Age of Analytics: Competing in a Data-Driven World,” a McKinsey Global Institute (MGI) study released in December 2016.

Considering this kind of demand and lucrative compensation, investment professionals need to figure out how to position themselves for these new opportunities.

A QUANT BY ANY OTHER NAME

The first wave of quants was made up of PhDs in physics and computer science who flooded Wall Street in the 1980s and 1990s (after the Cold War ended) to satisfy demand for investment decision making that eliminated human bias. These early investment quants didn’t want to know anything about fundamental investing; they surprised and upset the old order of fundamental investors in their operational hierarchy of analysts and portfolio managers.

The change was abrupt. In fact, Renaissance Technologies became the first quant fund in 1982. Based in East Setauket, New York, the firm made a point of having a name with nothing in it that smacked of investments, capital, or finance. And its approach was also different. PhDs in math and computer science created algorithms that scoured financial and economic data for correlations, and the firm’s hiring process was reputed to screen out finance (and even Wall Street) backgrounds. The company’s performance, however, made their employees rich as assets grew to $65 billion.

New quants build on some of these old foundations in such ways as devising algorithms for automated trading, but with today’s new techniques and tools, modern quants are out of the back rooms and employing much broader datasets from both inside and outside their firms. Recent advances in artificial intelligence (AI) technology, combined with increased computational power, now make it possible to generate trading models that could not be imagined two or three years ago.

Rebrain.AI, an AI-powered investment management company based in San Francisco, is putting new technology to work after a decade of testing with the launch of Darwin in 2017. “Unfortunately, the rigidity of these [older quantitative] models is poorly adapted to the constant evolution of the financial markets,” says Sylvain Morel, CEO at Rebrain.AI and founder and executive chairman at digital media group Adthink, headquartered in Tassin-la-Demi-Lune, France. “Our AI-driven trading models can teach themselves to adapt to changing market conditions without any human guidance or instruction.”

In fact, the recent advances in data-driven asset management represent a third wave of quantitative investing. “The third wave is characterized by AI and deep learning, supported by sophisticated machine-learning networks running on Theano and TensorFlow,” says Aditya Khandekar, CFA, chief analytics officer at Scienaptic in New York City.

Scienaptic offers data analytics services to various sectors on its proprietary Ether platform. Clients from all sectors use the platform to “infuse intelligence in the way organizations decipher customer behavior patterns, design intelligent...”
interventions, and create real value in delivering a superior customer experience.”

The first wave of quants devised statistical models based on the theory-driven normal distribution of data. The second wave brought models based on heteroskedasticity (when standard deviations of a variable are not constant over time) and other complicating abnormalities. To address these conditions, the second wave of quants lightened up on statistical theory in favor of machine-learning models with the goal of optimizing the math.

The third wave focuses on deep learning, supported by advances in machines and software. Graphical processing units (developed for gaming) not only facilitate speed in computing massive calculations but enable big data to classify images and provide video analytics, speech recognition, and natural language processing. Accompanying these foundational technologies are libraries of machine-learning paths (like Theano) so users don’t have to reinvent the wheel for each new process. “What used to take five or six days to converge data can now take a couple of hours,” says Khandekar. “With these tools, we’re able to train large data, be efficient and scalable.”

**THE MOST IMPORTANT GOAL FOR [ONE FIRM] IS TO BUILD A TEAM COMPOSED OF VERY DIFFERENT PROFILES IN ORDER TO HAVE AS MUCH HORIZONTAL SKILL AS POSSIBLE. GOOD IDEAS DO NOT NECESSARILY COME FROM MATHEMATICIANS OR AI SPECIALISTS BUT RATHER FROM THOSE WHO TAKE A DIFFERENT VIEW OF A PROBLEM.**

Data science is not a single body of knowledge. It encompasses a range of new fields. Whereas most early quants were out looking for alpha, new data scientists have a broader mandate. Daniel McAuley, CFA, a manager of data science at Wealthfront in San Francisco, illustrates this point. Wealthfront’s quant team performs essentially the same duties McAuley did while working at a hedge fund. At Wealthfront, this group is called the research team. They all have PhDs and work every day to develop tactical harvesting, automated indexing, and software from the finance perspective. McAuley uses his finance background and top-level programming skills to look at data across the business. They do A/B testing on product features, determine from whom and where growth in the business is coming, and quantify customer acquisition costs and customer lifetime value. They analyze customer-service patterns to project costs and company needs to serve 10 times the number of customers they were able to serve previously. “The old saw in our sector is true,” says McAuley. “If you ask three data scientists to define their job title, you’ll get four answers.”

McAuley, who hires data scientists for his team, says there is a big imbalance between supply and demand when it comes to the need for people who have the necessary skills. What are those skills? The technical skills—being able to write code and construct and understand models—are necessary but not sufficient. Data scientists must also have communication skills so executives trust and understand the output of the models. “Our mission at Wealthfront is to improve decision making using data and the scientific method,” says McAuley. “My team delivers an understanding of how the wealth products are working and why. If our work doesn’t cause anyone to change behavior, then it’s not fulfilling.”

Morel at Rebrain.AI is aggressively hiring to support growth at his fund. The most important goal for him is to build a team composed of very different profiles in order to have as much horizontal skill as possible. Good ideas do not necessarily come from mathematicians or AI specialists but rather from those who take a different view of a problem. Thus, in the coming months, he is looking for market specialists, quants, and computer scientists—as well as biologists, philosophers, and psychologists. “We are still at the very beginning of the AI, and no one can say what the evolutions of tomorrow will be,” he says.

As long as it is still possible, Morel is looking for profiles with the broadest skills and will gradually look for more and more specialized profiles. Rebrain.AI must hire and manage smart, as they charge no annual fees, only performance fees. “We also hire data scientists with the understanding that a single individual cannot master the end-to-end AI production chain and that knowing what will happen in one year is very difficult.”

**LOST IN TRANSLATION**

At early, systematic quant funds like Renaissance, the quant’s daily tasks included cleaning up securities pricing data, creating algorithms, and backtesting to identify signals that would become the foundations of investing algorithms. The final task was to devise algorithms that would transact trades at the precise moment of best price advantage. The old quant worked in a context where data was scarce, even commoditized, because everyone looked at the same securities pricing and corporate-activities data. Quants got an edge by cleaning scarce data better than the competition and by devising algorithms that made best use of the valuable (though small) cache of past prices.

Some of today’s data scientists consider this specialized focus to be esoteric. Though some still want to trade by understanding financial markets, GDP, open volume, monetary rates, and bond prices, today’s data scientist has less subject specialization and broader domain expertise.

Driving the broader scope of knowledge is the abundance of high-quality data available. No longer content with running algorithms on a closed set of pricing data, the new data scientist scour the marketplace for unique datasets that best inform the question needing to be answered. “With faster machines and an unending supply of highly granular data, quants don’t want to do the predictive models on scarce data
anymore,” says Sri Krishnamurthy, CFA, chief data scientist and president of QuantUniversity.com in Boston. “Now they want it all, like the rich sentiment data [gathered from social media] and geospatial-specific data, to make sense of outputs.”

Krishnamurthy also provides data analytics services for customers through his company. In that role, he reviews and evaluates vendors. As a way to illustrate his different perspective on data, he shared a report from JP Morgan evaluating data vendors. The report states, “[RavenPack’s] new platform uses proprietary sentiment analysis technology to ‘monitor’ market-moving events and quickly surface insights by combining a wide variety of datasets, including stock prices, geopolitical events, news flow, social media activity, payments data, weather, apps, and data from the Internet of Things.” JP Morgan used the service and presented the results of their tests at a RavenPack research symposium using three strategies: (1) trading equity indexes with an annualized return of 5.6% and Sharpe ratio of 0.44, uncorrelated with traditional risk factors; (2) trading developed-market currencies with a contrarian long–short portfolio, similarly uncorrelated; and (3) trading sovereign bonds, from which the use of RavenPack services generated alpha streams uncorrelated to traditional risk factors.

The explosion of big data and machine-learning theory also means a parallel evolution of new ways of computing. Examples include the neural-network gradient method of identifying and optimizing model parameters to minimize the order errors in estimation output, numerical partial derivatives that help data scientists understand local minimums, and trained networks that classify data and then predict outcomes. “These are the directions of the next wave; deep learning and self-learning solutions incorporate cognitive computing,” says Khandekar. “This is leading to more sophisticated predictive models.”

Today’s business world is looking to data scientists for more than just predictive analytics. MGI’s recent study advises employers that for every data scientist they need to hire, even more “translators” will be needed to connect what data reveals to real-world business problems. (In fact, the report estimates a demand for two to four million such translators in the US alone over the next decade). The data scientist is called on not only to analyze data but to create outputs in a format that supports decisions. This task crosses into the domain of business analytics. Visualizing the output in a single dashboard and including descriptors that solve such operational problems as network inclusion, security, and marketing questions will be of key importance.

"YOU’LL NEED TO LEARN HOW TO PROGRAM"

Data scientists with more than about five years’ experience have traveled a self-defined path in this brand new field. The stops on the path may have been similar—an undergrad or graduate degree in computer science, frequently an MBA or master’s degree in finance, perhaps some programming courses in neuro-linguistic programming and big-data languages, and/or some work experience using data to answer business questions. But they typically have had no formal training in data science. Now, however, the demand for data scientists has professionals scrambling for new courses and designations. Online courses, accredited colleges, and brand new schools and certification programs are springing up to meet the demand.

Also, in a complete reversal from the early quants, data scientists are adding the CFA charter to their credentials to claim domain expertise in investing and markets. And the CFA Program curriculum has been expanding to include content and case studies for fintech applications. For investment firms (and especially fintech firms), Krishnamurthy, Khandekar, and McAuley all contend that the CFA Program provides a unique background for translating business and investment-market contexts.

In its report “The Age of Analytics,” MGI notes that in answer to employers’ demands, degrees in data science and analytics grew by 7.5% between 2010 and 2015. Several top universities, including NYU, Carnegie Mellon, and Columbia, now offer master’s degrees in data science. Despite this increase in the number of programs (now in the hundreds), business leaders surveyed by MGI said finding and retaining analytics talent was far more difficult than in other areas.

Necessity being the mother of invention, savvy entrepreneurs have been moving in to fill the void. For Krishnamurthy, the task of educating clients with whom he consulted became his major business offering. During five years as a senior consultant with MATLAB, he worked extensively for financial institutions and banks. In this role, he repeatedly saw the need for—and heard clients request—big solutions to big data. “I saw another solution was to teach them how to fish,” he says.

The result is QuantUniversity, where Krishnamurthy is chief data scientist and president. QuantUniversity offers “customized training courses and workshops for executives to enable them with the tools needed to handle data and implementation challenges when designing and developing quantitative solutions.” He further trains students and executives as a data science professor at Northeastern University, which offers a certificate in data science, and has earned the certified analytics professional (CAP) designation from INFORMS, the leading international association for operations research and analytics.

Gaining skills or even awareness of the new field of data science is important for everyone. MGI warns that even if a job title remains the same, the skills needed for all jobs will soon be dramatically changed. In a December 2016 article for Education Week, Benjamin Herold predicts that as “data-driven
automation yields new advances in machines’ ability to process natural language, recognize patterns, and even sense human emotion, everyone from administrative assistants to lawyers to industrial engineers will see core aspects of their daily work evolve or disappear.”

Facebook, a major employer of new data scientists, readily hands out advice on how to prepare for such a job. In another December 2016 blog post, the company highlighted the daily use of artificial intelligence on the Facebook platform by the average person and teed up a series of videos on AI they are producing. They warn students and professionals alike to prepare. “Take all the math class[es] you can possibly take, including Calc I, Calc II, Calc III, Linear Algebra, Probability, and Statistics. Computer science, too, is essential; you’ll need to learn how to program. Engineering, economics, and neuroscience are also helpful. You may also want to consider some areas of philosophy, such as epistemology, which is the study of what is knowledge, what is a scientific theory, and what does it mean to learn.”

With the potential existential threat to traditional finance that technology poses, data-science education also enhances job security and supports higher salary demands through business knowledge and data expertise across verticals. Keeping up with knowledge across sectors means data scientists can satisfy demand from such disparate fields as health care, retail, and banking, and they can even help solve such social problems as poverty, climate change, and the challenges of urban living.

Even though programs are expanding now, many working in the field of data science today are self-taught for some of the skills. Khandekar’s background spans computers and finance. He started as a computer engineer coding and programming in the early 1990s. Next, he gained an MBA in finance. As part of the MBA, he had to choose to follow a technical leg or marketing or general management. “I could have kept with IT or could have gone the business strategy route with a firm like Cap Gemini,” he says. “Once I got into the case studies in corporate finance I realized I enjoyed the application of the numbers and logic to the business side.”

His subsequent job in corporate management collapsed in the tech crash of the early 2000s and the bursting bubble led him to pursue the CFA charter on a whim. As he was working in finance and coding strategic projects, he got deeper and deeper into business analytics. His work was driven by systems and business model forecasting, and he was defining and tracking key performance indicators. With the CFA charter, an MBA, coding experience and education, and experience working in banking space with statistics-based programs, the analytics bug bit him. “I finished the CFA Program but had no interest in traditional portfolio management,” he says. “In fact, I was doing work in the banking space and working with a statistics-based program to contextualize a lot of the business issues.”

Krishnamurthy traveled a similar path. With a BS in mechanical engineering and master’s degrees in both computer science and computer systems, he pursued an MBA. During the business administration masters’ program, he joined a team from Babson College that won the first CFA Institute Investment Research Challenge in 2007. “I was a quant first, trained in computer science,” he says. “We were applying financial models to investing. We analyzed a proposed divestiture for ADI and won because the judges hadn’t seen anything like it.”

Krishnamurthy says he was lucky to work on his team with a fundamental analyst as the team analyzed drivers of the company: “I still look at the CFA Program as the basis for rapidly understanding financial markets and underlying relationships.”

McAuley has a BA in international finance and then got an MBA from Wharton. For his senior thesis in undergraduate school, he and a partner analyzed the leveraged ETF, a fairly new financial product at the time. Few people understood how to use the new vehicle and even fewer understood the risks. Through analysis and modeling, the pair learned that the relationship between the underlying assets and the leveraged ETF broke down over time because of the volatility of the underlying assets.

To accomplish the research, McAuley taught himself statistics, math, and programming. Out of school, he convinced Verus Analytics (founded by serial fintech entrepreneur Dr. Carr Bettis) to hire him without a computer science degree or PhD. “While I was the only person without a PhD, I was not the only person without the CFA charter,” says McAuley. “I learned to write algorithms, but I couldn’t have done that without knowing how to pore through financial statements. The CFA Program was directly pertinent to being able to apply the technical skills at the job.”

Now, as director of data science at Wealthfront, McAuley looks for one skill above all others—a potential hire’s desire to learn on their own. He sees prospects from business school who want to make the transition into an analytics role. They’ve taught themselves how to automate, or maybe they’ve written a script to enter data. They’re spending time with online courses in basic type machine learning or R or Python. With these skills, according to McAuley, a job candidate is 80% to 90% of the way to being qualified. When he sees CFA charter-holders applying to work as one of his four team members, he knows they’ve satisfied both the requirement of being passionate about finance and a mastery of basic statistics. “They’ve also worked a few years and have spent three years of intense self-study,” says McAuley. “They’ve suffered through the program and that proves they’re going to keep learning.”

For those who want to go into data science, finance and fintech are relatively untapped areas, according to McAuley. And though he gets 30 applicants for each job he posts, he realizes a career in finance isn’t as sexy as working for other, more well-known consumer applications, at least at first glance. But with developing fintech comes greater opportunity.

“Finance is one of the last industries to be impacted,” McAuley says. “At Facebook, you might be part of a team of hundreds and hundreds stuck on optimizing a search function bar. In finance, even as an intern in data science today, you will be working on projects that change the direction of not just your business but of the industry.”

“It might be riskier,” he adds, “but with risk comes reward.”

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INVESTMENT PROFESSIONALS “DON’T ACTUALLY KNOW WHAT THEY NEED TO DO TO ADAPT, BECAUSE THE ASSET MANAGEMENT FIRMS THEMSELVES AREN’T CLEAR”

By Maha Khan Phillips

For nearly 95 years, employees of the UK investment consultancy Hymans Robertson could be certain of one thing: Their profession required formal business attire. Employees, primarily actuaries, came to work in suits.

But not anymore. Since September, Hymans Robertson no longer has a strict dress code, and the rationale for this change reflects a wider trend in the investment business: It now employs more software programmers than it does actuaries. “We had to work hard to integrate everyone, because the tech people have their own culture. This has been most obviously demonstrated by the clothes that they wear. Actuaries tend to wear suits, and tech people don’t. So one of the things HR has had to grapple with is our dress policy,” says Douglas Anderson, partner at the firm.

For the last five years, Hymans Robertson has been positioning itself as a de facto robo-advice firm, using its Guided Outcomes system to build a platform that encompasses all aspects of defined-contribution (DC) solutions.

And that type of positioning requires new types of talent and skillsets. “We’ve always been successful in the past with defined-benefit schemes, but the market is mature and expected to shrink, so employment opportunities would shrink along with it,” explains Anderson. “Our feeling was that we had to be big in DC schemes in order to replace jobs that were lost from the defined-benefit market,” he explains.

Hymans Robertson is not alone. Technology is increasingly becoming a critical game-changer in all aspects of finance. Deutsche Bank’s chief executive John Cryan said in September that a large number of employees will eventually lose their jobs as technology makes their roles obsolete. And you only have to look at BlackRock’s Aladdin software, the risk and operations platform now being used by 85 asset management clients managing an aggregate $18 trillion (or 6% of the world’s entire financial assets) to realise that the world’s biggest asset manager could potentially become one of the world’s biggest technology players as well.

Technological drivers are only some of what’s changing in this business, however. The asset management industry is undergoing an arguably painful evolution. The cost of doing business in a low-yield and politically uncertain world has increased as has pressure on fees. Active managers have come under attack for their fee structures, with passive investing growing 4.5 times more than the active management mutual fund industry in 2016, according to data compiled for FTfm by Morningstar.

From fintech to changing client demographics, major trends are converging to transform the career outlook in the financial industry.

“There will be a wave of people attracted to the buy side because it is an industry going through such dramatic change,” one industry expert believes. “On the flip side, compensation will go down and firms will need to recalibrate their organisational makeup.”

In one possible scenario for industry evolution, those who manage money would increasingly be separate from those who manage the business side.

With many parts of the asset management industry facing disruption, empowering that next generation of leaders will be critical for firms that want to remain viable.

KEY POINTS

- From fintech to changing client demographics, major trends are converging to transform the career outlook in the financial industry.
- “There will be a wave of people attracted to the buy side because it is an industry going through such dramatic change,” one industry expert believes. “On the flip side, compensation will go down and firms will need to recalibrate their organisational makeup.”
- In one possible scenario for industry evolution, those who manage money would increasingly be separate from those who manage the business side.
- With many parts of the asset management industry facing disruption, empowering that next generation of leaders will be critical for firms that want to remain viable.
As a result of squeezed margins, the industry is consolidating. The dust is still settling from the mergers of Janus Capital Group and Henderson Group, Standard Life and Aberdeen Asset Management, and Amundi’s $4.1 billion purchase of Pioneer Investments. Industry participants expect more consolidation to follow, as well as more change.

“The impact of change is going to be profound. At the highest level, revenues are under attack,” says Jeff Levi, principal at consulting firm CaseyQuirk. “Fee pressure, slowing organic growth rates, an inability to rely on capital market returns to grow a business, and rising costs of doing business mean that firms are searching for ways to be more efficient, effective, and differentiate[d].”

Levi believes three broad value propositions will emerge in asset management. One will be investment driven: firms that are premium providers offering high-quality, tailored, active products, able to generate high fees because of their premium service. The second value proposition will focus on customer experience, with business models about providing solutions and focusing on quality of experience for clients. The third value proposition will include traditional active managers charging low basis fees for their active products, focusing more on volume than on fee revenue. Such positioning can already be seen in the market. In October, the £233 billion giant Fidelity Investments announced that it will be cutting its management fees and introducing a performance component across its range of active equity funds.

Whatever value proposition a firm is working toward will have widespread implications for careers. The rise of the data scientists

Understandably, most of the new entrants will be people with science backgrounds.

“Low-cost asset management products need to leverage technology and their workforce. Traditionally, firms used to recruit people with very standard and monolithic skills with finance backgrounds. Very rarely would firms recruit talent from other industries. But that is changing,” explains Violetta Senda, CFA, digital strategist specialising in innovation at Avanade. “Asset management firms need very precise and very focused skills capture related to data science, engineering, mathematics, physics, and anyone who can help them build underlying models [that] would use data as analytics, and the programming skills to build artificial intelligence and produce good portfolio results.” [For a more in-depth report on the influence of data scientists, see the feature article “Speaking Data Science with an Investment Accent” in this issue.]

Robin Creswell, managing principal at global asset manager Payden & Rygel, believes there will be less opportunity in the investment business for those without specialist degrees, meaning history graduates will find it more difficult to knock on the door. “We are seeing a much greater focus on people having a master’s in finance or coming from science backgrounds,” he says. “The CFA [charter] is also becoming a minimum threshold for an increasing number of roles. We’re way past the point where people need to be able to use just Excel spreadsheets. I would think that over the next 10 years, programming and the ability to manipulate data are skills that will be quite essential.”

But Creswell suggests that there could be a bifurcation of career paths. In a world increasingly driven by data science, those who manage money will be separate from those who manage businesses. “A career where you end up managing the business needs creative thinkers,” says one asset manager. “It’s much more important to have the interpersonal and interactive skills and really understand clients and their needs.”

A career where you end up managing the business needs creative thinkers, says one asset manager. "It's much more important to have the interpersonal and interactive skills and really understand clients and their needs."
CLIENT DRIVEN CHANGES
In a DC-driven world, diversity is becoming an important issue for clients, who are pushing for change in the workforce across lines of gender, race, and sexual orientation, among other considerations.

“Asset management firms are making their products more accessible to the general public,” explains Emma Wallis, head of news and insight at talent management and consulting firm The Buy-Side Club. “In the DC world, individuals have much more sway over their managers, while robo-advice means an opening up of the investment industry. A related trend will be to focus on diversity as asset management becomes more accountable.”

Sarah Dudney, client partner at The Buy-Side Club, believes asset managers will have to compete to attract talent. “Asset management needs to appeal to young people and show them that this is an industry worth considering,” she points out. “Not all roles in asset management need a first-class math and economics degree from Oxford.”

Wallis is also concerned about a scarcity of talent. “If large asset managers need to strengthen their regulatory reporting, compliance, and risk management teams, the challenge arises when multiple firms are looking to hire from the same talent pool,” she says. “This results in firms either hiring people from different disciplines within financial services or outsourcing to consultants, bringing in expertise to help prepare for upcoming regulation.”

STUCK IN THE MIDDLE
But where do these developments leave professionals who are midway through their careers? One talent scout says there will be growing pains.

“Everyone in the asset management industry today is going to have to adapt to some degree to these new behaviours and new ways of interacting,” says Iraj Ispahani, chief executive of Ispahani Advisory, a business strategy and talent management firm. “People will have to unlearn bad habits and learn more efficient habits. There are likely to be fewer people in the industry.”

He believes organisations must invest and support experienced people through these transitions. “People feel very insecure now,” Ispahani says. “They see the world around them changing, but they don’t actually know what they need to do to adapt, because the asset management firms themselves aren’t clear.”

INDUSTRY DISRUPTERS
Inevitably, some job functions simply won’t be around in a few years’ time. Back-office jobs in particular will see the most dramatic change. TAINA Technology, an artificial intelligence company, is one of the new disrupters affecting jobs in the industry. TAINA chief executive Maria Scott says she has seen some redundancies take place at client firms that have automated their back-office compliance function. But her company is taking over mundane tasks that have high error rates and are not particularly rewarding for staff.

“People don’t like doing these roles,” says Scott. “For educated people with ambition, they aren’t jobs they want to be doing for the rest of their careers. And because we save so much money for the institutions, they tend to give [their employees] good packages and they tend to go and retrain. This is a natural evolution, but for smart people, it’s better to have the opportunity to go into higher-value-add roles.”

Another example of a potential disrupter is Havelock London, the technology-driven asset manager that is waiting for approval to launch its first fund in the UK. “What we are looking to do is to build a business that combines traditional investment management with forward-thinking data science and technology, in order to deliver different cost-effective solutions,” says Neil Carter, co-founder and chief commercial officer. “We’re not trying to replace anyone, be a ‘me too’ investment manager, or have a ‘me too’ pricing structure.”

The firm is not a quant-driven shop but instead uses data about a smaller number of themes to make qualitative decisions, starting from the bottom up to identify those themes and deciding whether or not to invest or adjust weightings. “We want to have a huge amount of data and knowledge about a smaller number of themes,” says Carter. “Our edge will be driven largely by our ability to apply data science techniques to managing money.”

He believes it is important for firms to recognise the need to attract new recruits, particularly those being wooed by tech firms. “There could well be a talent shortage, with companies competing for the best talent around. And so you have to differentiate yourself as a business and ensure you have a culture where talent has the freedom to explore some of their theories,” Carter says. But candidates will have to impress the firm as well. “The profile of people we’d be looking for is not just people who have great qualification in theory in data science, or brilliant master’s or PhDs,” he notes. “We would also be looking for experience in applying that to investment management and to the universe that we invest in. We want people who are multi-skilled and enthusiastic.”

From Levi’s perspective at CaseyQuirk he believes that institutions cannot afford to be complacent: “Leadership at many firms have retirement in sight, and many view change as presenting more of a risk than a reward,” he says. “However, many parts of the asset management industry are facing disruption, and empowering that next generation of leaders will be critical to staying at the forefront of the industry.”

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The Professional Talent Search
HOW CAN JOB CANDIDATES POSITION THEMSELVES IN A COMPLEX MARKET?

By Sherree DeCovny

Today, it is not enough to have mastery of one subject area, such as accounting, finance, business, or technology. Employers are looking for candidates who have cross-functional knowledge to go along with a specialization. A lot of attention has focused on the fact that financial firms want candidates who can use computers to enhance their research and analytical capabilities, handle vast datasets, render probabilities, and assess the impact and quality of inputs. With the focus on technical knowledge, there can be a tendency to overlook employers’ needs for other valued skills, including the ability to assess the local impact of global events, filter noise, assign appropriate levels of magnitude, evaluate potential opportunities, and translate complex financial concepts into easy-to-understand language.

With all these variables, job candidates face a significant challenge to present their skills and credentials in a way that will be persuasive for hiring firms. “A lot of banks will talk to you about record applicants, but they probably won’t talk to you about the attrition rate,” says Jade Bouhmouch, CFA, previously a senior analyst at Bank of America Merrill Lynch. “How many of those are staying to move up to partner level as opposed to going somewhere else?”

In this article, several CFA charterholders explain how they acquired various skills to complement their financial prowess and positioned themselves to advance in their careers.

DIVERSE BACKGROUNDS AND TRAINING
The demand for investment professionals who can combine different types of expertise means candidates with diverse work histories and academic backgrounds can adapt to a variety of opportunities.

For example, Hemant Sood, CFA, worked in technology consulting for six years. He then completed his MBA from Tuck School of Business at Dartmouth University in 2013, after which he worked in private equity for four years. His current role as vice president at J.P. Morgan Chase is in financial analysis in the bank’s credit card business. Each job enabled him to develop skills that he could transfer over to his new position.

Similarly, Chris Kennedy, CFA, a quantitative finance manager at BankUnited, has a background in engineering and has also worked in the healthcare industry. His skills in problem solving with quantitative methods and IT make his financial modeling more robust.

Even for those who stay with one employer, working in different areas can be beneficial. James Buckley, CFA, works in fixed-income trade support at Vanguard, collaborating with traders and portfolio managers to reconcile cash within funds and confirm trades. He started at the company after graduating from college, and he has been there for more than four years. However, Buckley has not stayed in the same track at Vanguard. He started out on the retail side of the business, and then switched to the institutional side because he felt he could apply more of the concepts he learned while studying for the CFA exams.

DEALING WITH INTERVIEWS
It is relatively easy to prepare for interview questions such as “Tell me about a stock you’ve invested in” or “How would you handle a translation between IFRS and GAAP?” But job candidates need to be prepared to handle stress in disconcerting interviews. One CFA charterholder says he was once asked to explain his most controversial view. In retrospect, he believes it was a clever question because investors need strong analytical capabilities to make good decisions, but they also need to be able to stand by them.

Another CFA charterholder had to respond to this challenge from an interviewer: “10 other candidates have more experience and probably could do the job better than you, so please describe how you can compete.” Being asked a question like this could be demoralizing because candidates perceive that the interviewer has already decided that they are not qualified for the role.

In such situations, Bouhmouch asks for a description of the qualifications the interviewer feels he does not have. He responds with examples of how he has succeeded in those specific tasks or tells them how he would go about dealing with them. He asks for feedback after an interview so he understands the specific skills the interviewer perceives as valuable and necessary for the role. He also uses that information in his next interview or on his resume.

For Buckley, the CFA Program was the key to a successful interview. He was asked questions about concepts, such as indexing versus active management. The sections in the CFA Program curriculum about asset allocation, asset location,
and how to combine index funds with actively managed funds to build a portfolio gave him the confidence to answer those types of questions. “I think the CFA Program went way above and beyond,” he says. “I felt prepared for the interviews and any technical question.”

**A CREDENTIAL THAT MATTERS**
The CFA Program curriculum provides a skillset (including a body of professional ethics) to operate in the current environment. At the end of it, charterholders are equipped to establish a reference point for their value in the market.

Many CFA charterholders did not have a career plan when they began studying for the exams, and some do not have one now. Buckley knew he wanted a career in finance before he began pursuing the CFA charter, but he was not sure what he wanted to do within the field. He knew the program would open up doors within the industry and provide many options. “The CFA Program helped me to make the transition,” he says. “Even though I was still on Level 2 at the time, it made me stand out as a candidate when I was applying for those roles.”

Kennedy had partially completed an MBA when he started the CFA Program. He enjoyed the finance coursework, so he thought getting the CFA charter would provide a solid foundation to signal his interest in finance to the banking world. His tactics worked. “Just being a candidate for Level 1, people started talking to me,” he says.

His career plan always has been dynamic, but the CFA charter has given him a broader view of what is possible in finance and banking. It has also helped him to develop a more strategic plan for what he wants to accomplish in his career. Sood pursued the CFA charter and MBA simultaneously, although he started the CFA Program first. In his opinion, each provides unique benefits. “With the CFA charter, you can target investment management and certain other roles, such as corporate finance and corporate development,” he explains. “The MBA will give you a broader experience because you learn about finance, strategy and operations, but there is some overlap between the two in finance.”

Obtaining the CFA charter enabled Bouhmouch to transition from a business development role to an analyst role, rising to the level of senior analyst. Gaining more in-depth financial knowledge provided him with the tools to do his job better and explore available career options. However, in his opinion the industry is focused too much on titles rather than responsibilities. That makes it difficult for someone to shift gears, even if they try to take on responsibilities that will help them build the skills an employer might desire. That is why he is now pursuing an MBA to complement his CFA charter. “It’s easy for us, especially at an abstract level, to get lost in the line items instead of really looking at the inherent business,” he says. “Employers want to know that you understand what’s actually behind a line item and that you can translate that into a broader vision of the business.”

**COMPUTERS CAN PERFORM CERTAIN TASKS BETTER THAN HUMANS, BUT THAT CAN FREE UP TIME FOR HUMANS TO ADD VALUE THROUGH OTHER ACTIVITIES. AMONG THEM ARE BUILDING AND MAINTAINING RELATIONSHIPS FOR CHANNEL CHECKS, GETTING BETTER ACCESS TO MANAGEMENT, IMPROVING THE QUALITY OF INPUTS AND PATTERN-MATCHING AT A HIGHLY ABSTRACT LEVEL.**

They all agree that mentors can help analysts improve their skills, identify areas of weakness and turn them into strengths, add value to clients, and figure out the next steps in their career. They can also help analysts build relationships with individuals who work in jobs they are curious about.

**STAYING RELEVANT**
Automation is disrupting the industry, and many traditional roles and paths could be redefined or even disappear. Some analysts are afraid of it, and instead of looking at it as a tool, they view it as their replacement. Ironically, many analysts dislike doing repetitive tasks. They prefer spending time on abstract thinking to identify the unique threads and patterns that might make a difference in the prospects of a firm. Computers can perform certain tasks better than humans, but that can free up time for humans to add value through other activities. Among them are building and maintaining relationships for channel checks, getting better access to management, improving the quality of inputs and pattern-matching at a highly abstract level. Anybody can plug in some numbers, notes Bouhmouch. Determining, using, and adjusting inputs are things that make or break an analyst—and ultimately a team.

Bouhmouch also thinks that outsourcing and regulation are not necessarily structural threats for job candidates today. Labor competition has been global for a long time, and knowledge-based jobs are prime candidates for outsourcing because they are not tied to any physical location. A lack of ability to compete reflects a personal problem, not a problem with the structure.

To stay relevant, CFA charterholders need to remain up to date with current events and how new technology is being applied in the industry and changing it. They also need to be flexible and willing to learn. “Things are changing more quickly than ever before, so you need your talent to be willing to learn more quickly than ever before,” adds Kennedy. “Companies are looking for talent that is willing to take a course, get a certificate, or talk to experts.”

Sherree Decovny is a freelance journalist specializing in finance and technology.
"I have a question regarding salary negotiations. I am currently in a position of earning less than my male co-workers for the same portfolio manager position. I am trying to address this point to my superiors. How should I negotiate this properly?"

We shared this question with Boston-based career coach Bryn Panee Burkhart, who is also senior associate director of alumni career services at MIT Sloan. She says that “anytime you are going into a salary negotiation, it’s important to frame it up as a conversation rather than a confrontation.” She goes on to say that she “would be very careful about making statements regarding your male counterparts unless you truly have the facts and are prepared to back that up.”

Keep in mind that compensation is more than just base salary; it is the totality of salary, bonuses, and other negotiated benefits. So having all the facts about colleagues’ compensation packages may not be as straightforward as it seems. That is not to suggest that if you did know all the details of colleagues’ compensation, you would be likely to discover anything different about parity or a lack thereof. Rather, this example just illustrates that it’s often easier to focus a compensation conversation with your employer on (as Burkhart puts it) “ensuring you are being compensated in a way that truly reflects the value and contributions you bring to your company,” as opposed to making the focus of the conversation strictly a matter of equal pay.

“Start by doing some research around market value of portfolio managers in your geographic location and industry,” Burkhart advises. “The more information you can get, the better. Use your network of current or former colleagues who may be willing to give you a sense of their compensation—if not exact salary, then a range.”

You may even consult salary surveys. Some CFA Societies participate in or publish salary surveys, and some executive search agencies, such as Robert Half, publish salary guides.

Importantly, this research step is also where you will insert what you do know about your male colleagues’ salaries. The bottom line, according to Burkhart, is that “you should never go into a salary negotiation without a strong sense of your current market value.” With this research done and at the ready, it’s time to ask your manager to have the conversation with you. Burkhart suggests that you “let him/her know that as you look at your current compensation, you want to ensure that your salary is competitive with your colleagues and that it reflects the value you bring to the organization.”

Burkhart goes on to suggest that when you sit down with your manager, you should have a solid list of your achievements and you should be prepared to tell the stories of those achievements. Explain that you’ve been doing your research, and share what you’ve found. “Make a statement like ‘my understanding is that I’m earning less than some of my colleagues here who do similar work, and I’ve been doing some research that suggest that total compensation packages (base/bonus potential) in our market are around $XXX–$YYY base with a XX%–YY% bonus potential. I’d like to be at a competitive level within our organization. What are your reactions?’”

Continue to draw attention to the value you bring to the organization through your abilities and achievements. Remember too that you are engaging in a conversation. Learn what goes into your manager’s thinking and the firm’s philosophy on compensation. And most importantly, make sure you explicitly ask for a review of your compensation package and for a timeline in which to expect the review to occur.

Good luck.

If you have a career question you’d like us to address, please email careermanagement@cfainstitute.org with the subject line “ask a career question.”
CONGRATULATIONS TO THE CFA® CHARTERHOLDER CLASS OF 2017.

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How should we view markets? Are they efficient, irrational, or slightly biased? A recent, more integrative theory is the adaptive markets hypothesis (AMH), proposed by Andrew W. Lo, the Charles E. and Susan T. Harris Professor at the MIT Sloan School of Management and director of the MIT Laboratory for Financial Engineering.

His new book is Adaptive Markets: Financial Evolution at the Speed of Thought. In this interview with CFA Institute Magazine, Lo explains the inspiration behind AMH theory, its application in building portfolio tools and financial regulation, and why a decision-making process needs to consider the human element.

How do you describe the AMH?

The main idea behind the adaptive markets hypothesis is that financial markets are governed more by the laws of biology than the laws of physics. There are five basic tenets of adaptive markets: (1) People act in their own self-interest; (2) people make mistakes; (3) from those mistakes, they learn, adapt, and innovate; (4) as they experiment and fail or succeed, the process of natural selection operates on individuals, institutions, and markets just as it operates on bacteria, sea slugs, and chimpanzees; and (5) this evolutionary process is what determines financial market dynamics.

The AMH applies the framework of evolutionary biology to specific financial contexts. If you follow that perspective to its logical conclusions for any given issue in finance, you’ll get answers that are quite different than what you’d get from either an efficient markets hypothesis (EMH) or [a] behavioral finance perspective.

How so?

Here’s an example: How should you determine your asset allocation between stocks and bonds? The EMH says that prices fully reflect all available information, so there’s no use trying to pick winners or losers or timing the market. You should just consider your own risk preferences, your age, your income, and the kind of retirement you’d like to have and then formulate your asset allocation to stocks and bonds to maximize your chances of achieving these goals.

The AMH starts with the observation that there’s no guaranteed return on equities or bonds. Their performance depends on particular market conditions, and those conditions evolve over time. In other words, there are periods where equities will do well, and there are periods where equities won’t do well. So if your goal is to retire with a particular level of wealth, you need to manage your asset allocation dynamically. When equity markets have a higher expected return, you’ll want to tilt more towards equity markets; when equity markets have a lower expected return, you’ll tilt more towards bonds.

How can you tell what expected returns will look like? By monitoring the entire financial ecosystem—the number of individuals and institutions that are investing in equities looking to pull money out and put money into bonds. Looking at financial markets as an ecosystem allows us to understand the relation between investment performance and the interactions of various types of investors. You may not be able to time the markets day to day, but you can certainly see trends over longer holding periods.

Do ecosystem measurement tools exist?

We do have some tools, but they’re not ideal because we haven’t collected all the necessary data to use them. For example, over the course of the past 10 years, there have been
tremendous amounts of assets flowing into passive index funds and [exchange-traded funds]. Not surprisingly, you’ve seen those passive products earning positive expected returns. That kind of trend tells you that equity markets are going to continue to do reasonably well—until we hit some kind of market disruption. What if we could measure such disruption as it starts developing? By measuring the market interactions of investors and traders at higher frequencies and on a micro scale, we can develop much better projections of what’s going to happen.

But we’re not very good at this yet because we’re not actually looking at financial markets as the kind of system that I just described. We’re not collecting the right kinds of data. We’re measuring prices and other economic fundamentals, which may not be the only factors or even the most important factors that are driving markets.

What factors should we be tracking?
Imagine if we were ecologists trying to study the ecosystem of the Amazon rainforest. How would we begin? The approach to studying financial ecosystems is much the same.

I would start by tracking the different species of financial market participants. When I say “species,” I mean it much in the same way that a biologist does. A species is a collection of animals that share certain traits and behave in a similar manner. One example is pension funds, which seem to behave in a similar manner due to commonalities in their legal and financial functions. Hedge funds also behave in a similar manner, even though they may differ in their investment styles. So the first thing I would do is to identify and catalog the different financial species—pension funds, hedge funds, mutual funds, banks, broker/dealers, insurance companies, and so on—and take an inventory of the size, growth rates, and other characteristics of each.

What’s the next step?
Once we’ve catalogued and measured the different species, we need to understand how they behave. How often do pension funds make investment decisions? How frequently do they revise them? What are their risk tolerances? What are their financial objectives? Are there certain assets that they can invest in [and] others that are forbidden?

If we did this, we’d discover that pension funds can invest in most publicly traded securities, but there are certain constraints that they have to satisfy. They have fiduciary obligations, so they can’t invest in below-investment-grade debt. Their liquidity needs will prevent them from investing in a large fraction of their holdings in illiquid hedge funds and so on and so forth.

By studying each of these financial market species, we can get a sense of how they’re likely to behave in different market circumstances. If we then aggregate across all these species, we begin to get a clear picture of how financial markets are trending and how they’re likely to respond to market shocks.

How much of this data is available?
Most of it is available, here and there. But no one central repository collects and maintains all of the data. That’s really the challenge. In fact, in some cases the data aren’t even being saved. They’re being generated and kept for a short time and then eliminated simply to save on storage costs.

For example, some financial institutions only keep records on certain business transactions for five years. So if eight years ago, they conducted business with a certain counterpart, some potentially valuable information regarding the behavior of that counterpart during negotiations or after a deal was struck would be lost. If we were able to sift through those records systematically, we might be able to come up with some very valuable insights and algorithms for improving our business processes.

Did writing this book help you elaborate AMH theory?
Absolutely. When you have to articulate an idea in non-technical language, it forces you to understand it much more deeply than ever before. While I obviously had a pretty clear idea of what I wanted to say, the process of writing it down was tremendously helpful in crystallizing connections between the AMH and other disciplines. I also gained many insights into the application of the AMH to many contexts that I hadn’t considered before, several of which go far beyond finance.

What were your new insights?
One of the things I discovered was the fact that human intelligence works very much the way internet search engines work. This idea—which comes from the neuroscience and artificial intelligence (AI) literature—has surprisingly broad implications, not just for finance but for life in general.

In the 1970s and 1980s, when the field of AI was just getting off the ground, the big idea was the “expert system,” a piece of software that would mimic human intelligence. Whether it was doing high-school algebra, steering a guided missile to its target, or making a robotic arm play ping pong, these expert systems were complex pieces of software that implemented sophisticated mathematical algorithms to anticipate and provide optimal responses to every possible contingency.

Expert systems made very little use of data, because in those days storage was actually quite expensive; we didn’t have anything like today’s “big data.” The software was highly complex, but the use of data was relatively limited. Today’s expert systems have completely reversed this trend. The algorithms that we use today are by comparison relatively simple, and the amount of data that we process is extraordinarily large.

After studying AI and attempting to model various types of financial decision making algorithmically, I realized that humans make decisions very much the same way that modern search engines do. We have vast stores of data—the experiences
we’ve encountered in our lives—and we use very simple algorithms to make predictions and decide on actions. I recollect what happened in my past circumstances, and based upon that history of evidence, I’m going to extrapolate the likely outcome of the current situation and choose the best course of action.

This is how we adapt to various circumstances. It allows us to make very quick decisions. If I tried to analyze every situation and optimize every possible outcome the way that the rational optimizing Homo economicus might, by the time we’re done optimizing, we’d have been eaten by a lion.

In fact, we don’t do that. What we do is rely on big data to make predictions. A large portion of our brains is devoted to memory, and we draw upon our past experiences to make a very, very quick extrapolation—in many cases without any information or detailed analytical deliberation. This is what I mean by the subtitle “Financial evolution at the speed of thought”: Instead of evolving one generation at a time, a single human can go through many generations of ideas and pick the one that seems best, based on her past experiences.

The problem is this: While this mechanism works for keeping us alive, it’s not always the ideal decision-making mechanism for determining our asset allocation. Therein lies the challenge in understanding the limitations of human cognition and developing systems to improve that process.

How did you weave this insight into the AMH?
Focusing on human behavior allowed me to bring it all together. I realized there are many different disciplines that have one thing in common—us, Homo sapiens. The common denominator among anthropology, sociology, economics, psychology, and biology is human behavior. When I realized that financial decision making was simply one aspect of human decision making, I [started] thinking more broadly about how people make decisions and how we model them, both analytically and biologically.

How can recognizing our humanness improve decision making?
We can improve by first acknowledging that in many cases we make decisions emotionally, not rationally. We need to take into account the emotional reactions that ultimately drive our behavior during certain circumstances. Any financial product that we design—or any investment plan that we decide to implement—needs to take into account the human element.

Can you be more specific?
If an individual realizes she’s likely to “freak out” (that’s a technical term) if she loses more than 10% of her portfolio, she needs to incorporate that into her planning. She needs to consider what kind of assets she’ll hold—that either won’t lose more than 10% over a given period or if they do, she’ll have a contingency plan to deal with the freak-out factor. That plan may be as simple as “When I freak out, I’m going to convert my investments into cash,” but if so, an even more important part of that plan is “After a fixed period of time, I’m going to put my cash back into these assets.”

We need to create investment plans that adapt to market conditions and also take into account our own personal frailties and emotions. Instead, what people do now is they’re told by their financial advisers to buy and hold for the long run and criticized as “short-term investors” or “hot money” when they freak out. That might be appropriate for an automaton, but that’s not helpful advice for a human, because we’re not going to be able to take that advice. When the stock market drops by 25%, we will react one way or the other; that’s the reality of human nature.

Are you addressing personal or professional investors?
Both. Personal and professional investors are both Homo sapiens. Now, professional investors have many more tools at their disposal to deal with some of these challenges, but they still face challenges of their own. Human challenges are just as difficult to deal with for institutional investors as they are for individual investors. It just takes a different form.

Is the AMH a successor to the EMH and behavioral finance?
I don’t use the word successor because it implies a kind of critique of both. I actually think that the AMH reconciles and integrates the EMH with behavioral finance. Behavioral anomalies and efficient markets are opposite sides of the same coin: They reflect the dual nature of human behavior. The fact is sometimes we’re rational and sometimes we’re emotional. Usually we’re a bit of both.

The AMH reconciles efficient markets with behavioral finance in an internally consistent and intellectually satisfying way, creating a more holistic view of markets. So maybe in that way, it’s a successor. But it’s a successor that takes the two theories and creates a more complete perspective; it doesn’t say these theories are wrong. They’re not wrong. They’re just incomplete. They don’t apply all the time. The AMH shows how they can happily and productively co-exist when you look at human behavior from a biological perspective.

What’s been the response from the industry and financial academia?
The responses have differed across different audiences. Industry has responded favorably, mainly because anybody who’s been involved in business understands that adaptation is the key to survival. They see evolution happening before their very eyes, day to day and year after year.

When they learn about the AMH, everybody who’s ever traded for a living—or has run a hedge fund—immediately responds, “Yeah, exactly. That’s exactly what happens.” The theory seems much better able to predict the outcomes of various kinds of market circumstances and environments than either behavioral finance or efficient markets.
However, the academic side is much more skeptical—mainly because the theory hasn’t been presented in a purely mathematical form and finance academics tend to be highly quantitative. So the CAPM, the Black–Scholes/Merton option-pricing model, and the EMH all have formal mathematical expression, whereas the theory of evolution wasn’t mathematically precise when it was first proposed by Darwin (I don’t think there was a single equation in On the Origin of Species).

Now, you can certainly quantify evolution, as many evolutionary biologists and ecologists have done since Darwin, but the statement of the theory is actually deceptively simple and intuitive: The forces of competition, innovation, and natural selection dictate the dynamics of the population. Academics have been less ready to adopt the AMH simply because it’s so early that we haven’t formulated a lot of the mathematical implications.

How could we build AMH portfolio tools?

Instead of telling investors they shouldn’t freak out—which is basically fighting their own hard-wired instincts—why not build portfolio tools that will help them navigate these very, very difficult and challenging periods? Let’s help them deal with the freak-out factor more productively.

These tools include adaptive risk management protocols that measure and manage risk much more dynamically, scaling portfolios down during high-volatility periods and scaling them back up when volatility spikes subside. They also include dynamic factor models for measuring common exposures among investors’ holdings, where the factor loadings are time varying and capture shifts in the relative importance of factors over time. Finally, these tools also include interactive software platforms for measuring the preferences of investors on a regular basis, monitoring changes in their goals, desires, and constraints as their lives unfold and they change.

What about adaptive regulation?

Regulators are human as well; this means they’re also subject to the influences of market conditions. When markets are going strong and everything is looking stable, it’s very hard to get regulators to “take the punchbowl away.” There’s no easy way to motivate this kind of self-correcting behavior because when things are going so well, who wants to spoil the party?

But it’s exactly during those times when everybody is making money and we haven’t experienced any bank failures or big losses that we do need to consider taking the punchbowl away. So if we understand human nature and incorporate it into the regulatory process, we might consider introducing adaptive regulations—that is, policies that adapt to changing market conditions.

One example is countercyclical capital buffers. When times are good, we increase capital requirements, and after things have blown up and we’re sifting through the wreckage, that’s the time to lower capital requirements. So instead of fixing capital ratios at 2% or 10% or whatever they are now, we ought to adjust capital ratios as a function of market conditions so as to produce a stable probability of loss.

Looking at financial markets as an ecosystem allows us to understand the relation between investment performance and the interactions of various types of investors.

An automatic trigger based on the data?

Exactly. It would amount to an automatic stabilizer that would help to control these kinds of risks, much like how the body regulates our temperature by causing us to shiver in the winter and perspire during the summer.

What are the implications for the AMH on the industry?

My book on the AMH doesn’t have a single equation, and I did that quite deliberately. (And it wasn’t easy!) I did it because I wanted to reach a broader audience—particularly people who don’t necessarily have the mathematical background that financial quants do. You don’t need mathematical formalism to be able to use and benefit from the AMH framework. If you simply recognize the fact that markets adapt and investors adapt to changing market conditions, you’ll be able to start thinking more flexibly and intelligently about your portfolio.

For example, the starting point for applying the AMH to one’s portfolio is to first recognize that there’s a logic to market behavior, and it’s more biology than physics. Rather than using simple rules of thumb or complex mathematical equations, we can develop a more nuanced view of how markets change, how risks can change, and what we ought to do in response to those changes.

Financial crises do happen from time to time, because when we all start becoming irrationally exuberant at the same time or we all start freaking out at the same time, that’s going to create market bubbles and crashes. There’s a logic to crises, and we can understand that logic. It’s not necessarily mathematically precise, but it is biologically precise. The AMH tells us we have to start learning more about human biology and about ourselves.

So what’s in store for the AMH?

These are still early days for the AMH; it’s not, by any means, a finished product. When Darwin published On the Origin of Species, that wasn’t a complete theory either, and I’m no Charles Darwin! It was just the beginning. It provided us with a roadmap for the different theoretical developments to come and the various applications of evolution.

My hope is that this book will introduce the field to my colleagues so they can start developing their own versions, their own models and empirical investigations. The book lays out an ambitious research program for putting these ideas into practice as well as doing more research to flesh out the details, and only time will tell whether the AMH survives.

Nathan Jaye, CFA, is a keynote speaker and member of CFA Society San Francisco.
We all expect our workplace’s corporate culture to champion honesty and behaviors that are ethical and free from immoral, unethical, or even illegal activity. Although you personally espouse the highest standards of ethical conduct, you might one day find yourself working at a company whose ethical compass seems broken or whose new initiative pushes the limits on regulatory standards or runs utterly contrary to your strong work ethic.

What do you do if you personally view, experience, or even strongly suspect that your company has undertaken an activity or endorses behavior that is counter to the moral high ground, breaks a regulation (or two), or could even be illegal?

We asked multiple industry compliance experts and lawyers for their suggestions as to what the best course of action should be if you experience an ethical quagmire at work that you have not been involved in.

One thing is clear: There are often gray areas to consider and navigate through, and handling such sticky situations with a professional demeanor and without overreaction is critical.

“Determining where to draw the line and evaluating when to tattle can be a lifelong moral dilemma,” concedes Janaya P. Moscony, CFA, president of SEC Compliance Consultants of Philadelphia, Pennsylvania. In general, saying something when you see something tends to be a good idea. “However,” says Moscony, “the risk comes in when you don’t have all of the facts and you could harm yourself or another person.” She suggests gathering as much information as possible as a key first step and cautions that if you don’t have all of the facts, it’s wise not to jump to conclusions.

**SIZING IT UP**
Where you are seeing or sensing a breach, you likely need to make some early determinations.

“The most important thing is to be able to first determine what is an ethical issue versus something that you just do not like,” says Maureen O’Brien, owner and managing member of DynaMo Consulting, a regulatory compliance consulting firm in Hudson, New York. “You need to document the who, what, when, and where details whenever possible.”

Approaches taken can then vary based on the individual circumstance and type of infraction, as well as the severity of the situation or breach, according to experts. That includes whether clients or investors have been harmed by the suspected misconduct, which must be taken seriously. However, taking concise notes can prove critical.

“There is a potentially different approach that should be followed with suspicions of ethical or compliance breaches,” says Harvey Pitt, founder and CEO of Kalorama Partners and Kalorama Legal Systems of Washington, DC, and former chairman of the US Securities and Exchange Commission from 2001 through 2003. “The first two questions that the employee must answer are how well grounded are the suspicions and how serious is the potential breach? If the suspicions are not well grounded and/or the potential breach is not significant, that employee should make a written note to him/herself regarding the concerns and indicate that he or she will keep their eyes open to determine whether there is a basis for the problem and whether the potential problem seems significant.”
If you are working for a regulated entity, such as an investment management firm, there should be written policies, stipulations, and procedures to follow if you suspect an illegal or ethical breach has occurred. These are found in a firm’s compliance manual, which should be available to refer to.

But tread cautiously. “Don’t just assume, as it may or may not be an issue,” counsels Todd Cipperman, attorney and founding principal of Cipperman Compliance Services in Wayne, Pennsylvania. “Consider what to do before you light the place on fire. There may be lots of facts that, as an employee, you don’t know about.”

REPORTING LINES
If you suspect some type of a breach has taken place, there are a number of decisions to be made, including whether to report up the chain of command, seek the ear of a chief compliance officer, or go directly to a top executive.

“When an employee is confronted with a suspected breach, they will need to decide whether to alert their manager, compliance officer, and/or external regulator,” says Francine E. Love, founder and principal attorney with the Love Law Firm in Uniondale, New York. “Obviously, investment management firms prefer that the reporting is first internal to allow the firm the opportunity to review, remediate, and potentially self-report if necessary. It is easier for an employee to choose to report to a manager or compliance officer if there is a culture of compliance at the firm.”

Should you report your suspicion to your direct supervisor or take it to the chief compliance officer? Our experts had mixed suggestions.

“You can start by reporting the next level up, unless you believe that your superior is implicated,” says Ronald M. Feiman, attorney and partner with the New York–based law firm Kramer Levin Naftalis & Frankel. “It’s always OK to go to the firm’s chief compliance officer or a compliance staff member with whom you have a relationship. They can investigate and report on the issue without bringing you into the mix and will usually mask the names of sources.” Just remember that at small shops, executives may wear many hats, so the chief financial officer could also be the chief legal officer and will be closer to the top. But small firms often lack additional staff. Feiman recommends that for suspected violations of securities law, you contact the chief compliance officer or the CEO directly.

“Employees should always report breaches they have seen or experienced directly to the chief compliance officer, whether or not they report those breaches to their direct supervisor,” says Pitt. “The reason for this is that direct supervisors may either try to talk the employee out of what they have seen or may prove less than diligent in pursuing reports of actual breaches. Moreover, retribution can occur more readily if the direct supervisor is informed exclusively.” Employees should always inform their chief compliance officer, and if choosing to also report this to their direct supervisor, they should be sure that the supervisor knows that the issue has been elevated to the compliance person/staff. The exception to this rule is if you suspect your direct supervisor is involved in the breach, in which case you should reach out solely to the compliance officer.

TALKING COMPLIANCE
Even if you suspect that the top executive may in some way be implicated, it’s highly unusual to find that the chief compliance officer is also compromised, so reaching out to him or her is wise, according to Cipperman. He suggests that you put your concerns in writing—email is great—and that you very carefully word your communication to express your concerns and say that you saw something that may need to be looked at. Refrain from including direct accusations. “It’s best to report in a non-threatening way,” he says.

"THE FIRST TWO QUESTIONS THAT THE EMPLOYEE MUST ANSWER ARE HOW WELL GROUNDED ARE THE SUSPICIONS AND HOW SERIOUS IS THE POTENTIAL BREACH?" SAYS FORMER SEC CHAIRMAN HARVEY PITT.

Pitt agrees that written communications are a best practice for compliance matters. Even if you talk to your direct supervisor for guidance before making a formal report on the matter to compliance, “contemporaneous written records should be maintained [by the employee], including any follow-up.” Then, if you are formally reporting, be sure that all communications are “in writing or are at least confirmed in writing, and [they] should be labeled confidential. Oral communications without contemporaneous written confirmation or follow-up will leave the employee without the ability to demonstrate the initiation of a report or the concerns before any retributive actions were taken,” if such occurs, Pitt says.

Watch your tone, and choose your words thoughtfully. When you do report a possible breach or violation, you need to report it “dispassionately,” says O’Brien. “Do not go [into a reporting meeting] angry at someone or self-righteous. Be factual and be calm so that your concerns are listened to and taken seriously.”

Consider using a non-threatening approach to voice your concerns. “You can always approach a situation with a ‘what if’ scenario and not use the names” of people who may be involved, explains Moscony.

Employees are most effective when they begin with an open stance and inquire about what they are seeing under the presumption that there may very well be a reasonable explanation for what appears to be misconduct, suggests Ann Skeet, director of Leadership Ethics at the Markkula Center for Applied Ethics at Santa Clara University. “Sometimes, employees closer to the action can identify conflicts of interest and issues that
superiors may not see or recognize.” If reassurances can’t be convincingly provided, she recommends that employees refer back to the company’s mission statement or expressed set of values and inquire as to how the practice they’ve identified supports a specific value, such as transparency.

If you are reporting your suspicion to a compliance officer and also your manager, be certain to tell your manager that you are elevating or have already reported the matter to compliance on your own but want to make them aware of this, advises John Robbins, CFA, former chief compliance officer, Wealth and Institutional Services, at M&T Bank of Wilmington, Delaware. “You need to sound the alarm and to inform both.”

NEARLY ALL THE EXPERTS WE SPOKE TO SUGGESTED THAT IF YOU DO PROPERLY REPORT A SUSPECTED PROBLEM INTERNALLY AND ARE SUBSEQUENTLY FIRED—ESPECIALLY IF YOU BELIEVE YOUR EMPLOYER IS RETALIATING AGAINST YOU—YOUR BEST ACTION IS TO HIRE AN EMPLOYMENT LAWYER.

Also, be aware that compliance may have already heard about an issue you are bringing to them. “A compliance officer may say, ‘Thanks, we’re aware of it and we’ve already spoken to management,’ ” says Robbins. Employees need to be reasonably knowledgeable and sensitive and understand the distinction between minor infractions and more serious issues, such as illegal trading. If in doubt, “an employee can ask to refer back to a compliance manual and specifically refer to the company’s escalation policy,” says Robbins. One difficulty can be properly distinguishing one individual’s behavior from the company’s overall behavior.

“A company should encourage employees to report such concerns,” says Michael Volkov, CEO of the Volkov Law Group in Virginia. “The more avenues open for such reporting, the better.”

SHOULD I STAY OR SHOULD I GO?
If you have reported what you believe to be a significant breach or problematic activity, you must then decide whether to stay or leave the company. This is particularly important if management or the company fails to address significant identified infractions, elects to ignore or dismiss them, or excuses them away by responding “Everyone is doing this.” If a regulator should instigate an investigation, an employee can become embroiled in the matter and be seen as culpable.

“If you are in a supervisory or compliance position and you know something is a serious violation but your company refuses to do anything to stop it, I believe you have an obligation to ‘report and run,’” says O’Brien. This is especially true if you are responsible for handling the issue but are denied company resources to do so or if you are not sufficiently empowered to do your job. “Then it’s time to go,” she says.

“As hard as it is to say goodbye to steady employment,” adds O’Brien, “it is not good for you to stick around on a job where the environment is hostile to compliance and ethics.”

“Supervisors, principals, and chief compliance officers all have personal liability,” notes Moscony. “You can’t just continue to work where there are significant [unresolved] issues.” In addition, if regulators suspect fraud, they could loop you in if they believe you didn’t do anything to stop the activity.

Most concur that quitting is often a last resort but may be the right course of action. “I suggest that if you think the firm is not prepared to do the right thing, then you should be prepared to abandon ship,” says Feiman.

“It is always difficult to advise an employee to terminate his/her employment,” says Pitt. “Employees should not remain at a firm where they are being utilized or would become caught up in the facilitation of whatever improper breaches have occurred and are ongoing.”

There is always the option of elevating your concerns externally by contacting the appropriate regulator, such as the SEC, FINRA, or CFTC. However, there can be severe and longer-term career consequences to this approach that you must first carefully consider. Reporting problems to a regulator is an option that can be utilized “where there is fear of reprisal or the problems perceived appear systemic rather than one-off ethical/compliance breaches,” notes Pitt.

Nearly all the experts we spoke to suggested that if you do properly report a suspected problem internally and are subsequently fired—especially if you believe your employer is retaliating against you—your best action is to hire an employment lawyer. “They can help you determine if your termination was actionable enough to bring a case or claim,” says Feiman.

CULTURE CLUB
Assuming you have chosen to leave your employer or are still employed but very actively looking for a new gig, how can you assess the ethical culture at a prospective new employer?

When a prospective employer asks you why you’ve left the previous firm or are seeking to move, Feiman recommends being honest and testing the new waters. “Mention that you are seeking a new perch because you were not comfortable with the thoroughness of compliance at your previous/current firm, and then gauge the reaction,” he says. Is that met with shock and dismay or with open arms and approval? As you get closer to getting an offer, it’s OK to ask to speak to the new firm’s chief compliance officer. That conversation can provide insight into how the firm views ethics.

Don’t be afraid to ask pointed questions. “If you are taking on a personal liability with a potential new employer, you need to interview them as much as they need to interview you,” Moscony says. “Ask to talk to other employees, and ask to review regulatory correspondence,” which could show issues discovered during regulators’ compliance inspections or sanctions levied. Furthermore, if a company offers you a job, be...
certain the employment contract you sign doesn’t prohibit you from reporting a matter to the presiding regulator, she adds. It’s often difficult to truly assess a firm’s moral compass until you are working at the firm, Pitt acknowledges. But during a discussion with a potential employer’s chief compliance officer, remember to carefully assess not only answers to your questions but also his or her body language, which can provide definite clues. Pitt and other compliance professionals consulted for this article also recommend checking public regulatory enforcement violation records, which can show patterns of company violations. “The number, frequency, and seriousness of past transgressions are a [good] guide,” Pitt says.

Remember to ask hiring managers about the firm’s ethical culture, issue resolution practices, and what happens when problems arise, notes Robbins. Ask how the firm addressed the financial crisis of 2008–2009, and use the interview to probe. If those questions are held against you, that is a huge red flag.

Robbins also recommends tapping social media resources, such as LinkedIn, to connect with current and former employees and ask about a firm’s ethical culture and reputation. He suggests you do your own research and look at a firm’s Form ADV (available at www.adviserinfo.sec.gov) to determine whether there’s been a great deal of senior leadership turnover at a firm or whether company leaders have been there for 30 years and may be stuck in their ways. Either can be a red flag.

Further, cautions O’Brien, if at an interview you hear such answers as “we don’t mind getting into gray areas” or “there needs to be more flexibility in obeying the rules we don’t think apply to us” or “our compliance staff is good because they are more business friendly than other shops,” those clues may indicate a potential cultural problem.

Conventional wisdom dictates that a truly ethical and compliance-sensitive corporate culture most often starts at the top, with a company’s top executive. Experts suggest sniffing out the reputation of a top executive.

“It’s a truism that the ‘tone at the top’ is the single most important factor in creating an ethical culture in an investment management firm,” notes Love. “The senior executive and rest of the leadership team must consistently and convincingly insist on a culture of compliance.” Also keep in mind that complexity is not a friend to compliance. The more complicated a business is, the more likely ethical lapses will occur. “A company operating in multiple lines of business, across multiple jurisdictions, will have a more difficult time establishing and maintaining an ethical culture than a single-line business in only a few locations,” she adds.

“No single person creates culture, but a founder or CEO can certainly influence culture,” says Skeet. These top executives can help mold a positive and purposeful ethical culture. “If leadership in a company is committed to designing systems that promote ethical behavior, that’s a positive sign, as is any additional bandwidth they might have to contribute to industry-wide standards.” Moreover, she notes that smart leaders will invest the time to clarify culture when things go wrong. Skeet suggests watching for four ethical red flags: (1) Employees make disparaging remarks about colleagues in the interview process. (2) The company emphasizes perks and compensation. (3) An emphasis is placed on secrecy, as opposed to confidentiality. (4) References are made to poor or conflicting communication practices.

“[If you work for an organization that does not match with your culture, it can be soul crushing],” concedes Cipperman.

Lori Pizzani is an independent business and financial services journalist based in Brewster, New York.
Suppose a private client’s largest asset was illiquid and costly to maintain. Its long-term price performance was mediocre, and its value was subject to wide swings. You probably would recommend reducing exposure to this asset, either by hedging or sale, with a goal of increasing overall portfolio diversification.

For many older Americans, home equity represents that type of concentrated position. According to a 2017 study by Kaul and Goodman, the national aggregate value of primary residential equity in the US exceeds $11 trillion and homeowners age 65 and older have 40% of that equity value.

An ability to monetize home equity would benefit many retirees, particularly the less affluent. Kaul and Goodman note that “owner-occupied households age 65 and older could increase their incomes 45 percent among those in the lowest income group and 56 percent among those without high school diplomas.” Access to home equity would also benefit wealthier retirees. However, they add, “In contrast, those in the highest income group could increase their incomes 17 percent, and those with college degrees, 32 percent.”

METHODS FOR USING HOME EQUITY
Traditional methods for accessing equity, such as home equity lines of credit (HELOCs), home equity loans, and cash-out refinances require monthly repayment while the loan is outstanding. In contrast, a key benefit of reverse mortgages is that borrowers can delay repayment until the house is sold or when the second spouse dies. Homeowners age 62 and older can use reverse mortgages to convert home equity into a lump-sum payment, annuity payments, a line of credit, or a combination of these payout options.

The property must be the borrower’s primary residence, and the borrower must be able to pay for home maintenance, insurance, and property taxes. Most reverse mortgages are home equity conversion mortgages (HECMs) that are insured by the Federal Housing Administration (FHA) but originated by private lenders. Non-HECM, privately issued reverse mortgages make up a very small segment of the market. Prospective HECM borrowers must receive counseling from an approved counselor before the mortgage is approved.

FEW TAKERS (SO FAR)
Should the mortgage debt exceed the home’s value at sale, the FHA insurance makes up the difference so lenders don’t incur a loss. If the sales price exceeds the loan balance, the owner or heirs receive the remaining equity. It sounds like a good deal, but after reaching a peak of about 115,000 new HECMs in 2009 (fiscal year ending in September), the annual pace dropped to roughly 49,000 for 2016. That reduced activity doesn’t seem likely to increase soon: A Fannie Mae survey in early 2016 found that 90% of older homeowners were not interested in tapping into their home equity.

Several reasons could explain the reluctance. Establishing an HECM incurs significant upfront costs, even if the homeowner sets up a line of credit but does not use it immediately. HECMs also still suffer from negative publicity, with reports of indebted seniors facing the loss of their homes, frequently because of an inability to pay property taxes, insurance, or required maintenance. Kaul and Goodman cite longer careers and a desire to avoid debt in old age as other important considerations; viewing the home as a bequest for heirs is another factor.

SUPPORTING RESEARCH
Private wealth advisers have considered HECMs as too expensive and viewed them as the loan of last recourse. Some advisers’ negative views of HECMS changed during the stock market’s 2008–09 collapse, however. Retired clients whose income relied on distributions from portfolios managed for total return faced a difficult decision. Should they cut their spending in line with their portfolios’ negative returns or sell stocks at a loss to maintain distributions? A few advisers with whom I spoke at that time had clients set up HECM lines of credit as an
alternative solution. Instead of selling into a bear market, clients tapped their lines of credit (which didn’t require immediate repayment) and kept their portfolios intact. This approach paid off after the market rebounded. The costs incurred with the line of credit were relatively modest in comparison to the losses clients would have incurred by selling, and clients used subsequent capital gains to pay off their lines of credit.


Pfau identified multiple potential uses for HECMs. One is to pay off an existing mortgage or to purchase a new home. The second, which is where most research has focused, is to coordinate the reverse mortgage and investment portfolio to help manage sequence-of-returns risk. Another category is what Pfau calls “retirement efficiency improvements.” These actions require current payment for long-term benefits, such as delaying Social Security retirement benefits or paying the income taxes due from a Roth IRA conversion.

The final use is a longer-term strategy in which the borrower opens an HECM line of credit but doesn’t use it immediately. Maximum loan values on HECM lines of credit are tied to a formula that generates annual increases in the loan limit, regardless of the home’s market value. As a result, borrowers who set up their lines of credit at age 62 will be able to access more of their home equity at, say, age 75 than those who establish the credit line at age 75 in a similarly valued home. Those increases can provide additional funds for major later-life expenses, such as long-term care.

An HECM line of credit isn’t correlated with the home’s market value, says Jamie Hopkins, professor of retirement income at the American College. Unlike a traditional HELOC, where the credit amount is based on the house’s value at any given time, a reverse mortgage line of credit continues to grow, even if the house’s value falls below the line of credit’s maximum borrowing limit. Although it’s not the program’s intent, this structure creates downside protection for the homeowner. “Setting up a line of credit that’s not related to the housing value anymore, once it’s set up, really creates a new asset,” says Hopkins. “It’s like reallocating your assets between a line of credit and your house so you can better utilize those assets in a comprehensive planning portfolio and draw from that when it’s most impactful for the retiree, typically when markets are down.”

HECM lines of credit likely became less attractive, at least marginally, after 2 October 2017. On that date, Housing and Urban Development (HUD) raised the upfront premiums for HECMs to 2% of the home’s value (most borrowers paid 0.5% upfront before the change), although the annual fee on outstanding loan balances will drop from 1.25% to 0.5%. These changes will reduce the maximum loan amounts and slow growth rates for lines of credit maximum limits. Hopkins and Pfau believe the number of new HECM line of credit applications will fall, although they caution that they have just started analyzing the changes’ impact.

ADVISERS’ VIEWS

The research has increased advisers’ willingness to consider reverse mortgages, but there are still hurdles, says Hopkins. Some financial services firms prohibit affiliated advisers from discussing HECMs and their potential uses. The advisory business model’s emphasis on investable assets is another stumbling block. An adviser might agree that home equity is an important asset, but most advisers “don’t think about the home as part of the client’s asset pool and don’t think about the ways to effectively utilize that reverse mortgage, standby line of credit, downsizing, or the like,” says Hopkins. Still, HECMs’ complexity warrants the adviser’s analysis, he adds: “If we say it’s a complicated product with fees and somebody’s borrowing and there’s risk, of course I want the financial adviser involved.”

Christopher Cordaro, CFA, with RegentAtlantic in Morris-town, New Jersey, has discussed reverse mortgages with many clients, although only a few have applied for HECMs. But the conversation about potentially using home equity helps clients see how that equity could play a role in their retirement income plans. Once they understand that potential benefit, the next step is to determine how to best access home equity if it’s needed. The resulting analysis often leads to other products, such as traditional HELOCs, says Cordaro.

Marguerita Cheng, with Blue Ocean Global Wealth in Gaithersburg, Maryland, notes that most retirees want to age in place, but that doesn’t mean their current home is ideal for an aging resident. In those instances when the client might have to move in the near term, HECMs don’t make sense. In cases where the client is likely to remain in the home for the foreseeable future, a reverse mortgage can meet the client’s needs. Cheng cites her work with a widow who received Social Security and a pension benefit from her late husband. The client owned long-term care insurance, and her suburban Washington, DC, home had a senior-friendly rambler (ranch house) design that was worth roughly $400,000.

The client had opened a traditional HELOC for $75,000 and was carrying a $35,000 balance, but she wanted to add additional home improvements. Cheng recommended she replace the traditional line of credit with an HECM. The change eliminated the monthly payment and “gave her tremendous peace of mind,” says Cheng.

Pfau gives numerous presentations on HECMs, and in his experience, when advisers learn about reverse mortgages and see how a growing line of credit can work, they become much more receptive to the idea. Although the percentage of advisers working with the products is still low, he is optimistic that their interest in and their clients’ use of HECMs will grow.

Ed McCarthy is a freelance finance writer in Pascoag, Rhode Island.
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Leadership Lessons from History

By Jennifer Simpson

While many people try to foresee the potential for the next market crash or depression, looking back into history can provide lessons for us to draw on today. In particular, we can learn from how the finance industry and society were shifting in the late 1920s.

You may remember where you were in the fall of 2008 and how that year’s financial crisis affected you, your community, and your business. But the 1920s in the years before the market crash and the beginning of the Great Depression were a time when flying to travel overseas was not the norm and heavy hitters from Wall Street would give stock tips by granting interviews (reluctantly, so they claimed) to eager newspaper reporters on the deck of their ship just prior to setting sail.

In his classic historical account of the 1929 market crash Once in Golconda, author John Brooks weaves the tale of a period when the United States was moving away from free market capitalism toward government help in regulating financial industry activity. In the fall of 1927, markets were frothy (much like today, according to some observers). The US automobile industry was taking shape, and Charles Lindbergh had reached Paris with his airplane earlier that year. Similar to the way that advances in personal communication have changed our lives during the last 20 years, people then were beginning to fathom how life might be different with these new modes of transportation. Stocks were doing well, and public optimism deemed it the end of the boom and bust cycle. Three noteworthy characters from this period raise important questions for professionals in leadership positions today.

ALBERT WIGGIN: NEGATIVE INCENTIVES

Wiggin, head of Chase National, the securities affiliate of Chase National Bank, differed in temperament from natural-born salesman Mitchell. Wiggin was quiet but shrewd and opportunistic in his short selling of his own company’s stock, set up in accounts under dummy names for his benefit. This practice was legal at the time, possibly because nobody had ever thought someone would do it, and thus there was no need to set rules preventing it. In the crash, his company’s stock value also plummeted, making Wiggin a wealthy man. When he retired several years later, he was gifted a healthy pension.
Risk, Return, and Regulation

By Ralph Wanger, CFA

If your golf buddy gives you a stock tip and you decide to take a look at the company, one of the things that should be on your checklist is government regulation. There are lots of laws governing corporate activity. There are now government agencies regulating every company, and a lot of the regulations issued by a specific agency are only loosely related to some federal law. For instance, in the US, the Dodd–Frank Act was passed after the 2008 mortgage crisis. The law did not contain specific rules but authorized the SEC and Treasury to write rules on their own. The new banking rules are tough. Before Dodd–Frank, 100 or more banks were started up every year. Since Dodd–Frank, the rate has dropped to almost none. If new regulations are written and suddenly no one wants to enter an industry, how can the agency refuse to recognize its mistake?

The Affordable Care Act was set up so that private health insurance companies would administer the payment system. But the ACA ended conventional underwriting standards, such as not covering pre-existing illness, and established massive cross-subsidies, such as charging young people three times the true value of their insurance to offset the cost of insuring seniors. The consequence of these untested innovations has been causing unbearable losses for the insurance carriers, such as Aetna, Humana, and United Health, which are dropping out of the market. This has left millions of consumers scrambling to find a new carrier and has whacked the shareholders of the insurance companies.

A classic example of the government ripping off shareholders is the case of Fannie Mae. Fannie Mae was set up on a peculiar basis—a shareholder-owned company but with an unstated guarantee of their mortgages by the US Treasury. This arrangement worked pretty well from its founding during the New Deal until 2003, when Fannie Mae management was found cooking the books in order to increase their annual bonuses, as reported by Gretchen Morgenstern in the New York Times (“The Untouchable Profits of Fannie Mae and Freddie Mac,” 15 February 2014) That was only a temporary distraction, and the company returned to its business of financing a large percentage of the American mortgage market.

The banks were regulated by the Community Reinvestment Act (1977) to mandate increased lending to “red-lined” inner city neighborhoods. In March 2008, CRA Loans were in obvious distress. “The financial soundness of CRA-covered institutions decreases the better they conform to the CRA,” wrote M. Minton in his report “The Community Reinvestment Act’s Harmful Legacy” (Competitive Enterprise Institute, 20 March 2008). The head of the banking committees in the Senate and House of Representatives were Sen. Chris Dodd and Rep. Barney Frank, who were the primary sponsors of the Dodd–Frank Act. So, after the crash, the authors of the legislation that was supposed to rescue the system from the collapse of the subprime mortgages were the same two gentlemen who had congressional oversight of the disaster in the first place.

In 2008, millions of subprime mortgages were recognized as worthless. The Treasury had to pay up on its unstated backstop to the mortgage system, but rescuing Fannie Mae cost US$190 billion. Fannie Mae was placed under the care of a conservator, the Federal Housing Finance Agency. For about three years, the company was in terrible shape, but it eventually recovered. Today, Fannie Mae is making several hundred million dollars a year. With this happy development, you might expect that I will recount how steadfast management led the company through the crisis, paid off the bailout money that they had taken from the government, and made it a profitable and valuable company. That ain’t what happened. In 2010, the Treasury decided unilaterally to take all of the company’s profits forever. Since lots of investors had bought FNMA stock, hoping to profit by the dramatic turnaround in the mortgage market, they were irritated to discover that the government had permanently seized all the future profits of the company without telling anybody. Numerous lawsuits have been filed concerning this matter. How valuable could Fannie Mae be in five years? Well, in pre-crash 2006, the market value of its equity was $57 billion. (The Fannie Mae story is complex, disputed, litigious, and not for casual investors. If you are
interested, you must go beyond my brief summary. The current stock is trading like a call option on a lawsuit.

Government attacks are not confined to the US. A few months ago, EU authorities ordered Apple to pay $14 billion to the government of Ireland, arguing that Apple had gotten too good a tax deal from the Irish and their agreement should be cancelled. The Irish government (to its credit) told the EU that they had made the deal with Apple in a perfectly legitimate fashion and that they were not interested in reclaiming the money. More recently, the US government has brought an action against Deutsche Bank for manipulating interest rates, and by an amazing coincidence, the payout they are seeking is $14 billion.

The energy industry has always been deeply involved with regulation. The Texas Railroad Commission acted as a mini-OPEC starting in the 1930s to control production and pricing of oil, and OPEC is trying to do it for the entire world at the present time. Cartels don’t last forever, so any of us investing in the oil and gas industry will need to factor in political events that affect oil prices. In a different sector of the energy market, the EPA is trying to close the coal-fired electric utilities, which is controversial because it is not clear that the EPA legally has such sweeping power. While that is being decided, the EPA’s policy has not stopped such companies as Peabody Energy, a leading coal miner, from going bankrupt.

If you are interested in pharmaceutical and biotech stocks, I do not have to tell you that developments at the FDA can make or break one of your companies in a single announcement. The FDA has set up stringent policies that have screened out many drugs which might be harmful to some of the public and have screened out others that are ineffective, but they have not been concerned with a third class of drugs. These are the potential medicines that were never developed because the drug company did not want to risk the investment of hundreds of millions of dollars that would be instantly lost if the drug was not approved. There is no easy way to estimate the cost to society of not having an important drug that was just too financially risky to work on, but I suspect that millions of people have suffered or died because the potential drug never left the laboratory. On a more practical level, many of us have been seduced by the potential of some small company’s drug development only to see the young biotech company smashed by an adverse FDA ruling.

You cannot fight the government when it decides to attack a company you have stock in. In mid-2016, the Department of Education destroyed ITT, a for-profit college with 130 campuses, 8,000 employees, and 35,000 students. The school was forced to close just after the 2016 school year had started, doing real harm to the students and employees and great harm to the American taxpayers who are going to have to cover many billions of dollars in student loans that are now highly unlikely to be repaid. At no time was ITT taken to court and tried under legal due process. Again, the shareholders lost all their investment, while the students, faculty, and administrators lost their careers.

One of the economic mysteries of the last few years is that zero interest-rate policies and quantitative easing have made money cheap and plentiful but capital expenditures have remained stagnant. I believe that one factor explaining this economic peculiarity is that companies are reluctant to invest in long-term illiquid assets and bankers are reluctant to lend the money because of fear that a government agency will step in and destroy their hopes, just as the Department of Labor is disrupting the investment management and mutual fund business today.

Ralph Wanger, CFA, is a trustee emeritus of Columbia Acorn Trust.
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Rethinking Relevancy

By Robert W. Jenkins, FSIP

“Just three letters can make a real difference” as our brand campaign proclaims about the CFA designation. We believe it to be true. The CFA designation confirms that a body of knowledge has been mastered and that it is being applied with integrity. But is the knowledge relevant? Record CFA Program registrations suggest that it is. Will our coveted credential remain so? We are determined that it will. What steps might ensure this?

Let’s start with the exam. CFA Institute goes to great lengths to ensure that the curriculum covers both fundamental skills and those practices proven to be relevant to the investment profession. Changing the curriculum is a challenge. What would you add? What would you subtract? Beyond a certain point, you can’t do one without the other. Similar to managing a portfolio, to add something new you have to discard something old.

As this is the gold standard, caution is called for. Indeed, the exam eschews the latest fashions—until incontrovertibly established. The risk is that the curriculum may lag in pockets of market practice. The advantage is that it provides a solid grounding in skills that matter. Could it be improved? Of course. Is it broken and needs to be fixed? No. Will the knowledge gained at any particular point in time be relevant well into the future? Much of it will; some of it won’t. Is that a problem for the relevancy of the charter?

If the relevancy of the CFA designation is wholly and solely dependent upon the content of the exam, then the exam must somehow contrive to always be at the cutting edge of all relevant practices tried and true. It would also have to magically discern which of the many new investment approaches will stand the test of time. Now, assuming that this is even possible, the implication would be that charters earned today are relevant and those earned 10 years ago are not. How would that go over? We expect 13,900 charters will likely be earned this year. A grand total of 186,800 charters have been earned in the past. Is that the message we wish to send?

If the exam alone cannot guarantee the relevancy of the knowledge implicit in the charter, then what can? Clearly, a regular dose of ongoing education must play a part. How much, what type, and in what form is open for debate. And of course, the question of making it mandatory remains controversial in some quarters—surprisingly so in that most of our members would likely meet desirable minimums. Mandatory or not, being able to evidence such learning would reassure employers, clients, and regulators.

We want our members to be the best professionals they can be. And we want the world to know beyond doubt that they are. We are not alone in our thinking. “Continuous Professional Development” (or CPD) is a feature of most major professions. You might like the fact that your physician graduated from Harvard Medical School. But you wouldn’t let him touch you if he got his degree 30 years ago with little demonstrable learning since.

So where does that leave us? These three letters—“CFA”—make a difference today. They declare that you have passed a rigorous set of exams and that you serve your clients with integrity. To ensure that this moniker remains relevant in the future, we need a third leg to the stool. That third leg is a more vibrant and compelling offering of continuous education. This is not a “nice to have”; it is a strategic imperative.

So, what are we going to do about it? CFA Institute will elevate the importance of our CPD offering. We will devote more time, energy, and resources to the effort. The medium-term goal is to make CPD relevant, easily accessible, and even easier to record. We want to offer all members a useful, user-friendly experience that helps them enhance their professional career. Management is already on the case. Watch this space.

Robert W. Jenkins is chair of the CFA Institute Board of Governors.
MiFID II: A New Era for Investment Research

By Rhodri Preece, CFA

On 3 January, Europe’s MiFID II (Markets in Financial Instruments Directive) legislation comes into effect. MiFID II brings sweeping changes to Europe’s securities markets, with the objectives of delivering more price transparency, enhancing competition and market efficiency, reducing conflicts of interest, and strengthening the protection of investors. One of the most significant aspects for investment managers and brokers is the requirement to unbundle commissions for execution services from payment for investment research, bringing an end to the practice of “soft commissions.” Explicit payment for research is set to shake up the investment industry on both the buy side and sell side.

Under MiFID II, brokers will have to establish a price for investment research services and asset managers will have to draw up research budgets and either pass the cost on to clients via pre-agreed Research Payment Accounts (RPAs) or absorb the cost of research themselves (i.e., against the firm’s profit and loss). For the sell side, separating out research from execution services forces brokers to establish a price for research. But how much to charge depends in no small part on what value asset managers ascribe to research and thus how much they are prepared to pay service providers. Value (and therefore price) will vary according to the asset class being invested in and the type of investment strategy pursued.

Over the past year, brokers and other third-party providers have been providing pricing estimates for different types of research products, which have varied significantly depending on the asset class and level of service being offered. Initial estimates reported in the media for sell-side research have ranged from tens to hundreds of thousands of euros, illustrating the inherent complexity of establishing a price for a previously unpriced service. On the buy side, asset managers have been focusing on developing processes for building research budgets and weighing how to allocate the costs of research.

To help investment professionals and firms evaluate the state of the market for research, CFA Institute conducted a survey of its European members in September 2017. The survey sought to understand the expectations of buy-side professionals regarding pricing of research for different asset classes, whether firms expect to absorb research costs or charge clients, and other related issues. The survey was sent to investment professionals who are involved in using, producing, or procuring investment research, as well as to a sample of asset management firms. In total, 365 valid responses were received, spanning 330 firms and 28 different European countries.

Regarding the allocation of research costs, 53% of respondents indicated that they expect their firms to absorb the cost of research, compared with only 15% who expect their firms to charge clients for research. A further 12% of respondents expected a mixed attribution, and 21% were still unsure. These results corroborate the common perception that asset managers increasingly are opting to pay for research themselves, perhaps as a result of competitive pressure or because

**FIGURE 1**

Impact on Research Providers

<table>
<thead>
<tr>
<th>Research Provider</th>
<th>Source relatively less research</th>
<th>Source same amount of research</th>
<th>Source relatively more research</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment banks</td>
<td>78%</td>
<td>15%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Independent research providers</td>
<td>37%</td>
<td>33%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Other third party providers</td>
<td>34%</td>
<td>25%</td>
<td>8%</td>
<td>33%</td>
</tr>
<tr>
<td>In-house research (buy-side)</td>
<td>5%</td>
<td>43%</td>
<td>44%</td>
<td>8%</td>
</tr>
</tbody>
</table>

*Question: For each of the following research providers, select whether you expect to source more, less, or about the same amount of research under MiFID II compared to at present (364 respondents).*
doing so may be operationally simpler than establishing RPAs.

Significantly, the proportion of respondents expecting their firm to absorb the cost of research also increases with the respondent firm’s assets under management (AUM). Of respondents with AUM greater than €250 billion, 67% expected their firms to absorb the cost of research; in comparison, only 42% of respondents from firms with less than €1 billion under management expected their firms to absorb research costs. This indicates that larger firms are more willing (and able) to absorb research costs than smaller firms, suggesting a potential competitive disadvantage from the rules for smaller firms.

Survey respondents were also asked whether they intend to source relatively more or less research from different providers under MiFID II. Investment banks are expected to lose the most from the rules, with 78% of respondents expecting to source relatively less research from the sell side. The corollary is that investment management firms are likely to source more research in-house, as expressed by 44% of respondents (a plurality), illustrated in Figure 1.

Regarding the issue of how much to pay for investment research, survey respondents were asked how much they expect external investment research to cost their firms annually across different asset classes (expressed in basis points on AUM). Responses varied widely, highlighting the lack of industry consensus over what different research products should cost. The range of responses also underlined the inherent difficulty of valuing research, which depends on the strategy being pursued but also on a firm’s bargaining power. Pricing negotiations between asset management firms and research providers are ongoing, and industry convergence may emerge only after the implementation of MiFID.

At the aggregate level, the median value of the annual expected cost of equity research was 10 basis points, which equates to €1 million per annum on a notional €1 billion AUM. On average, survey respondents attributed 31% of this cost to analyst access (versus written research reports), although the proportion of the total research cost attributable to analyst access was higher for larger firms.

In comparison, the expected cost of fixed income, currencies, and commodities (FICC) research was lower than for equity research, with a median expected cost of 3.5 basis points, equating to €350,000 per annum on a notional AUM of €1 billion. Establishing a cost for fixed-income research is somewhat more challenging than for equity research because, unlike equities, no commission is charged by dealers for executing fixed-income trades; dealers are instead compensated by the bid–offer spread.

Consequently, it is harder to back-out an expected price for fixed-income research from existing execution costs than it is for equities. Significantly, survey respondents did not expect spreads to decrease as a result of dealers charging separately for fixed-income research, suggesting that investors believe aggregate (execution plus research) costs will rise for fixed income, as illustrated in Figure 2.

Finally, survey respondents were asked about their views on the likelihood of explicit payment for investment research being adopted in jurisdictions outside Europe. Responses were mixed, with 54% of respondents thinking that it is likely or very likely that other jurisdictions will abandon soft commissions and adopt explicit research payments and 46% thinking this outcome was unlikely or very unlikely.

Either way, MiFID II is likely to be felt outside of Europe, particularly in the case of investment firms with global clients. Recognising a conflict with existing US securities laws, the US Securities and Exchange Commission issued a series of “no-action” letters in October 2017 to permit US broker/dealers to provide separately paid-for research services for European clients—alongside existing soft dollar (bundled commission) arrangements for US clients—for a period of 30 months. The SEC announced it will study the effects of MiFID II and consider whether any permanent changes to its securities laws are appropriate. CFA Institute will be monitoring developments.

Rhodri Preece, CFA, is head, capital markets policy EMEA, at CFA Institute.
Seizing the Moment in India

By Nick Pollard

India’s economy—the fourth fastest growing in the world—is projected to grow 7.2% this year. In a country where economic liberalization has helped fuel growth for more than two decades, total GDP has reached more than US$2 trillion. Not only is India the world’s second most populous country, but it is Asia Pacific’s second fastest growing market for CFA Program candidates. As we usher in 2018 and our team in Mumbai embarks on its fourth year, the time is right to provide some context for operating in India and to highlight our top priorities in the coming three years.

The asset management industry in India is flourishing. Average assets under management have doubled over the past three years, surpassing US$350 billion in October. This growth comes from just 42 asset management companies and has been bolstered by regulatory efforts to increase participation amongst retail and high-net-worth individuals as well as investor education initiatives. Wealth management is an exciting and emerging segment. The number of ultra-high-net-worth individuals grew nearly fourfold between 2006 and 2016 and is expected to more than double by 2026, and the number of multi-millionaires (those with assets greater than US$10 million) is projected to grow by 2.5 times.

India is also a talent story. It boasts the world’s largest education system (with 5,500 business schools), has a well-known demographic dividend, and has a growing entrepreneurial ecosystem. India’s Centers of Excellence and large international banks, such as Goldman Sachs, hire a cadre of technically trained, well-educated, English-speaking engineers, PhDs, chartered accountants, biotechnologists, economists, statisticians, quantitative analysts, MBAs, and CFA charterholders in roles that are client facing and growing rapidly.

India is our second largest pool of CFA Program candidates in Asia, exceeding 23,000 in FY17, up nearly 20% year over year. The Indian candidate cohort is younger (51% of candidates are 25 years old or younger), and the share of women candidates has recently increased (23% for the June 2018 exam compared with 11% in the past three years). This demographic means we are producing a large, young pool of candidates without professional experience, with only one-fifth of candidates passing Level III and earning the CFA designation within one year of passing. Surveys reveal that students have a high level of confidence the CFA charter will bolster career prospects as well as earnings. And while the investment management industry is growing, it is still relatively small and CFA Program candidates compete with others holding both domestic and international qualifications.

In FY2017, the number of candidates increased 31% year over year. Senior-level CFA charterholders hold top posts as chief investment officers and heads of research, run large shared services operations, and regularly participate in conferences and roundtable discussions, with some serving as adjunct professors in addition to their day jobs. Member growth has been helped by an array of new initiatives, such as career/talent development events and continuing professional development delivered through CFA Society India. CFA Institute has reduced member pricing in several developing markets, including India, which helped reactivate lapsed members. Regional advertising and media relations have helped build our brand.

Our strategic priorities in India over the next three years fit into four pillars:

GROW AND RETAIN MEMBERS. We will localize and tailor candidate communications with an emphasis on setting realistic expectations of entry-level roles and compensation commensurate with those roles. We will also accelerate efforts that connect the accomplishment of passing all three CFA exams to a broader focus on professionalism.

INCREASE CONNECTIONS. India is our second largest market for Investment Foundations Program candidates, and lower product pricing has been key to broader adoption. We have made considerable progress improving engagement with key employers (including SBI Funds Management, State Street India, and Morningstar India, among others). University relations efforts emphasize building new and deepening current relationships as well as collaborating on research projects.

STRENGTHEN BRAND RECOGNITION. The “glocalized” brand campaign in India has two aims: (1) to shift perception of CFA Institute from being an “exam body” to being a “professional body for the investment management industry” and (2) to drive preference for CFA charterholders among employers. Media relations rounds out and augments all our efforts. For example, recent coverage on corporate governance was secured in Business India and The Economic Times.

EXPAND REGULATORY AND GOVERNMENT ENGAGEMENT. We are active with the Securities and Exchange Board of India (SEBI) and the National Institute of Securities Markets (NISM). We will continue efforts to secure waivers and program recognition and will soon evaluate opportunities to partner on investor education programming.

We believe there is no democratic emerging market more important or with greater scale than India. We have a tremendous opportunity to do more in a country that is receptive to all that CFA Institute can offer: capital market reform, investor literacy, and international best practices.

Nick Pollard is managing director for the Asia-Pacific region at CFA Institute.
Lessons from Africa

By Gary Baker, CFA

The fact that Africa is the “A” in EMEA can sometimes be overlooked because the challenges of Western Europe, Scandinavia, Russia, Central and Eastern Europe, and the Middle East monopolize attention and time. And so it was with considerable excitement that Paul Smith and I seized an opportunity to visit Africa to better understand how we might better support this frontier region, connect with our community of CFA Program candidates and charterholders, and help improve the quality of the local investment industry. We flew to Africa twice during the summer of 2017 to visit our member societies in East Africa and Nigeria, and we met with as many local leaders as possible.

We started our trip thinking that we were there to help. But what actually happened was quite unexpected.

“This was an extraordinary visit from many perspectives, but what struck me most was the notion that the developing world will lead the way for the developed world in the future,” said Smith, president and CEO of CFA Institute. “We do ourselves a disservice by underestimating just how vital improving countries like Nigeria, Kenya, Uganda, and Rwanda are. They are the future leaders.”

During our travel, every flight we took within Africa left and arrived on time, and we were treated with courtesy and charm throughout (a stark difference from the travel atmosphere in much of the developed world). Our accommodations were top-notch, infrastructure was reliable, and at no time did we feel threatened or unsafe. But certainly, the best thing about our visit was the people. As we traveled from Nigeria to Kenya and later to Uganda and Rwanda, a common thread among the people we met was their enthusiasm, ambition, and work ethic, accompanied by an extraordinary resilience and optimism in the face of many disappointments and challenges.

We met with members, CFA Program candidates, numerous government officials (including Acting President Prof. Yemi Osinbajo in Nigeria), regulatory agencies (such as the Securities and Exchange Commission and the Kenyan Ministry of Finance), central banks, pension regulators, university students, professors, and many others. Knowledge of and support for our mission ran deep among all those we had the privilege of meeting, a number of whom are CFA charterholders.

“This is a region with incredible potential,” Smith said. “The Nigeria and East Africa societies are the most innovative,
energetic, and well connected that I have come across. Our African colleagues are helping us blaze a trail in the region with members, candidates, the industry, and up to the highest levels of government. These visits have opened my eyes to many things, especially to the fact that we have much to learn from our African counterparts.”

THE VISION FOR AFRICA
The region is working to overcome a long history of economic and political struggle. Since the 1980s, many African countries have made significant improvements to their financial markets through stronger institutional regulations, increased central bank credibility, progress on corporate governance, and political commitment to economic change and job creation. Headwinds remain severe, however. When oil prices fell in 2014 and exports dropped, so too did government revenues, with financing requirements on the rise at a time when financial conditions were tightening. Policy and reforms are still struggling to catch up. Stable, long-term policies that are attractive to investors remain essential for growth.

At the same time, new technologies are replacing legacy systems in banking, telecommunications, and utilities. The African middle class is growing, and there have been large reductions in poverty. As in other parts of the world, citizens are skeptical of businesses that value short-term profits over long-term growth. Business models must evolve to deliver services that generate sustainability.

Much work is still needed to improve the region’s financial markets and create a better environment for investors, and CFA Institute is widely seen as an important ally in this endeavor. So, how will we meet this challenge in a market still considered immature for investors? CFA Institute currently has four societies in Africa: East Africa, Nigeria, South Africa, and Mauritius. South Africa has historically been the largest and fastest growing among the four. But membership and candidate growth in East Africa and Nigeria have surged in recent years, signaling greater interest in the CFA designation and offering the prospect of rising integrity within the capital markets in a region plagued by corruption and starved of economic growth for decades.

“In the last decade, the Nigerian investment industry has witnessed tremendous growth and now has some of Africa’s largest financial institutions and a rapidly growing pension industry,” said Banji Fehintola, CFA, president of CFA Society Nigeria. “As the markets have evolved, the importance of improving ethical standards, professionalism, and investment knowledge in the industry is no longer in doubt. The CFA designation is now seen as the gold standard for competence in the industry, and this has translated into strong candidate and membership growth in Nigeria.”

In East Africa, Patricia Kiwanuka, CFA, president of CFA Society East Africa, said, “It is impressive to see the growth in numbers of CFA charterholders from less than 40 a few years back to over 100, with almost 1,000 CFA Program candidates in the pipeline. Society membership now includes members from Uganda and Rwanda. We were pleased to see that not only is the CFA designation recognised as a global standard, but [it] also has garnered respect from captains of industry, regulators, and other government agencies.”

Our long-term vision for improving the investment community in Africa is twofold and similar to how we have approached other developing markets. First, we must work with regulatory agencies to increase their awareness of what CFA Institute and charterholders have to offer—specifically and most importantly, initiatives to improve the quality and integrity of the investment market infrastructure. Improving the investment industry can then have an immediate positive impact on Africa’s economies. Second, we must work with institutions on the supply side—such as employers and universities—to increase understanding about the difference the CFA Program curriculum and designation can make in the eyes...
of global investors by unlocking the true potential of human capital in the region.

**CHANGING THE TIDE**

One of the biggest challenges in the sub-Saharan economy is attracting international capital into the market—often a key contributor to economic growth and vitality. CFA Institute can play a role in changing the tide.

“The higher the quality and integrity of the investment community, the more likely it is that foreigners are going to invest,” said Smith. “In sub-Saharan Africa, there is a huge gap between the potential of the country and its ability to attract foreign money, and CFA Institute can really be the bridge between the two. The more charterholders in Africa, the higher the quality of investments here and the more interest foreigners will have in investing. This is because investment is about trust, and CFA charterholders are well trusted globally.”

One of the most critical ways to shore up the integrity of the African markets is by working with governmental and regulatory agencies to improve the quality of the investment market infrastructure. Our involvement in developing codes, upholding ethics and standards, and implementing global best practices can make a key contribution.

We are already working very closely with the organizations we met to entrench ethical values and standards in the business community and introduce initiatives to aid in the growth of the securities and capital markets. Our next mission is to raise the bar when it comes to human capital. Currently in East Africa, we have about 3,000 charterholders in a population of more than 96 million people. Compare that with Hong Kong, where we have 8,000 charterholders in a country of 7 million. We have a long way to go in Africa in terms of our charterholder base, and our strategy focuses on working with employers and universities to increase their understanding of the CFA designation’s value. Africans want to be on a level playing field with investment professionals throughout the world, and the CFA designation provides them with that opportunity.

“For universities, our goal is to help them understand why they should incorporate and teach the CFA Program curriculum,” said Smith. “For employers, the objective is educating them as to why they should employ CFA charterholders and the benefits charterholders bring to their business. Doing both will ensure there is a pool of highly skilled investment professionals working in adherence to the highest standards of ethics, education, and professional excellence, with clients at the center of it all.”

Equally important is improving access for candidates seeking to sit the exam. For too long, we have underinvested in exam centres within Africa but this is something we are changing, with new centres in Nigeria, Kenya, and Uganda planned for the next 12 months.

**BLAZING THE TRAIL**

Our time in Africa was truly eye-opening and, in many ways, life changing. For both Paul and myself, the trip was a salutary reminder of our organization’s potential to bring about change and simply to do good. Our society leaders Banji Fehintola of CFA Society Nigeria and Eleanor Cheptoo Kigen, CFA, president of CFA Society East Africa, at the time of our visit, are an excellent reflection of the population around them: energetic, enthusiastic, and incredibly ambitious. They are leading our local societies and volunteer boards to make an enormous impact in the region.

During the last year, both societies have presented Ethics Challenges and held inaugural investment conferences for their members. CFA Society East Africa also played a key role in facilitating a two-year memorandum of understanding (MoU) between the African Securities Exchanges Association (ASEA) and CFA Institute to extend our suite of educational offerings to ASEA member exchanges, regulators, brokerage firms, and other capital market stakeholders.

“This MoU is our first significant step towards beginning to invest more meaningfully in Africa,” Smith said. “By bringing our programs to the ASEA community, we hope to enable employees to train and capacity-build for Africa and contribute to the development of its financial markets.”

It is easy to get carried away by the enthusiasm we found in Africa. It is infectious. We returned from our trips transformed and enlightened. As we take inventory of our lessons learned, what stands out most is the leadership role the developing world will play for the developed world in the future. We at CFA Institute will do everything we can to support Africa on that journey.

Gary Baker, CFA, is managing director of EMEA at CFA Institute.
"Wouldn't Miss It for the World"

CFA EXAM GRADERS EXPLAIN THE IMPORTANCE OF GRADING

By Kate Rowinski

The dedicated CFA charterholders who make up the team of graders that gather in the Charlottesville area every summer to grade Level III exams share one special trait. Regardless of their differences in age, experience, and backgrounds, they all love what they do.

“I wouldn’t miss it for the world,” says David Stevens, CFA, of Minneapolis, Minnesota. As a measure of his dedication, he and his wife Hillary once packed their newborn son into the car to make the trip to Charlottesville. Baby Stevens arrived for his first grading session at just 10 days old, and 19 years later, he has been coming ever since. Stevens, currently a team leader, has been coming to Charlottesville for 24 years.

“I am not sure I had any expectation about what it would be like to be a grader, but I did feel some awe when I first got there,” says Stevens. “It was a little overwhelming.”

Describing himself as a humble Midwestern kid from a small college, he was a little unsure at first about fitting in. In the first year, he was assigned Level III exams. He would grade and then re-grade the essays, worried that he was being too tough or too easy on the candidates. Some essay answers might contain four or five pages of handwritten response, and David often felt like he was not making any progress. As a team leader, he now leads a group that makes those decisions.

“When you first arrive, you realize everyone is kind of like you—a little geeky, all knowing that we share the dedication that it took to get the charter and all wanting to continue to contribute to the process of growing and expanding ethical practices in our industry,” says Ryan McVicker, CFA, who travels from San Francisco every year for grading. He jokes about the fact that he started asking to become a grader even before he had earned his charter. “It just sounded like fun,” he explains.

McVicker now looks up to 90-year-old Bob Hardaway, CFA, who still comes every year to grade. “I really hope that I can be like that, still grading in my 80s,” he says.

McVicker shares his enthusiasm for grading with his wife, Anastasia McVicker, CFA. The two of them bonded over studying for the exam and have been grading together since they married. They are one of three couples who come to grade every year, part of the large family atmosphere that pervades the grading week.

For Kampoleak Pal, CFA, grading is also a family affair. He meets his brother Kanol Pal, CFA, who is also a grader, in Charlottesville every summer. But Pal says his primary reason for becoming a grader was to understand the process. “I wanted to know that the charter I received deserved the integrity and reputation behind it,” he explains.

Pal quickly realized that it was everything he thought it was and more. “My MBA gave me a broad range of knowledge,” he says. “The CFA charter gave me much more on the practice side, a solid background in real-world skills.” Now, even though his MBA is from the prestigious Wharton School of Business, it is his CFA designation that comes first on his resume.

“Grading completed the circle for me, in terms of knowing how the exam cycle works,” says Lee Smales, CFA, who travels from Perth, Australia, to grade exams. Grading ties in nicely with his work as an academic, allowing him to see what “best practice” really looks like. “The ability to come together with like-minded professionals to complete such an important task and to ensure the reliability of results is so rewarding,” he says.

Smales also points out a few of the perks of being an exam grader, such as the grazing stations that keep graders hydrated and energetic all day, as well as the after-hours events arranged to allow graders to unwind and get to know one another. “There are some fascinating stories among the graders and amazing tales you hear over beers at the end of the day,” he says. But Smales says his ultimate goal is to be in a grading role that allows him to wear one of the fancy (and garish) shirts worn only by the leaders.

Graders build their summer schedules around the exam cycle. For Santosh Pokharel, CFA, that means travelling from the Asia-Pacific region to Charlottesville. “I had heard about the grading experience from one of my graduate professors,” he says. “His description of the whole process and the idea of meeting other investment professionals from around the world appealed to me.”

Pokharel loves coming back to Charlottesville every year, particularly as a graduate of the University of Virginia. He has missed only one exam cycle, when his home country of Nepal suffered a major earthquake in 2015. Pokharel chose to spend that summer contributing to relief efforts there.

Between 600 and 700 graders come together each year to score 25,000 to 30,000 exams. Level III candidates should take great comfort in knowing that their work is being evaluated by a dedicated group who generously volunteer their combined wisdom, fairness, and enthusiasm to the grading process.

It turns out the graders benefit too, from the chance to come together once a year to share perspectives, learn from one another, and form lasting friendships with like-minded professionals. And that’s something to be enthusiastic about.

Kate Rowinski is marketing manager for credentialing at CFA Institute.
"To Remain Current and Relevant"
HOW CONTINUING EDUCATION HAS HELPED 3 CHARTERHOLDERS’ CAREERS

By Rhea Wessel

This year another round of CFA charterholders achieved 30 years of continuing education (CE). Elizabeth Miller, CFA; Kathryn Anischik, CFA; and Ken Levy, CFA, have achieved quite an accomplishment through long-term commitment to CE. According to them, it has been essential to their careers. In this article, they share their stories and explain why CE is so important.

"SO MUCH INFORMATION"
Elizabeth Miller was working on her MBA when one of her bosses said, “Go pursue your CFA charter now while you still know how to study and you’re still good at it.” She did, she earned the charter and Miller immediately began CE. “I’m a lifelong learner,” she says. “It was early in my career, and I knew I had a lot to learn.”

Today, 30 years down the road, Miller works with a group of colleagues on CE, turning occasional Friday afternoons into a collegial meeting of minds (and drinking of coffee). She is chief investment officer at the Kansas Public Employes Retirement System, which has an investment staff of nine. Among them, four hold the charter and two of the investment staff are working toward it. For about five years, the group has been doing what they call an “Offsite,” all reading the same article and discussing it at a café.

Miller’s advice about CE to others in the group is to focus. “There’s so much information, and it’s so dynamic,” she says. “It changes by the minute. It’s a bit like drinking from a firehose.” In addition, she points out, “You have to be selective about where you’re going to spend your time. It’s so worth spending the time. It’s essential to try to keep up with the changes in the investment industry.”

Miller is fond of webinars for CE, but she says, “I still really enjoy reading the Financial Analysts Journal. There’s something about sitting in a chair in a quiet room, spending time exploring ideas. That really resonates with me.”

During the “tech wreck” in 2001, it was very challenging to manage money for clients because everything you did made you look foolish, according to Miller. “The CE program provides a foundation of knowledge that is helpful no matter what the market environment is,” she says.

"SETTING THE RIGHT EXAMPLE"
Kathryn Anischik, CFA, who also completed 30 years of CE in 2017, began to study for her CFA charter directly after college because many of the professionals around her were charterholders. “There was no question. This was the thing you did,” says Anischik, who is senior vice president and portfolio manager at US Trust, Bank of America Private Wealth Management, in Hartford, Connecticut.

From the beginning of her career, there was an emphasis on the CFA Program and earning your charter in order to get to the next level of being a senior analyst or portfolio manager. Anischik served as the president of her local CFA society for two years and considered CE an important part of her agenda. “It’s important to set a good example.”

For Anischik, it’s impossible to max out on CE. “This business is so dynamic, and the market is changing so fast. There’s always something new or something else of interest. I’ve always been able to explore my interest and my experience. I’ve done some real estate investing and I’m very interested in women in investing, so these are things you can explore.”

"THE WORLD IS ALWAYS EVOLVING"
Ken Levy, CFA, also reached 30 years of CE this year. Back when he started studying for the CFA charter, he had recently come out of the doctoral program in finance at Wharton.

As a young quantitative researcher, he thought the CFA Program curriculum would be helpful in his career. “I was so impressed by the learning process that I offered to help out, and I was asked to serve on the curriculum committee, which I did for three years,” says Levy, who is co-chief investment officer and co-director of research at Jacobs Levy Equity Management in New Jersey.

Why did Levy stick with formal CE? Because he was making his own contributions to the body of knowledge and his own CE was a part of staying in the conversation.

Levy’s CE of choice includes the Financial Analysts Journal and other journals, conference proceedings, as well as summaries of academic and other industry publications. “The world is always evolving,” he says. It’s important to learn how to learn, to absorb new information because there is going to be an onslaught of it for the rest of your life.”

“I was doing all the things I was doing to earn the CE ‘checkmarks’ anyway. I wouldn’t dream of missing an issue of the FAJ,” he says. “For me, life is continuing education and that pertains professionally as well,” says Levy. “To remain current and relevant in any profession, you need to continually be learning.”

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The Professional Conduct team has historically focused solely on investigating misconduct cases. As an organization, we know the importance of an effective disciplinary process, but it is still tough to admit that one of our members actually violated our Code of Ethics and Standard of Professional Conduct (Code and Standards). It is for this very reason that Professional Conduct has worked in the past few years to improve our internal and external communications for the purpose of educating our members, candidates, regulators, and the investing public about the strength of the CFA Institute compliance program. As part of this communication outreach, Professional Conduct is keen to offer our knowledge, experience, and lessons learned to members and candidates, not only acting as the enforcement officer to protect the reputation of CFA charter as the professional gold standard but also serving as a compliance resource for members.

One of Professional Conduct’s objectives is to help members and candidates mitigate risks in ethically challenging situations. From our experience investigating many situations that involve professional ethics, we have found that three factors are critical for avoiding difficulties. To help you remember them, these tips can be summed up by a simple acronym—ART: A: Ask the right source. R: Restrictions: Pay attention. T: Take the proper steps.

1. **ASK THE RIGHT SOURCE.** One of the best mitigating actions is to ask the right person for a second opinion. Industry practitioners can encounter unfamiliar situations in which they are uncertain about whether a local law or firm policy governs their conduct. A recurring pattern in our investigations happens when people consult unreliable sources. Rather than asking for clarification from the firm’s legal or compliance department, a covered person (a subject of our investigation) often consults with a like-minded peer or co-worker who misinforms the covered person that he or she is free to act. As a result of seeking advice from someone without the correct information, the covered person makes the wrong choice. The compliance department of the covered person’s firm then hears about the behavior and questions the covered person about it. The covered person panics and, instead of admitting to a potential misstep, exacerbates the problem by misleading or lying to compliance personnel. Failing to ask for advice from the appropriate source can lead to a violation of law, firm policy, and/or the Code and Standards. Hiding or lying about one’s mistakes inevitably amplifies the problem and will almost always derail a covered person’s career.

2. **RESTRICTIONS: PAY ATTENTION.** Another lesson involves checking the restrictions—what is allowed and what is prohibited. After all, a lot of firm policies are designed to prohibit certain conduct to protect the firm, its clients, and employees. Nowhere are these prohibitions more evident than when a person transitions from one employer to another. Although changing firms is a normal feature of a covered person’s professional life, the process can be fraught with potential pitfalls if the individual fails to realize that Standard IV(A)—Loyalty governs, among other things, what work product the person may remove from her previous employer as well as the kinds of communications she may have with former clients about employment at the new firm.

Before you leave your employer, carefully read your employment agreement, company handbook, and Standard IV(A) to help ensure an incident-free transition to your new firm.

3. **TAKE THE PROPER STEPS.** Professionals in the financial services industry are committed to providing excellent and efficient client service with a minimum of inconvenience to the client. It often happens that in the rush to sign account-related documents, a client will neglect to sign or initial a page. Taking the proper steps in record-keeping and documenting transactions is essential. Unless a covered person receives written authorization from the client, which is also approved by the individual’s compliance or legal department, a covered person should never sign his or her client’s name on any account document, even if it inconveniences the client. Such conduct has been deemed to be forgery and a serious violation of Standard I(C)—Misrepresentation, even when the covered person acted with good intention in the client’s best interest and did not benefit from signing the client’s signature.

We have learned from our cases that many of the missteps by covered persons could have been prevented and the adverse consequences could have been mitigated by taking the right steps. Specifically, Professional Conduct aims to offer this guidance and assistance to CFA Institute members and candidates to help them recognize ethically challenging situations and choose the appropriate course of action.

It is our goal to position Professional Conduct as a resource, a reference, and an adviser. Enforcing the Code and Standards remains our primary responsibility, but helping our members and candidates avoid our investigative and disciplinary processes is equally important.

Contact us at Professional_Conduct@cfainstitute.org with any questions. Learn more about Professional Conduct at www.cfainstitute.org/ethics/conduct.

Eddie Chan, CFA, CIPM, is director of Professional Conduct at CFA Institute for the Asia-Pacific region. Julia McDonough is a senior investigator for Professional Conduct at CFA Institute.
Supporting Professional Ethics

CFA INSTITUTE PROVIDES TOOLS TO HELP MEMBERS AVOID ETHICAL PITFALLS

By Lori Pizzani

For CFA Institute members, striving to uphold the CFA Institute Code of Ethics and Standards of Professional Conduct often can be a complex task. In addition to professional ethical standards, each investment management firm has its own individual compliance manual and employment guidelines. Knowing the challenges faced by members, CFA Institute provides resources to help make the right ethical decisions.

PROFESSIONAL STANDARDS

The updated Standards of Practice Handbook (effective as of 1 July 2014) is intended to help investment professionals “translate” genuine, everyday ethical dilemmas into real-life practice. It provides guidance to members as to what situations may cause a breach of the Code of Ethics or Standards of Practice and why. It also discusses how to avoid breaches.

Although the handbook cannot address every ethically sticky situation, it does cover many of them, and it discusses emerging issues (such as how to handle social media dilemmas) with guidance and suggestions. “The Code and Standards are intended to be long-lived while still relevant to current industry practices,” says Glenn Doggett, CFA, director of professional standards at CFA Institute. “Elements of the principles stay the same even where some roles or new technology emerge.” He adds that the basic tenets of “loyalty, prudence, and care cover all of our members.”

The “Ethical Decision-Making Framework” offers practical guidelines in navigating ethical situations. Also available is an online learning course and a live webinar, both of which qualify for continuing education credits. (All of the “Framework” guidelines are available online at cfainstitute.org.)

ETHICS HELPDESK

CFA Institute maintains an email-based ethics helpdesk that members can contact for more personalized guidance. “Through this helpdesk, members can learn what’s expected of them vis-à-vis following CFA Institute’s ethical standards. But we cannot give out legal advice,” Doggett says. Questions are generally broad, and inquiries often pertain to handling conflicts of interest and maintaining objectivity. Other common inquiries are about appropriate use of the CFA charterholder designation and how to engage in the “dissociation” process when an investment professional sees greatly concerning workplace behavior. “Dissociating means not knowingly participating in illegal or unethical behavior,” he explains.

Doggett encourages investment professionals with concerns about workplace misconduct to first have a conversation with a direct supervisor: “It’s best to always try to solve the problem at the point of contact,” he says. If that doesn’t work or if suspected misconduct caused client harm, then you should go up a level to a higher supervisor or compliance officer who will investigate. The CFA Institute ethics helpdesk can be a valuable resource. “We can help them ask the right questions,” he explains.

“Conversations and communication are the key to all of this,” says Doggett. Just because actions appear troublesome may not mean there is a true ethical breach. “You may not be aware of certain disclosures that others have provided,” he cautions.

However, if you’ve exhausted your options, you may have to make the hard decision between your personal reputation and your career. Separating from the firm altogether should be considered.

PROFESSIONAL CONDUCT

As a self-regulating professional organization, CFA Institute sets the policies for professional conduct and is responsible for the disciplinary process when a question arises about a member possibly having breached the Code of Ethics or Standards of Professional Conduct. “We’re a part of the enforcement side, alongside the Disciplinary Review Committee,” says Leilani Hall, CFA, head of professional conduct at CFA Institute. Her department investigates potential violations and uses a “sanction matrix” to help determine the recommended sanction. The matrix considers both mitigating and aggravating factors, including whether a breach was unintentional or intentional, whether it affected unsophisticated investors or particularly vulnerable ones, and whether it caused considerable harm to investors.

A transition from one firm to another can raise particular concerns. If someone works for a large firm with a robust compliance program, astute compliance officers, and broad resources to prevent ethical blunders—and then moves to a small, two- or three-person company lacking that network of extensive resources, adjustments need to be made. “Many people don’t even know when they’re in the midst of an ethical dilemma,” says Hall. “Our tools are out there to help our members mitigate the risks of breaches and show them how not to make a fatal mistake that can ruin their careers.”

Lori Pizzani is an independent business and financial services journalist based in Brewster, New York.
REVOCATIONS
Effective 3 August 2017, CFA Institute imposed a Revocation of membership and of the right to use the CFA designation on Spyridon G. “Sam” Adondakis (New York, New York), a lapsed charterholder member. This sanction was based on the determination that Adondakis violated the CFA Institute Code of Ethics and Standards of Professional Conduct: I(C)—Misrepresentation; I(D)—Misconduct; II(A)—Material Nonpublic Information; and IV(A)—Loyalty (2005).

In January 2012, the U.S. Attorney’s Office for the Southern District of New York announced the unsealing of a guilty plea by Adondakis, a research analyst at the hedge fund Level Global Investors, to felony criminal charges that he conspired with others to engage in insider trading. According to the government, Adondakis participated in a scheme with fund managers and research analysts at five different investment firms to share material, nonpublic information about two publicly traded technology companies. Based on his guilty plea, Professional Conduct imposed a Summary Suspension automatically suspending Adondakis’ membership and right to use the CFA designation. Adondakis did not request a review and the Summary Suspension automatically became a revocation in March 2012.

In January 2017, Adondakis requested that the revocation be rescinded and provided documents showing that the criminal charges filed against him by the U.S. Attorney’s Office had been dismissed. The dismissal resulted from a decision issued by the U.S. Court of Appeals for the Second Circuit in a related case, which found that the transactions that were the basis for the entry of judgment against Adondakis and others did not constitute illegal insider trading. The U.S. Supreme Court subsequently denied the government’s petition for review of that decision.

In accordance with Rule 10.6 of the Rules of Procedure, Adondakis’ revocation was rescinded and a Notice of Rescission was published in CFA Institute Magazine and on the Institute’s public website. Professional Conduct then reopened its investigation into the underlying conduct and determined that Adondakis had intentionally and repeatedly used material, nonpublic information to assist Global Level in the trading of securities and made false statements to cover up his misconduct in violation of the Code and Standards.

In May 2017, Professional Conduct issued a Statement of Charges to Adondakis seeking a revocation of his membership and right to use the CFA designation. He failed to respond, so the matter was presented to a Review Panel, which accepted Professional Conduct’s conclusions as to violations and imposed the recommended sanction of a revocation.

Effective 22 June 2017, CFA Institute imposed a Revocation of membership and of the right to use the CFA designation on John R. Erb (Steamboat Springs, Colorado), a charterholder member. This sanction was based on a hearing panel’s determination that at various times from 1992 until 2011, Erb violated the CFA Institute Code of Ethics and Standards of Professional Conduct prohibiting misrepresentation, misconduct, violation of fiduciary duty, and failure to know and comply with the law.

During the relevant period, Erb operated a one-person advisory firm called De Teffé Capital Management in Alexandria, Virginia. From 1992 to 2010, he and his firm acted as both trustee and investment advisor to two irrevocable trusts established for a wealthy family. In 2010, the family became concerned about Erb’s conduct, and after they consulted an attorney, he was asked to resign.

Erb then sued the successor trustees for allegedly unpaid deferred trustee and investment advisor fees of more than $1.4 million. The successor trustees then countersued Erb for $17 million, alleging breach of contract, breach of fiduciary duty, and fraud. After the successor trustees’ counterclaims against him had been pending for four months, Erb filed a Professional Conduct Statement with CFA Institute in which he did not disclose the litigation and misrepresented that he was not the subject of any litigation concerning his professional conduct.

After a six-day trial, a jury concluded that Erb had no valid claim for unpaid deferred fees and agreed with the successor trustees that he had violated his contract, breached his fiduciary duties, and defrauded the trusts. As a result, the jury awarded them $3 million in compensatory damages and $10 million in punitive damages. The judge later disallowed the award of punitive damages and reduced the amount of the compensatory damages to $1.5 million. The Virginia Supreme Court subsequently considered and denied Erb’s appeal.

The CFA Institute hearing panel found that Erb failed to register himself and De Teffé as investment advisors as required by Virginia law, thus avoiding any regulatory review or supervision of his actions as an investment advisor; intentionally chose not to file state trust tax returns as required by law because doing so would cause the trusts to pay taxes; intentionally caused the filing of false federal income tax returns by deducting from trust income investment advisor and trustee fees that were never paid, thus avoiding the payment of taxes; billed the grantors and trusts for outside legal and accounting expenses in amounts that greatly exceeded the actual charges incurred; and filed a Professional Conduct Statement that failed to disclose the litigation and misrepresented that he was not.

SUMMARY SUSPENSIONS
On 3 August 2017, CFA Institute imposed a Summary Suspension on Jason Alan Katz (Estero, Florida), a lapsed charterholder member, automatically suspending his right to reactivate his membership and use the CFA designation. Because he did not request a review, the summary suspension became a Revocation on 1 September 2017.
On 19 December 2016, Katz, a former trader at Standard Bank, Barclays PLC, BNP Paribas and Australia & New Zealand Banking Group Ltd. pleaded guilty to felony criminal charges related to violations of Section One of the Sherman Antitrust Act in the United States Court for the Southern District of New York. The charges stemmed from Katz’s involvement in an alleged conspiracy to suppress and eliminate competition by fixing prices for Central and Eastern European, Middle Eastern, and African emerging market currencies from January 2007 until July 2013.

On 2 August 2017, CFA Institute imposed a Summary Suspension on Richard Boomgaardt (Sevenoaks, England), a charterholder member, automatically suspending his membership and right to use the CFA designation. Because he did not request a review, the summary suspension became a Revocation on 31 August 2017.

On 12 July 2017, Boomgaardt, a former managing director and head of the Transition Management Desk for Europe, the Middle East, and Africa for State Street Corp., pleaded guilty to felony criminal charges in the United States Court for the District of Massachusetts. The charges were related to Boomgaardt’s involvement in allegedly fraudulent transition management fees that were levied on various institutional investors between February 2010 and September 2011. Prosecutors claimed that Boomgaardt and two co-conspirators engaged in a scheme to defraud the bank’s transition management clients by applying hidden commissions to securities trades made on behalf of the clients.

On 20 January 2017, CFA Institute imposed a Summary Suspension on Jiawei Yeo (Singapore), a lapsed charterholder member, automatically suspending his right to use the CFA designation. A Hearing Panel affirmed the Summary Suspension, which then automatically became a Revocation on 29 June 2017.

On 21 December 2016, Yeo, a former wealth planner at Swiss bank BSI SA, was found guilty of four charges of witness tampering in the State Courts of the Republic of Singapore in connection with an investigation of money laundering involving billions of dollars allegedly misappropriated from a Malaysian state fund—1Malaysia Development Berhad (1MDB). Prosecutors claimed that Yeo attempted to tamper with witnesses to hide his illicit wealth and downplay his ties with a Malaysian financier.

Specifically, while released on bail, Yeo met with two associates and urged them to “stick to the story” and lie to the police when interviewed about the ownership of certain investments. In another instance, Yeo reportedly told an associate to dispose of his laptop and not to travel to Singapore so as to avoid being interviewed by the authorities.

As a result of his conviction, Yeo was sentenced to 30 months in prison. Several additional criminal charges against Yeo involving money laundering are pending.

**TIMED SUSPENSIONS**

Effective 10 July 2017, CFA Institute imposed a Two-Year Suspension of membership and of the right to use the CFA designation on Barry M. Sine (New York, New York), a charterholder member. A Hearing Panel found that Sine violated the CFA Institute Code of Ethics and Standards of Professional Conduct: I(B)—Independence and Objectivity; I(C)—Misrepresentation; and I(D)—Misconduct (2010). An Appeal Panel reviewed and affirmed that decision but reduced the term of suspension from three years to two.

The Hearing Panel found that while serving as Secretary of the New York Society of Securities Analysts (NYSSA) Board of Directors, Sine participated in an internal investigation; received confidential information, documents, and investigative reports; and attended and participated in confidential meetings, discussions, deliberations, and voting regarding allegations against a fellow Board member and an officer of NYSSA without ever disclosing that he was married to the complaining party. And when specifically asked at a Board meeting, Sine denied having any relationship with the complaining party or other conflicts of interest regarding the matter under review.

Both the Board’s internal investigation and a separate, independent investigation by an outside party commissioned by NYSSA concluded that the allegations against the Board member and officer were unfounded.

**RESIGNATIONS**

Effective 7 September 2017, Nicholas Attila Vardy (London, England), a lapsed charterholder member, Permanently Resigned his membership in CFA Institute and right to use the CFA designation during a disciplinary proceeding.

During the period 2014 to 2017, Vardy provided investment analysis and recommendations for investors through several newsletters and trading services that were owned, marketed, and sold by a financial publishing company, with which he had a relationship as an independent contractor. Professional Conduct had alleged that Vardy failed to dissociate or separate from the publishing company even though he knew or clearly should have known that it made and was continuing to make dishonest, false, inaccurate, and/or misleading statements and omissions in promoting, marketing, and selling his investment newsletters/trading services to investors. These alleged misrepresentations were pervasive and included claims, recommendations, assurances, and predictions of specific future returns on recommended investments.

The materials used by the publishing company to promote, market, and sell Vardy’s investment newsletters/trading services claimed that investors who subscribed could achieve huge profits based on the investments he would recommend. The materials also suggested that similar returns would be replicated and realized by subscribers, often within a matter of only a few weeks or months. Professional Conduct alleged that Vardy’s continued association with the publishing company making such misrepresentations and omissions constituted participation or assistance in such unethical conduct, as explained in the 2014 Standards of Practice Handbook (at pages 15, 19, and 20–21).