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“The course was nothing short of excellent. Lionel Martellini did a great job of presenting complex concepts in an understandable fashion. I also learned a great deal that I can apply in my responsibilities to significantly improve our risk management processes. It was an invaluable experience that I would recommend to any asset manager with liability matching responsibilities.

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Vice President, Pension Investments, NAV CANADA, Canada
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Anwiti Bahuguna
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Lionel Martellini is a wizard in translating technical aspects of quantitative finance into a very intuitive and interactive dialogue. I have already recommended this seminar to my colleagues!

James Kwon, CFA
Senior Associate, CPP Investment Board, Canada
Past participant



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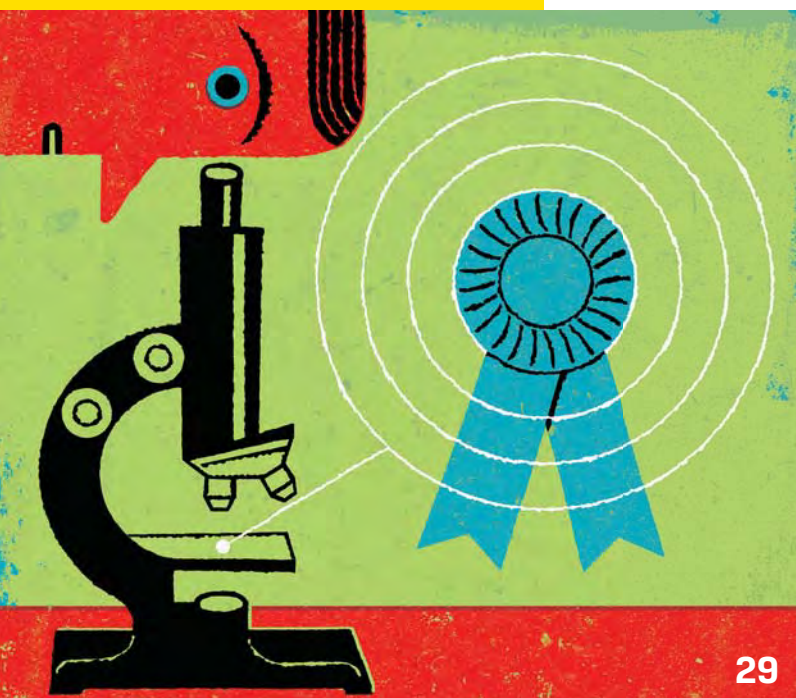
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REALISING OUR POTENTIAL: INVESTING FOR SUSTAINABLE GROWTH

Under the patronage of His Majesty King Abdullah II of Jordan, the 5th Annual CFA Institute Middle East Investment Conference will bring together industry thought leaders to consider the central theme of "Realising our Potential: Investing for Sustainable Growth".

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Editor and Publisher *The Gloom, Boom & Doom Report*



Amre Moussa

Former Secretary-General of the League of Arab States



Raghida Dergham

Founder and Executive Chairman, Beirut Institute
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James Rickards

Senior Managing Director, Tangent Capital Partners LLC
Author of *Currency Wars: The Making of the Next Global Crisis*

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The Stupid Truth

"In order to attain to perfection, one must begin by failing to understand much."—Fyodor Dostoevsky, *The Idiot* (translated by Eva Martin)

When the “idiot” of Dostoevsky’s title appears mysteriously at the home of the Epanchin family, they initially take him for a pauper on account of his shabby appearance. The young man turns out to be a distant relation who, after spending most of his life abroad being treated for epilepsy, has returned to Russia to claim his inheritance as a “prince,” the last of his family line.

But Prince Muishkin is something even more extraordinary: an honest soul. His lack of guile makes him almost incomprehensible to the members of a society that is a simmering stew of vanity, duplicity, insincerity, intrigue, greed, covetousness, resentment, and envy. “It is a well-known fact that only stupid people tell the truth,” as one remarks. Although Muishkin’s naive purity leads people to dismiss him as a fool or simpleton, they quickly find themselves drawing him to their bosom and confiding in him. A kind of “deep-value investor,” the prince can discover a facet of grace in even the roughest, most unpolished character. His generosity and forgiveness extend even to those who would abuse him. When he inherits his family estate, he satisfies virtually all of the creditors who file claims even though half of them are fraudulent.

“He does this sort of thing out of pure innocence,” observes General Epanchin. “It’s a little dangerous to encourage this sort of freedom.” The general may be more right than he knows. Challenging conventions can be disruptive and disorienting. As Edouard Senechal, CFA, writes, “Conventions derive their value from the fact that market participants are familiar with their limitations and advantages” (“Using Symmetrical Fees to Reduce Tail Risk,” 13). To borrow a different example from financial markets, although credit-rating agencies have been much maligned since the global financial crisis, one of their functions is providing familiar conventions, “which give a common language for all investors looking at credit risk” (“Evaluating the Evaluators,” 21).

Dostoevsky may have had something similar in mind when he wrote, “A certain limitation of mind seems to be an indispensable asset, if not to all public personages, at least to all serious financiers.” The passage describes General Epanchin himself, “a very good fellow” who had risen through the ranks of the military, married into the aristocracy, and established lucrative business ties “with certain government monopolies” and “rich public companies.” He has mastered the limitations and advantages of society’s conventions. To someone like the general, a naive idealist like the prince ought to be a marginal figure, but then again, “for investors, it is usually the marginal change that matters most,” according to Nitin Mehta, CFA (“The Trouble with Nigeria,” 8).

The marginal changes set in motion by the prince prove to be crucial for the general, his family, and an array of other characters. Muishkin operates from a belief that “compassion is the chief law of human existence.” Yet the prince lacks judgment and discernment. Mercy without justice seems incomprehensible, or in the words of Mrs. Epanchin, “A fool with a heart and no brains is just as unhappy as a fool with a brain and no heart.” As with investing in stocks, trying to distinguish between the intrinsic value of authentic “quality” and the mere appearance of value is an exercise fraught with uncertainty (“Quality Control,” 29). Moreover, even the most noble ideal or elegant model of reality will only be as good in practice as its implementation (“Agile, Nimble, and Error Free,” 18).

Implementation is hard and requires prudence. Such practical considerations are lost on Muishkin. “You will not easily find heaven on earth, and yet you seem to expect to,” a government clerk warns him. From a cynical point of view, the prince can afford to be generous, as the same clerk points out: “But, excellency, if you knew, if you only had the least idea, how difficult it is to get money nowadays!” Converted into monetary terms, the prince seems to be dealing in the moral equivalent of virtual currency, which defies conventional wisdom (“Bit by Bit,” 34).

Prince Muishkin’s story has its climax in a “huge, fantastical, absurd, unpardonable mistake.” The conclusion is perplexing. Should the reader admire the sensible people in the story, most of whom aspire to “die full of honour and riches, though they have never done anything great,” or the noble-hearted prince, whose goodwill and simplicity culminate in tragedy? The choice may be a false one. Consider the contrast between headline-grabbing scandals involving, say, financiers convicted of insider trading and the quiet impact of outreach efforts by local CFA Institute societies to help disabled veterans or to provide mentorship programs (CFA Institute News, 10 and 11). As James G. Jones, CFA, explains in a different context, “Although most of the benefits of unethical behavioral are immediate, ethical behavior bestows its benefits over a longer time horizon” (“The Value of Sharing Ethical Wisdom,” 6). If the “benefits” of integrity often appear intangible or even incomprehensible, it doesn’t make them any less real. Measured in terms of material success, the prince may look like a misguided simpleton. Dostoevsky, however, proposes a different scale of measurement: “How impossible it is to follow up the effects of any isolated good deed one may do, in all its influences and subtle workings upon the heart.”

Roger Mitchell, Managing Editor (roger.mitchell@cfa-institute.org)

The Value of Sharing Ethical Wisdom

By James G. Jones, CFA

The conviction of Rajat Gupta in June 2012 for securities fraud and conspiracy resulting from charges of insider trading marked the end of a tragic fall from grace. The former CEO of consulting firm McKinsey and Company as well as a former board member of Goldman Sachs, American Airlines, and Procter & Gamble and a noted philanthropist, Gupta later stated during sentencing, “I regret terribly the impact of this matter on my family, my friends and the institutions that are dear to me. I have lost my reputation I built for a lifetime. The verdict was devastating.”

Gupta had committed the error most common to decisions that end in great regret and pain. At the time of deciding, he did not understand the ultimate cost of his poor decision.

It goes without saying that if we could somehow foresee ultimate outcomes, we would make better decisions and have fewer regrets. As a society, we recognize this truth and have sought to communicate with clarity the costs of certain poor decisions whose consequences extend beyond the individual to other members of society. The establishment of criminal laws and sentencing guidelines serves to define and communicate both the unacceptable behavior and the personal costs of a conviction. Civil law and government regulations serve similar purposes. In our profession, the CFA Institute Code of Ethics and Standards of Professional Conduct define proper and improper behavior for CFA Institute members and impose penalties for misconduct, ranging from private censure to revocation of the CFA charter.

Most people would agree that laws, regulations, and codes of ethics are important pillars in society that inform us what ethical behavior looks like and which behaviors, by the nature of the severity of their associated penalty, are most egregious. Yet, even with these constructs, unethical behavior persists. However, I submit that these institutional systems have two major shortcomings. First, they do not shed light on the natural progression of unethical behavior, and second, they cannot effectively communicate the *benefits* of ethical conduct to the individual. Both of these shortcomings contribute to significant errors in estimating the expected costs and benefits of ethical behavior.

The worst ethical lapses that make the headlines are rarely the initial ethical lapse of the individual. Such ethical journeys typically begin years prior with a seemingly minor ethical misstep. By failing to address the strong tendency of ethical misconduct to progress over time in its depth and severity, the current system of laws, regulations, and codes of ethics—with their focus on the costs of individual actions—do not properly inform people of the likely long-term effects of a seemingly small ethical lapse.

Suppose a minor ethical dilemma comes before an

individual. If he estimates the costs and benefits based only on the costs of this single action, he is most likely significantly underestimating the total costs. Rather, a more enlightened individual, who is aware of the natural progression of unethical behavior, will compare the estimated benefits to a much larger cost based on a hypothetical future unethical act that would have a much more severe penalty.

A significant improvement in ethical decision making could be achieved if individuals understood the principle of progression in unethical actions and began upwardly adjusting the estimated cost of unethical behavior.

Laws, regulations, and codes of ethics by their very nature define only the direct negative consequences of unethical behaviors. The benefits of ethical conduct, often undefined and implied, are typically framed in terms of benefits to society or the avoidance of punishment.

Although most of the benefits of unethical behavior are immediate, ethical behavior bestows its benefits over a longer time horizon.

The first benefit of ethical behavior is a clear conscience. Because unethical behavior is behavior that injures another individual or society for personal gain, a rare individual would not recognize or have some empathy for those injured. The lingering guilt can slowly rot the soul. Even for those individuals who can dismiss or push feelings of guilt or empathy away, the lack of a clear conscience requires hard work. Unethical actions must be kept hidden, far from the light of day. False histories must be constructed, lies must be told, and the truth must never be discussed. One must always be on guard. Careless talk cannot be tolerated.

The ethical individual can live the carefree life, having no fear of the truth. History is an open book, freely discussed without worry. There is no fear of being “found out” for there is nothing to find. Note that having a clear conscience does not imply that regrettable mistakes were not made, but even though honest mistakes may have consequences, such mistakes are not moral failures.

A different benefit of ethical behavior is the acquisition of a reputation for integrity and honesty. Although a good reputation takes a long time to develop, the benefits are substantial. The trust of clients and the respect of peers enhance your personal brand, which creates new opportunities and increases personal satisfaction and joy. Clients are more likely to refer colleagues and friends to a professional with a sterling reputation. People are more willing to partner and engage with such a person, and the individual has a greater sense of worth and purpose.

Since the benefits of a clear conscience and a sterling reputation do not reveal themselves in the short term and are hard to quantify, it is highly likely that individuals will

substantially underestimate their benefits, resulting in more unethical behavior.

Who has witnessed the principle of progression within unethical behavior? Who has experienced the benefits of a clear conscience and a sterling reputation? Not unexpectedly, research shows that ethical decision making improves with age and experience. Therefore, seasoned and experienced investment professionals have a special role to play. It is their responsibility to inform those new to the profession of the true costs of unethical behavior and the benefits of ethical behavior.

How can we communicate these truths effectively? I believe the answer may come from our childhood. As children, our parents and caretakers wanted to teach us virtues. They knew the development of a virtuous life would benefit us as well as society, but their methods were curious. If they wanted to teach us the importance of honesty, they didn't just say, "Tell the truth, or you will get punished." Instead, they told us the story "The Boy Who Cried Wolf." They used "The Tortoise and the Hare" to teach the importance of perseverance, and "Beauty and the Beast" highlighted the virtues of compassion and loving the unlovable.

They knew something about the human condition. Stories stick with us. Propositional statements and rules are often forgotten or dismissed over time. A story resonates and settles deeper within us.

Can the power of stories be harnessed to help people become more ethical? I believe it can. Those of us who have

been in the investment profession for an extended period of time have stories to share. Some stories are born of our own experiences. Others are gathered from the observation of other people's experiences. It falls to us to bring our Code of Ethics to life by sharing these stories with others in our industry, especially those new to the profession who are most likely to misestimate future costs and benefits.

We must tell stories of those whose unethical actions may have succeeded for a season but, like the actions of Rajat Gupta, eventually led to great pain and hurt. We must help them understand the great satisfaction and joy that eventually come from a great reputation built over many years of honorable and ethical work. We must help them become better decision makers by giving them better information.

So, for those of us who have been in the investment profession for a long time, I have this admonition: Tell your story. Educate. We must not overlook this important responsibility of an investment professional. We must help the inexperienced better estimate future costs and benefits. To those who are inexperienced, I ask you to listen and consider our stories. Trust our call to pursue a higher ethical calling—for the ultimate benefit of society and you.

James G. Jones, CFA, is the founder and managing member of Sterling Investment Advisors in Bolivar, Missouri, and a member of the CFA Institute Board of Governors.

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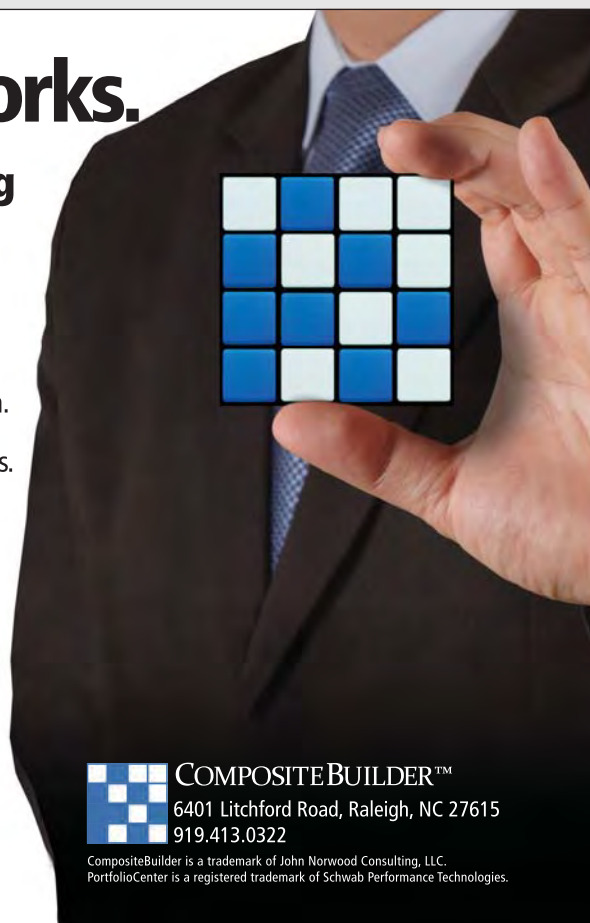
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The Trouble with Nigeria



By Nitin Mehta, CFA

“The trouble with Nigeria is simply and squarely a failure of leadership.” This quote is the opening salvo in a damning essay, titled “The Trouble with Nigeria,” written 30 years ago by Chinua Achebe, Nigeria’s best-known novelist and critic. Achebe pointed to venal politicians, tribalism, social injustice, a culture of mediocrity, and widespread indiscipline which “cripple our chances of becoming a modern country.” Above all, he cited the “problem of rampant corruption which threatens to paralyse this country in every sinew and every limb.” I recently re-read that essay when Achebe passed away, in part to remind myself of his righteous voice but also in preparation for my trip to South and West Africa and ultimately to Lagos to celebrate the inauguration of the new CFA Society Nigeria. Having been born on the great African continent, I well knew that the troubles which afflicted Nigeria applied to much of Africa, so I wanted to gauge the progress made over the past three decades.

Unfortunately, many of the problems mentioned by Achebe still persist today. For example, a decade ago, Nigeria signed on to the standards for transparency and accountability set by the Extractive Industries Transparency Initiative (EITI), aiming to curtail corruption in its oil and gas industry. Yet, its central bank recently alleged that \$50 billion of oil revenues from the state oil company over the past 18 months was not remitted to the treasury. In the latest report by the African Progress Panel, Kofi Annan noted that the continent lost more from illegal outflows than it received from aid and foreign direct investment.

But for investors, it is usually the marginal change that matters most. And that has been heading in a positive direction for some time. During my recent visit, the most palpable difference I discerned was a mood of optimism about the future. A new economic vigour was clearly evident: Heavily laden lorries and shiny new cars clogged the roads, new towers of glass punctured the skies above city centres, and more foreigners were lodging at the leading hotels. Back in 2000, the *Economist* magazine had a cover titled “Africa: The Hopeless Continent”; a decade later, the cover changed to “Africa Rising.” During this period, symbolising the new ascendancy, Aliko Dangote, a cement tycoon in Nigeria, replaced Oprah Winfrey as the richest black person in the world.

Not surprisingly, global investors are rushing to learn more about Africa. Last year, a CFA Institute Travelling Conference with a focus on the continent was sold out in Italy. At the CFA Institute European Investment Conference

in November 2013, in response to popular demand, three speakers described the investment landscape and the growing number of exciting opportunities in Africa. One of the speakers, Tendai Musikavanhu, CFA, opined that fear about investing in Africa is imposing an enormous opportunity cost on investors.

Given the many positive changes, what about Achebe’s claim of a “failure of leadership”? The death of Nelson Mandela was a reminder that Africa does not lack great leaders. The recent financial crisis provided yet more examples. In response to a severe banking crisis in 2008, Sanusi Lamido Sanusi, the governor of the Central Bank of Nigeria, took decisive action that led to structural reforms, the removal of executive management at several banks, and the instilling of greater discipline in management and oversight of

DURING MY RECENT VISIT TO LAGOS, I WAS EQUALLY IMPRESSED BY THE LEADERSHIP OF THE NEW CFA SOCIETY NIGERIA. THEIR COMMITMENT TO ESTABLISHING THE INVESTMENT PROFESSION IN THEIR COUNTRY IS INSPIRING.

the financial sector. Given the success of these bold steps, Sanusi was recognized as Central Bank Governor of the Year Worldwide for 2011 by the *Banker* magazine. When he spoke at a plenary session of the 67th CFA Institute Annual Conference in Edinburgh, Scotland, Sanusi received a warm standing ovation for his courageous leadership.

During my recent visit to Lagos, I was equally impressed by the leadership of the new CFA Society Nigeria. Their commitment to establishing the investment profession in their country is inspiring. More than a thousand candidates for the CFA Program aspire to join them.

As Nigeria celebrates the centenary year marking the country’s birth, there is much room for optimism. Achebe pointed to it, saying, “Nigeria is a nation favoured by Providence. The vast human and material wealth with which she is endowed bestows on her a role in Africa and the world which no-one else can assume or fulfill.”

Nitin Mehta, CFA, is Managing Director of Europe, Middle East, and Africa (EMEA) at CFA Institute.

Charting a Course for Global Engagement



By Charles J. Yang, CFA

"The challenges presented by being global are as daunting as the opportunities are exciting." – Board of Governors Planning Committee Chair Frédéric P. Lebel, CFA

As chair of the Board of Governors, I often chat with my fellow governors, particularly with those colleagues who have different perspectives than I, to update and educate myself on the background and

history of CFA Institute. The collective "board memory," if you will, often suffers because members serve three-year terms, which is why these discussions are so important and informative. During a recent discussion at a board meeting with Vice Chair Aaron Low, CFA, I remembered that six years had passed since the governors last asked this thought-provoking question: What does it mean to be global?

At the time, the board was less diverse than it is today, and as my discussion with Low continued, we realized how much has changed in recent years. Today, we have the benefit of professionals serving on the board from the United Arab Emirates, Canada, Japan, India, Switzerland, China, the United Kingdom, and the United States.

This diversity is leading us to a more global focus and perspective, and we recognize the importance of not only having a global presence but also being more globally relevant. Concrete examples can be found in the growing numbers of staff in our offices in Brussels, Hong Kong, and London, as well as a new global operating model and the evolution of the China/India strategic project that was launched in 2013. Our Brussels office opened in 2009 and grew by two employees this year. Also in 2013, we added 7 staff to our Hong Kong office and 16 to our London office. In total, our organization hired 52 new staff to move our global efforts forward.

Governor Low expertly summed up these efforts: "The global rethink is not just a reflection of economic market gravitation toward a multipolar world but a clear mandate from changes in our growth drivers, with examples like the Asia-Pacific region engulfing a significant share of our candidate base."

To meet the needs of our members, candidates, member societies, and other stakeholders, we are implementing a global operating model that shifts the organization toward consistent, integrated operations. Governor Beth Hamilton-Keen, CFA, has stressed the importance of staying relevant to our members and candidates by working to understand country and regional perspectives. We move toward this goal by continuing to invest in and build our regional capabilities. For example, a cross-functional Americas Engagement

THIS DIVERSITY IS LEADING US TO A MORE GLOBAL FOCUS AND PERSPECTIVE, AND WE RECOGNIZE THE IMPORTANCE OF NOT ONLY HAVING A GLOBAL PRESENCE BUT ALSO BEING MORE GLOBALLY RELEVANT.

Team has been formed with representatives from relevant parts of the organization, and an Americas region operating platform is now in the implementation phase. The Americas, our largest region, comprises 78,500 members and 86 member societies.

In the words of Hamilton-Keen, "We consider the global operating model to be a thoughtful, balanced approach—a global view with a regional perspective. The diversity of the staff, the board, and volunteers across the organization are important tools in understanding that balance of perspective and in implementing strategy."

The China/India project continues to show positive progress. Candidate and member growth, the need to raise awareness of our mission and values, and the size and impact of China and India in the global economy are the driving forces behind our China/India expansion plans. The project team met in Hong Kong in November 2013 to finalize country-specific operating plans that include clear priorities, necessary capabilities, appropriate legal structure, and resources required. The organization's goal is to establish operations in both countries in 2014. The board will review final plans in Beijing at the Board of Governors meeting in March.

Guiding all of these efforts as we chart a course toward the future is the CFA Institute strategic plan. President and CEO John Rogers, CFA, often reminds us during board discussions of the following: "Our strategy directs us to embrace a broader mission, a bolder voice for ethics, and engagement with a bigger community." Our globalization efforts are an active, positive step in this direction. It's a step toward being more globally relevant by having a more global presence as the future of finance evolves.

Charles J. Yang, CFA, is chair of the CFA Institute Board of Governors and chief investment officer at T&D Asset Management in Tokyo.

Employer and Community Outreach in Action

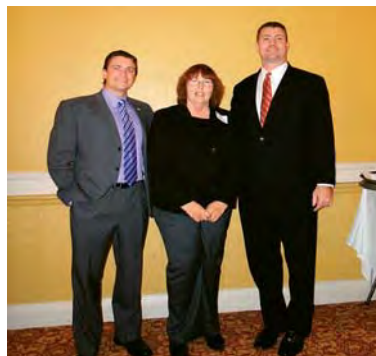
By Michele Armentrout

Eight local member societies—CFA Society San Francisco, CFA Society Los Angeles, CFA Society Washington, DC, CFA Tampa Bay, CFA Society Dallas/Fort Worth, Atlanta Society of Finance and Investment Professionals, CFA Society Minnesota, and CFA Society Philadelphia—have stepped forward to make a difference in the lives of disabled veterans eager to embark on a career in the financial services profession. With support from CFA Institute, the societies have hosted a series of informative events to educate society members on how they can help veterans reenter society and pursue investment management careers.

Disabled veterans in the United States face an unemployment rate of 41%, which is more than five times the national unemployment rate. They also face further obstacles with civilian hiring managers who may not fully understand how relevant military experiences can apply within the private sector. To address these issues, the eight societies have hosted speakers from the Wall Street Warfighters Foundation to discuss their transitions to the financial sector. The society executive directors—Maren Amdal in San Francisco, Laura Carney in Los Angeles, Leigh Talbot in Washington, Christine Brown in Tampa, Emily Van Zant in Dallas, Cathy Ford in Atlanta, Mark Salter in Minnesota, and Peter Connors in Philadelphia—have enthusiastically embraced these events and seen them gain momentum with other societies in the past few years.

The Warfighters Foundation provides a six-month training program to identify, develop, and place disabled veterans in careers in the financial services industry. It has received strong support from CFA Institute via CFA Program scholarships. Michael McMillan, CFA, director of Ethics and Professional Standards at CFA Institute, has also provided support to the program by traveling to the foundation's office in Philadelphia to conduct ethics training. "Hiring veterans and giving them an opportunity to succeed in the investment industry is for the ultimate benefit of society, and as charterholders, giving back to society is something we should aspire to," he said.

At the Los Angeles and San Francisco society events, US Navy Lt. Cauldon Quinn (retired) discussed his experiences in Afghanistan in the months immediately following 9/11. He shared statistics on the unemployment epidemic facing disabled veterans and described how the Wall Street Warfighters program, from which he graduated, works. Attendees must have at minimum a 30% disability rating and be committed to a career in finance. They receive classroom training and résumé writing and interviewing instruction and are outfitted with their new uniform—a suit from Brooks Brothers. They also take part in mini-internships at several major investment banks and asset-management firms in



At the CFA Society Los Angeles luncheon event, CFA Institute Presidents Council chair Marla Harkness, CFA, is joined by graduates of the Wall Street Warfighters Foundation training program, retired US Army Captain Eric Eberth (left) and retired US Navy Lt. Cauldon Quinn (right).

Longbow helicopter, but was subsequently injured in an improvised explosive device (IED) attack. Upon returning home, he was able to complete the Warfighters training program, and he now works as a municipal finance investment banker.

Mark Harbour, CFA, a veteran and president of CFA Society Los Angeles, appreciates the strong character and leadership qualities that veterans bring to the boardroom. "I have observed firsthand unique military experiences that enhance the perspective and ability of many veterans, which can make them unusually valuable leaders to the organizations they eventually join," Harbour said. In fact, CFA Society Los Angeles now offers its online CFA prep program to all active-duty military and disabled veterans for free.

Marla Harkness, CFA, chair of the CFA Institute Presidents Council, also attended the Los Angeles event and noted how well the program's objectives dovetailed with CFA Institute's vision. "An event like this aligns beautifully with the employer outreach, community outreach, and job placement goals of many of CFA Institute's member societies. Speaking out boldly for disabled veteran hiring, perhaps in conjunction with other local organizations, is likely to substantially raise the CFA society's visibility in the local business community," she said.

Managing Director of Equity Research at Drexel Hamilton, Barry M. Sine, CMT, CFA, whose firm has hired a large number of veterans from the program, said he often suggests CFA Institute's new Claritas Investment Certificate to veterans seeking to enter the investment profession. "Claritas offers veterans, as well as others, a respected initial achievement from the highly respected CFA Institute to add to their résumé."

Additional CFA Institute member societies are in the process of planning their own veterans outreach events. For more information on the Wall Street Warfighters Foundation, go to www.wallstreetwarfighters.org.

New York City, Boston, and Philadelphia. The organization boasts a 100% placement rate.

Lt. Quinn also shared the stories of several veterans who have graduated from the program, including Eric Eberth (pictured in photo). A veteran of the Air Force, Marines, and Army, Eberth achieved his dream of becoming a pilot, flying the Apache

Longbow helicopter, but was subsequently injured in an improvised explosive device (IED) attack. Upon returning home, he was able to complete the Warfighters training program, and he now works as a municipal finance investment banker.

Sharing Professional Knowledge and Experience

LOCAL SOCIETY MENTORSHIP PROGRAMS ENHANCE MEMBER VALUE

By Michele Armentrout

Mentorship programs in particular have taken hold as a way to recruit members, enhance networking opportunities, and offer societies around the world a direct link to local investment professionals by matching mentors with protégés in their cities or regions.

CFA Society Minnesota started a mentor program in 2009, which has been proven to be an excellent connection tool and valuable member benefit. “All of our regular and special events are open to members and nonmembers, but the mentor program is one of just a few Minnesota offerings available only to society members,” says Josh Howard, CFA, the society’s vice president and member chair. “It’s an incentive for Level III candidates to join the local society before they receive their charters.”

Melissa Wedel, CFA, a member of CFA Society San Francisco (CFASF), volunteered to establish that society’s mentor program in July 2013. “I identified both with people who would benefit from a mentor and people whose colleagues sought guidance from them as a mentor,” she said. With the support of society executive director Maren Amdal and society president Marc Lieberman, CFA, Wedel used data collected from an assessment survey of membership needs, which indicated that younger and mid-level career members were seeking mentors and some of the more experienced members were interested in sharing their knowledge with others. Currently, 16 professionals—matched by industry specification—are in the program and have been meeting for about six months.

An engaging element of the San Francisco program is the heavy focus the society places on training. Jim Keene, CFA, of Atherton Consulting Group and past president of CFASF, was hired to develop a training session for the mentorship program. “As a professional, we have a responsibility to share our intellectual

knowledge and experience with others who are newer to the business, and the San Francisco society’s mentoring initiative accomplishes this,” Keene says. “The mentor training program emphasizes the importance of chemistry, emotional intelligence, and using an accountability structure to set and reach challenging goals. The emphasis is on developing long-term relationships based on giving and trust.”

Friendships and connections have been the most rewarding part of being a mentor for Bill E. Dove, CFA. A portfolio manager at Abbot Downing in Minneapolis, he has been a CFA Society Minnesota member for 10 years and an active member of the mentor program for the past 4 years. “The



Bill E. Dove, CFA

mentor program and local society took my career to the next level, and I wanted to help do that for others,” he says. Dove not only is a society board member but also co-leads the mentorship program with Howard.

One challenge with this type of program is tracking its success, according to Wedel of CFASF. “We’ve asked all of our protégés to define specific goals and outcomes they want to achieve by the end of

the year,” she says. Committee members remain engaged with the protégé and mentor volunteers to see what progress is being made and how they can help.

“One of the biggest successes so far is having support at every level for this program,” says Wedel.

As a member of the CFA Society Minnesota’s board of directors, Jessica Murray, CFA, has been a mentor for about four years and a society member for the past decade. “I am motivated to be a mentor because I remember how intimidating it was starting out in this industry and specifically taking the CFA exams, and I wanted to help others find their career path,” she says.

Kelly Colotla, CFA, and Casey Keller, CFA, manage the mentor program for CFA Society San Antonio. Their team of volunteers received a lot of guidance and resources from another CFA Institute member society, CFA Society Dallas/Fort Worth. “It isn’t necessary to reinvent the wheel because there are people in other societies who have created a mentor program successfully that you can model, so use what’s out there and reach out personally to your mentors and protégés,” Colotla says.

Chris Battifarano, CFA, oversees the mentor program at CFA Society South Florida and is a strong proponent of reaching out to younger members. “The mentoring initiative is a value incentive to become a society member, and it makes the society a more worthwhile endeavor overall for both younger members and seasoned professionals who are seeking leadership roles and practice,” he says.

As Amdal sums it up, “That’s the value of a society—the local connection to professionals in your area and in your industry who can help you succeed in your career.”

Michele Armentrout is a communications specialist at CFA Institute and assistant editor for *CFA Institute Magazine*.



Jessica Murray, CFA



Jim Keene, CFA

IN MEMORIAM

Anthony "Tony" Cope, CFA, of Marion, Massachusetts and Scottsdale, Arizona, died on 8 November. A member of CFA Institute since receiving his charter in 1970, Tony was actively engaged in advocacy efforts and served on CFA Institute's Corporate Disclosure Policy Council (CDPC) until just recently.

Tony's contributions to CFA Institute's advocacy efforts date back to well before the publication in 1993 of the seminal piece on investor-focused financial reporting, *Financial Reporting in the 1990s and Beyond*, to which he contributed. His volunteerism extended beyond financial reporting to other areas of CFA Institute, including creating and chairing an SEC Liaison Committee and serving on the editorial boards of the *Financial Analysts Journal* and *CFA Digest*. In 1992, Tony received the CFA Institute Alfred C. Morley Distinguished Service Award for his dedication and commitment to the organization.

Tony was born in the United Kingdom and educated at Cambridge University. He spent much of his career as an investment analyst and partner at Wellington



Management in Boston. In retirement, Tony's expertise in the area of investments and financial reporting resulted in his selection and service as a member of the US Financial Accounting Standards Board (FASB) from 1993 to 2001, when he was asked to join the International Accounting Standards Board (IASB) as one of its founding members, returning to the United Kingdom from 2001 to 2007.

Management in Boston.

In retirement, Tony's expertise in the area of investments and financial reporting resulted in his selection and service

Gerry White, CFA, the immediate past Chair of the CDPC, remembers Tony's passion for advocacy. "Tony was a highly effective advocate for investors over many decades, both as a volunteer within CFA Institute and as a member of the FASB and IASB. He combined perceptive intelligence, strong analytic abilities, and excellent interpersonal skills," White said.

Vice Chairman of the IASB, Ian Mackintosh recalls the impact that Tony had on accounting standard setting. "Tony was one of the founding members of the IASB and made a huge contribution to the quality of financial reporting worldwide. More than that, he was a lovely guy and he will be missed deeply by his many friends and colleagues in the standard-setting community," Mackintosh added.

There will be a celebration of his life at the Kittansett Club in Marion, Massachusetts, on 10 May 2014.

ETHICS & EXCELLENCE

Introducing



DREXEL HAMILTON

a Service-Disabled Veteran Owned and Operated Investment Bank

We stand at the intersection of an ethical mandate & a commitment to excellence.

Over the last twelve years, nearly two times the historical average of service members have returned with a disability. A study by the Cornell ILR School in 2012 found that of those disabled persons, 41% were unable to procure employment. Tragically, those members who have sacrificed so much are finding themselves excluded from the dream of prosperity through hard work and sacrifice. Drexel Hamilton is stalwart, standing in defiance of indifference and committed to the restoration of those people who have given so much.

Drexel's creed is that no disabled person should be viewed as a charity; instead,

they should be viewed as a highly sought after commodity. Our plan has been to prove this thesis statement by partnering a disabled person working alongside an industry professional to deliver premier financial services to institutions. Today, one quarter of our staff are service-disabled individuals, embarking on new careers in finance.

In our short history, Drexel has developed a reputation for excellence in Equities, Capital Markets, Credit and Tax-Exempt Debt. We have developed a comprehensive Corporate Access Platform and begun to establish ourselves as a leader of thought in Equity Research.

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Using Symmetrical Fees to Reduce Tail Risk

By Edouard Senechal, CFA

Many of the ethical problems revealed by the global financial crisis of 2008 originated in the misalignment of incentives between financial professionals and their clients. Bankers were incentivized to package loans into securities they could resell without suffering from the consequences of non-performing loans. Concurrently, some investment managers responded to similar incentives and took risks in order to magnify their performance fees without exposure to the downside risk that their clients would later experience. (See “You Get What You Pay For, and Sometimes More: A Cautionary Note for Investors” by Brian D. Singer, CFA [www.williamblairdas.com/investor_resources/content/white_papers.fs], for a discussion of investment manager incentives.)

One could argue that the problem with defining a fair performance fee structure is that investment managers cannot fully participate in the downside risk and still operate their business in a sustainable manner. Full participation in the performance downside implies not only that the performance fee can become negative but also that the performance fee may exceed the management fee and result in negative aggregate revenue. By definition, investment managers do not have the capital necessary to take on such investment risk.

Full participation of the investment manager in the fund performance may not be in the best interest of the client if it puts the investment manager's business at risk. The failure and ultimate liquidation of an investment management company creates risks for the client, and most institutional investors will carefully avoid such a situation. Therefore, the current typical performance fee structure that gives investment managers an option-like payoff seems a reasonable compromise. Investment managers suffer no net losses if their funds underperform and participate if the funds have positive performance. This

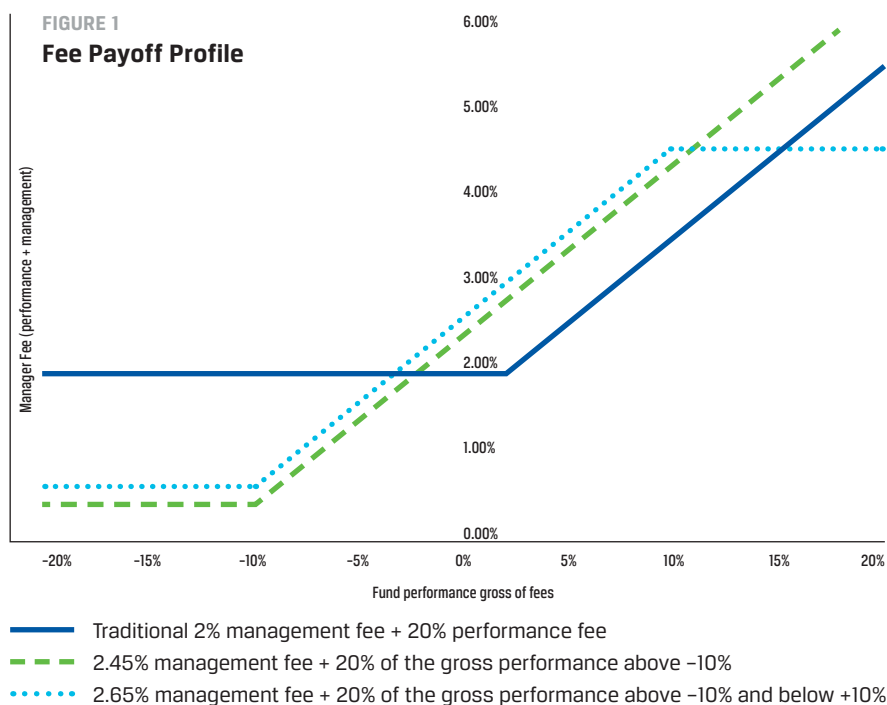
option-like payoff, however, creates an incentive for investment managers to take risk and participate in the potential upside while being protected from the downside. An alternative solution is to let the investment manager's revenue be impacted by negative performance in exchange for higher management fees. This solution does not change the manager's overall expected compensation and results in a more sustainable business model for the management company, where the interests of managers and clients are better aligned. Let's illustrate this performance fee structure with the example of a conventional 2% management fee + 20% performance fee (represented by the solid line in Figure 1).

The Black-Scholes model can be used to analyze the option embedded in the performance fee. The performance fee is equivalent to a call option on the fund's gross performance, having a strike price 2% above the fund's net asset value (NAV) at inception through the performance measurement period.

For a fund with an expected volatility level of 10%, the flat-fee equivalent of the performance fee (i.e., the value of the call option) is 64 bps of the fund NAV per annum. Hence, the total equivalent flat fee is $2\% + 0.64\% = 2.64\%$. The vega of the option is 0.08. This means that for every 1% of volatility added to the fund, the investment manager earns the equivalent of an additional 8 bps of fees. Because the manager controls the volatility of the fund, a positive vega indicates an incentive for the investment manager to exceed his risk budget.

TRANSPARENCY

The advantage of pricing the option embedded in the performance fee is that it reveals the cost of the performance fee and makes it comparable to the management fee. It also makes possible the comparison of performance fees across strategies with different expected levels of risk. Table 1 shows the price of a 20% performance fee on a flat management fee-equivalent basis using the average



volatilities computed by Lo (2008) for each fund category in the Lipper TASS Database from February 1997 to August 2007. One could argue that the Black–Scholes pricing based on realized volatilities will underestimate the price of the option. This argument is correct, especially when analyzing funds with illiquid securities and/or significant tail risk. Because there are no option markets for funds, however, we cannot observe the implied volatilities for various funds. Devising a rigorous method by which to price options embedded in performance fees is not straightforward and is beyond the scope of this article. For illustrative purposes, we will continue using the Black–Scholes pricing method with realized volatilities. Using realized volatility is still an improvement over the apples-to-oranges comparison one makes when directly comparing a 20% performance fee in a highly volatile early-stage venture fund with a 20% performance fee in a fixed-income arbitrage fund with tight risk management constraints. In order to let clients compare fees on an apples-to-apples basis, the disclosure of an all-inclusive equivalent flat fee computed according to a standard set of rules will create a more transparent marketplace for investment management services.

Solution 1: Manager Participation in Negative Performance

Analyzing performance fees within the framework of option pricing also allows us to assess the cost of letting the investment manager participate in the fund's negative performance. If we ask the investment manager to participate in 20% of the fund performance down to –10% performance, we essentially reduce the strike price of the “performance fee option” from +2% to –10% of the fund NAV (the payoff for this solution is shown by the dashed line in Figure 1). As a result, the expected value of the option given to the investment manager is reduced by approximately 45 bps. (Note that we are now pricing an option with a strike price 10% below the fund NAV. The simplifying assumption that implied volatility is

TABLE 1

Flat-Fee Equivalent of a 20% Performance Fee

Type of Fund	Average Annualized Fund Volatility (February 1997–August 2007)	Flat-Fee Equivalent of 20% Performance Fee*
Convertible arbitrage	6.3%	0.35%
Dedicated short bias	22.4	1.63
Emerging markets	20.9	1.51
Equity market neutral	8.1	0.50
Event driven	8.0	0.49
Fixed-income arbitrage	6.1	0.34
Global macro	15.1	1.05
Long–short equity hedge	16.3	1.14
Managed futures	19.1	1.37
Multi-strategy	10.0	0.64
Fund of funds	7.5	0.45
All funds	12.7	0.86
All funds except fund of funds	14.1	0.97

*20% of the value of a call option, valued using Black–Scholes model with the following parameters: price = 1, strike = 1.02 (i.e., 1 + management fee), time to maturity = 1 year, interest rate = 0.27% (1-year US\$ swap rate as of 2 December 2013), and dividend yield = 0.

Source: Andrew Lo, *Hedge Funds: An Analytic Perspective* (2008).

equal to expected volatility will result in undervaluing the option relative to the previous option with a strike price 2% above the fund NAV. Therefore, the new management fee should be up to 45 bps higher.) Thus, the management fee can be increased by up to 45 bps to obtain a fee structure equivalent to the starting point of 2% + 20%, where the management fee is 2.45% (2% + 0.45%) and the performance fee is 20% of the gross performance above –10%.

The sensitivity of the expected performance fee to an increase in the fund's volatility is now lower, and the higher management fee creates a buffer that forces the manager to participate in negative performance along with the client. In the worst-case scenario (loss of 10% or more), the investment manager would earn a greatly reduced fee: 45 bps. The fee structure should be designed so that the sustainability of the manager's business is not affected. If the 45 bp fee level that accompanies the worst-case performance scenario threatens the sustainability of the investment manager's business, one can introduce fully symmetrical performance fees.

Solution 2: Symmetrical Performance Fee

In addition to letting the investment manager participate in some of the downside performance, the investment manager participation in extreme upside outcomes can also be limited. That is, it is possible to create full symmetry in the fee structure and remove the investment manager's incentive to take undue risk on behalf of his clients.

To make the fee structure fully symmetrical vis-à-vis the fund's performance, simply remove the investment manager's performance participation above the 10% threshold. This is equivalent to the investment manager selling back a call option to the client on performance above 10%, which can also be priced with the approach that we used previously. The expected value of the new performance fee is roughly 20 bps lower than in Solution 1. (In the illustrative example, the intrinsic values of the two call options nearly cancel each other out because the same volatility is used to price the two calls. In practice, the value of the call with a strike at 90% of the fund NAV is much higher than that of a call with a strike at 110%

of the NAV.) Therefore, increasing the management fee by another 20 bps will obtain an equivalent fee structure, where the management fee is 2.65% ($2\% + 0.45\% + 0.20\%$) and the performance fee is 20% of the gross performance between -10% and $+10\%$.

The payoff profile for these fees is shown by the dotted line in Figure 1. There is less incentive for the manager to take undue risk and “swing for the fences” because he won’t receive compensation for extreme positive performance. Because the client alone bears the tail risk (no investment manager participation in losses in excess of -10%), it is fair that the client also gets rewarded for upside tail events without having to share. In the worst-case scenario (loss of 10% or greater), the investment manager’s fees are 65 bps, which significantly improves the sustainability issues of the investment manager’s business. Such a fee structure also makes sense if we look at the investment manager incentives through the lens of behavioral finance. Indeed, Tversky and Kahneman’s prospect theory teaches that above a certain threshold, very large gains of different magnitudes have very similar effects (see Figure 2). Hence, the impact of exceptional gains is relatively less important than that of moderate gains to motivate investment managers. Finally, such a symmetrical fee structure may allow the reintroduction of performance fees in mutual funds, from which they largely disappeared following the 1970 amendment to the 1940 Investment Company Act, which prohibited the use of asymmetrical performance fee contracts. (Golec and Starks [“Performance Fee Contract Change and Mutual Fund Risk,” *Journal of Financial Economics*, 2002] examined the impact of the 1970 amendment on mutual fund risk.)

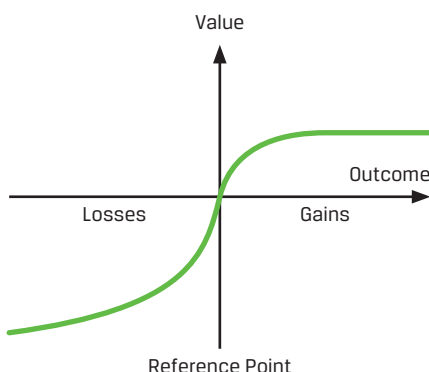
Solution 3: Full Performance Participation

Full participation means that all the optionality embedded in Solutions 1 and 2 is removed and the manager is effectively asked to invest alongside her clients. It provides a complete alignment of incentives between the investment manager and her client. As we noted in the introduction, however, investment

IT IS DIFFICULT TO CHANGE ESTABLISHED MARKET PRACTICES, BUT MOVING TOWARD A MORE SYMMETRICAL PAYOFF PROFILE WILL LEAD TO A BETTER ALIGNMENT OF INCENTIVES BETWEEN INVESTMENT MANAGERS AND THEIR CLIENTS.

FIGURE 2

Prospect Theory Utility Function



managers may not have the capital necessary to take investment risk equivalent to the 20% exposure they would get through a typical performance fee. Therefore, to implement full performance participation, one would need to reduce the size of the incentive fee. The investment manager’s ability to fully participate in the fund’s performance will depend on her net worth rather than the fund’s NAV. One could argue that her incentive to perform will therefore be greatly reduced, but this goes against one of the fundamental discoveries of behavioral finance—that wealth preferences are relative, not absolute. What matters in motivating an investment manager is her wealth starting point. Hence, the variable to consider in setting the incentives of the investment manager is her dollar exposure to the fund performance relative to her current net worth rather than relative to the NAV of the fund. The NAV of the fund should actually be irrelevant when setting the investment manager’s incentive to perform. Therefore, unless an investment manager has a large portion of her capital tied up in illiquid assets, a direct investment in her fund in a meaningful

amount relative to her net worth is a great incentive to perform.

CONCLUSION

Changing market conventions is never an easy task. Conventions derive their value from the fact that market participants are familiar with their limitations and advantages. Following the 2008 crisis, however, we have observed an increased awareness of, and aversion to, tail risk among investors. A simple way to reduce this tail risk is to remove the incentive for investment managers to take such risk. It is difficult to change established market practices, but moving toward a more symmetrical payoff profile will lead to a better alignment of incentives between investment managers and their clients without changing the overall expected compensation levels. In this article, I have proposed simple incremental changes with respect to the current status quo, and if properly implemented, such changes could significantly reduce incentives for investment managers to take unjustified risks.

Finally, independent of the fee structure one chooses, I believe that pricing the option embedded in the fee structure according to a clear and transparent set of parameters will improve transparency in the hedge fund marketplace, which will ultimately benefit both clients and investment managers.

Edouard Senechal, CFA, is a global macro analyst at William Blair & Company in Chicago. The views and opinions expressed herein are those of the author and do not necessarily reflect the views of William Blair & Company, its affiliates, or its employees. The author is grateful for helpful comments and suggestions from Mike Jacobs; Brian Singer, CFA; Michelle Seitz, CFA; John Simmons, CFA; Sam Kunz, CFA; Claire Fargeot; and Patrick N’Soudou.

Private Equity Funds and Pension Plans: A Changing Dynamic

By David Levine and Susan Mangiero, CFA

Institutional investors with an allocation to private equity or an interest in exploring this asset class have a new item to add to their due diligence checklist. The landscape shifted significantly in 2013, when a US federal court ruled that, under certain conditions, a private equity fund could be obliged to fund a portfolio company's underfunded pension plan. Although this significant opinion has captured the attention of countless transactional and litigation attorneys, not all limited partners have focused on what *Sun Capital Partners III, LP v. New England Teamsters & Trucking Industry Pension Fund* ("Sun Capital Partners") might portend and why ignoring this case could potentially lower investment returns.

Specifically, this decision increases the risk of calls on cash and future expected cash flows by defined-benefit plans in which a private equity fund's portfolio company participates. Such an event would make it difficult for that asset manager to hit its performance targets. Thus, investors and their advisers may want to evaluate the extent to which they are asking questions of portfolio managers, including the topic of portfolio company pension plan economics.

REASONS FOR INCREASED DILIGENCE

On 24 July 2013, the US Court of Appeals for the First Circuit, in its decision in *Sun Capital Partners*, reached the conclusion that a private equity fund can be held liable for the multi-employer (i.e., collectively bargained, non-company-run) pension obligations of a portfolio company. In brief, *Sun Capital Partners* revolves around whether certain private equity funds are active trades or businesses that could lead the funds to be included in a portfolio company's controlled group, thus making them liable for withdrawal liability. Although this ruling focuses only

on which legal entity might be responsible for the liabilities of underfunded multi-employer pension plans, this decision should be looked to as a potential opportunity for limited partners to further evaluate the risks and potential returns of the private equity funds in their portfolio. Given the dollar magnitude of retirement liabilities in the United States and frequent headlines about retirement plan problems, private equity funds may find themselves under intense scrutiny for their involvement, with potential liability for the employee benefit plans of their portfolio companies. It is in everyone's best interest to evaluate the extent to which a potential or existing fund investor could be

decision paints the image, depending on future court decisions, of a private equity fund being bogged down and delayed in executing its exit strategy because of the cost of an expensive, underfunded pension plan.

Litigation risk is yet another potential trouble spot. Allegations of fiduciary breach, whether from the US Department of Labor or private plaintiffs, are popping up in courts with more frequency. In some cases, the damages or settlement costs are in the millions of dollars. This trend means that private equity funds are exposed to potentially huge legal risks if they fail to properly take retirement plan liabilities into account when deciding to invest in a

IN THE AFTERMATH OF SUN CAPITAL PARTNERS, LIMITED PARTNERS MIGHT EVALUATE HOW FAR TO DIG INTO PRIVATE EQUITY FUND INVESTMENTS.

affected by further developments along the lines of *Sun Capital Partners*.

Liquidity is another possible headache for limited partners. As described by the Private Equity Growth Capital Council, the business model for a typical private equity fund relies on an exit of three to seven years from the time an initial investment is made. When a portfolio company has a problem that will be expensive to fix, it becomes difficult for the private equity fund owner to sell one portfolio company and realize any gains. Whether seeking to take a business to the market for the first time via an initial public offering or selling a portfolio to a competitor, a private equity fund owner must demonstrate that certain financial thresholds have been met. The *Sun Capital Partners*

firm for the first time or add to an existing allocation. The cost of pension litigation can be significant and can have an impact on a fund's realized returns. Moreover, a nasty court battle could make it harder for a general partner to raise capital from other institutions, thereby putting more pressure on existing limited partners.

THE VALUE OF PREEMPTIVE ACTION

In the aftermath of *Sun Capital Partners*, limited partners might evaluate how far to dig into private equity fund investments—at the outset and regularly thereafter. Specifically, they might ask a private equity fund manager, fund-of-funds manager, consultant, and/or adviser about the ultimate vulnerability to additional pension funding

liabilities. Of course, some investments might necessitate a higher or lower level of scrutiny.

Preemptive action can save money and maximize investment value. An existing or prospective limited partner might take a number of steps as part of its private equity fund analysis. Key considerations include (but are not limited to) seven critical areas:

First, ask whether a private equity fund is relying on the position that it is not a “trade or business” and is therefore not subject to liability for a portfolio company’s pension underfunding.

Second, examine a private equity fund’s holdings to ascertain whether any of its positions reflect majority ownership. This means taking a count of outstanding common stock, preferred stock, warrants, and/or equity derivatives, such as swaps. Although any such review should focus on holdings subject to jurisdiction in the First Circuit (Maine, Massachusetts, New Hampshire, Puerto Rico, and Rhode Island), a broader review of holdings elsewhere might also be considered.

Third, query whether the Pension Benefit Guaranty Corporation has expressed concerns about any or all of the portfolio companies in a particular private equity fund’s basket.

Fourth, understand the pension restructuring solutions being used or evaluated by a private equity fund’s portfolio company. As the family of “de-risking” products continues to expand, there are many options for reducing the amount, volatility, and other barriers that a pension plan could present and it might be helpful to understand how portfolio companies are using or contemplating the use of these creative solutions.

Fifth, ask whether the private equity fund regularly examines the collective bargaining agreements for any or all of its portfolio companies. Although the *Sun Capital Partners* case was about liability for pension-funding obligations under a multi-employer pension plan, the logic of *Sun Capital Partners* might be extended to conclude that a private equity fund is conducting a “trade or business” under the Internal Revenue Code through its management and oversight of portfolio companies. A decision

concluding that a private equity fund is a trade or business for Internal Revenue Code purposes could impact that fund’s representations of its attempts to minimize its unrelated business income tax liability and/or its acceptance, pursuant to the Internal Revenue Code, as a trade or business.

Sixth, ask about the due-diligence process employed by the private equity fund for new and existing company investments. Ask how the private equity fund vets risk exposures associated with the offering of traditional defined-benefit pension plans, 401(k) plans, and health and welfare arrangements by existing and prospective portfolio companies. Individually and collectively, ERISA plans can carry significant liabilities that have the potential to materially reduce overall business profitability, increase insurance premiums, lead to expensive litigation and/or regulatory enforcement, impede liquidity, and/or hamper capital raising. As a result, a private equity fund may never be able to realize the growth targets that motivate a particular investment in the first place. The objective is for a limited partner to understand the possible seriousness of a given situation in

terms of economic, fiduciary, and legal vulnerability.

Finally, recognize that the *Sun Capital Partners* decision could encourage further litigation and regulatory activities. Accordingly, limited partners could inquire as to how private equity fund structures might be changed by general partners and how these changes might impact the economic and legal rights of the limited partners.

This list of potential action steps can appear to be extensive, but it need not be overwhelming. Working with experienced economic and financial advisors, as well as knowledgeable ERISA counsel, can often allow an investor to efficiently and expediently address the potential future ramifications of *Sun Capital Partners* and to maximize the value of investments in private equity funds, even those with portfolio companies facing potentially significant pension liabilities.

David Levine is an ERISA attorney and principal with Groom Law Group, Chartered, in Washington, DC. Susan Mangiero, CFA, is a managing director with Fiduciary Leadership LLC in New York City, lead contributor to the blog *PensionRiskMatters.com*, and author of *Risk Management for Pensions, Endowments and Foundations*.

LETTERS

BUSTING THE BOOM-BOOST CYCLE

I was amazed to read that “economic prediction led to government efforts to control business cycles and boom-boost financial volatility” (“Visionaries, Econometrics, and Crystal Balls,” January/February 2014). The Austrian view of economics is that booms, busts, and volatility are indeed “boosted” by government intervention. But this view is, alas, not widely held. Too bad your use of “boost” was probably meant to be “bust.”

We all know that price controls offer short-term benefits to some at the cost of greater long-term pain overall. Yet the ruling Keynesian orthodoxy suggests that government should do something—anything—to prevent market forces from finding a natural equilibrium. So, today, the price of money itself is artificially suppressed. Some say this is good for past bondholders and current borrowers and bad for future bond buyers and current savers. I say it’s bad for everyone.

I suggest that economic prediction is best used to protect one’s financial interests in a distorted economy and should not be used to manipulate a very complicated global economy. We predict the weather, as noted in the article, but government does not (yet) presume to manipulate it to benefit favored constituents.

I greatly enjoyed the thoughtful article. And thanks for the chuckle!

Thomas R. O’Connor, CFA
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Agile, Nimble, and Error Free

A STRONG CONCEPT IS ONLY THE START OF A LONG, COMPLEX EFFORT TO DEPLOY A MODEL

By Ed McCarthy

Ideas for trading strategies, pricing models, and risk management techniques can come from multiple sources. Perhaps a trader in your firm approaches you about a strategy she has been considering. She believes it could be profitable and would like you to analyze it for better insight on its performance. A client might e-mail you an article from an academic financial journal detailing advances in a hedging model. The authors make a good case, and you wonder if the revised model might benefit your work for the client.

Scenarios like these are routine in many firms, particularly those relying more heavily on quantitative methods. It's not just a question of coming up with creative approaches, though; firms must also decide how to systematically evaluate each idea's potential. And if an idea proves to be viable, it still must be deployed and managed effectively within the organization.

Financial institutions recognize these challenges. A 2012 study by Massachusetts-based software developer MathWorks, "Modeling and Analysis in the Wake of

Carlo models. However, each segment of the industry has its own focus. The models used by a small-cap value manager focusing on US stocks will differ from a commodity trader's models or a global macro fund manager's models and so on. As the report notes, "Such techniques are common across the financial services industry, but different in application depending on what is being modeled (e.g., instrument classes, risk factors, trading strategies), and where it is being modeled, whether on the buy side, sell side, or elsewhere."

Nonetheless, across industry sectors, the process of seeking viable strategies and modeling, testing, and installing them has several common characteristics. Frequently, this process can be made more efficient, industry experts maintain, resulting in quicker evaluations and deployments.

COLLECTING IDEAS

Phil Zecher at Periplus LLC in Greenwich, Connecticut, has worked for a hedge fund and as a fund-industry consultant. In his experience, everyone in the financial industry, particularly on the trading side, is to some extent a "pattern analysis machine." He's not referring to technical analysis necessarily but rather to the effort to see incipient trends and ideas that can spur further investigation. Ernie Chan, hedge fund manager at QTS Capital Management in Toronto and author of *Algorithmic Trading: Winning Strategies and Their Rationale*, verifies that observation. He reads numerous trading and finance publications and academic journals, and he receives ideas from clients and readers of his blog. "I'm like a vacuum cleaner," he says. "I just vacuum up all information and ideas from multiple channels."

Chan follows a procedure to determine whether the method discussed in an article or academic paper merits further research. His checklist includes the author's inclusion of transaction costs, and for stock selection models, he screens for survivorship bias. He also applies a subjective test based on his experience: Does the idea make sense? Other sources also stress the need to avoid blind faith in a strategy or model that can result from failing to understand the intuition behind the work. Only after an idea passes these initial screens will Chan consider it for further investigation.

If a strategy survives the first cut, Chan collects the required data, which he transforms as needed in preparation for back testing. He uses MathWorks' MATLAB software for his work in these stages; however, he points out that other computation options are available, such as R and Python. Users can also choose from special-purpose programs designed for creating trading strategies, including MethodTraders and QuantHouse, among others. "These platforms are created for quantitative portfolio managers,

KEY POINTS

The process of seeking viable strategies and modeling, testing, and installing them can be made more efficient.

To improve efficiency, some investors use integrated development, testing, and portfolio management platforms.

A critical challenge is overcoming the separation between "technology people" and "idea-generation people."

the Global Financial Crisis: The Financial Services Perspective," found significant interest in the model development and deployment process. The study had several key findings:

- 88% of financial institutions believe they would lose their competitive edge, 79% believe their profits would decrease, and 54% believe risk would be increased if they were operating poor (e.g., flawed or outdated) models.
- Slow model development will result in firms lacking the agility to respond to market changes and ineffective risk management, according to 82% and 74% of firms, respectively.
- It is currently taking months (for 51% of firms) to integrate models into business processes. However, the buy side would like to cut this down to days (75%). The sell side ambitiously wants to reduce this time to hours (40%).
- 83% of financial institutions are trying to speed the process of model development.

The MathWorks report found that 70% or more of respondents used time-series, regression, optimization, and Monte

and in some sense, they would make it even easier, make it more productive, for you to develop strategies,” Chan explains. “But there’s one drawback. Oftentimes, they also place some restrictions on the kinds of strategy you can develop, so there are some pros and cons to that. But there’s still a good number of institutional traders who prefer to develop strategies on these platforms as well, so it’s really based on personal preference.”

Buy-and-hold investors can also use integrated development, testing, and portfolio management platforms. For example, Alpha Vee Solutions in Binyamina, Israel, recently began licensing a global equity research management technology. The software provides data on about 20,000 public global companies. Analysts can use the included templates to build valuation models or design and back test their own models within the system. The program is intended for fundamental investors, not short-term traders. “We are not into high-frequency trading,” says Moshik Kovarsky, the company’s CEO and founder. “We’re not into technical trading. We basically look at fundamental values.... This is for investors who are interested in the medium to long range.”

THE MODEL REDO IS A PERENNIAL PROBLEM IN THE FINANCE INDUSTRY THAT RESULTS FROM THE LONG-STANDING SEPARATION BETWEEN “THE TECHNOLOGY PEOPLE AND THE IDEA-GENERATION PEOPLE.”

There is an ongoing debate over back testing, and Chan recognizes its potential weaknesses. For instance, a client may ask him to perform a 20-year backtest on a strategy, forcing Chan to explain that structural and regulatory changes over that period would make the results less informative than using a 3- to 5-year period. He also cautions that a strategy might back test very well but perform poorly going forward. Nonetheless, he says, back testing is a critical step for identifying strategies that fail to produce the desired Sharpe ratio and maximum drawdown metrics he uses. “At least if it performed poorly in the past, we should not even bother to run it going forward because there’s actually no evidence that it will ever work,” he says.

FAILING FASTER

Each step takes time, and as the MathWorks survey noted, firms want to reduce development time. One way to reach that goal is to “fail faster.” Although such an approach may sound counterintuitive, most research in the physical sciences, such as pharmaceuticals, ends in failure. By eliminating nonproductive ideas quickly, firms can identify and move on to potential winners more quickly.

Achieving that speed requires a systematic approach to model development and testing. But that effort is likely to require greater collaboration among staff and the imposition

of added structure on those involved in the process. Those changes can be problematic in some organizations, such as those in which individuals and teams have preferred workflows and are reluctant to share information about their work.

One industry source who requested anonymity provided an example of how firms can increase efficiency with less disruption. Consider a firm with multiple researchers (or quantitative analysts) working independently. Each researcher prefers a different data source, such as Bloomberg or Thompson Reuters. Each uses different software to transform the data into a strategy, back test the strategy, and then analyze the backtest. For example, the first analyst might use Microsoft Excel; the second, EViews; and the third, MATLAB.

An alternative approach would be to have researchers use the same software for several stages in the process. This use of a common environment makes it easier to collaborate without impinging on a researcher’s creative input in defining a strategy or model. In this source’s firm, the process for evaluating investment strategies is to use MATLAB to collect and transform data. Each researcher can still use his or her preferred software (Excel, EViews, or MATLAB, in this example) to define the strategy and back test it, but the researcher then shifts back to MATLAB for a backtest analysis and for presenting results and collaborating with colleagues. In the firm’s experience, this increased use of common tools has removed obstacles to collaboration and allowed analysts to spend more time refining their strategies.

AVOIDING THE REDO

Assuming a firm approves a strategy or model for use, the next stage in its development can bring about a new set of problems. Jim Tung, a MathWorks Fellow, describes this as the “redo”—a step that should be avoided whenever possible, he maintains. In this scenario, the researcher or analyst has developed a robust algorithm. The researcher then hands the work over to a programmer, who recodes it to fit the IT department’s language requirements, which in turn necessitates a new round of testing. That step can backfire, says Tung. “The problem with redoing, with rewriting algorithms, with reimplementing something is that it’s a faulty process,” he says. “It introduces errors, [or] sometimes you lose the original intent of the person who created the original algorithm.”

The model redo is a perennial problem in the finance industry, Zecher agrees. He describes it as a disaster waiting to happen and says it results from the long-standing separation between “the technology people and the idea-generation people.” There is a risk that even a highly skilled programmer won’t truly understand the algorithm’s business purpose and might inadvertently modify it in ways the developer won’t approve. “The business person who’s come up with the model isn’t that experienced at writing specifications, and the programmers generally don’t appreciate how lacking the specs that they’re probably given really are,” says Zecher. “And so, the business people end up spending a lot more time having to check and test the work of the programmer than they probably should have.”

Zecher suggests two possible solutions. The first is to

have the business users provide better upfront specifications to the programmers. Another is to have someone serve as a liaison between the business people and the programmers and IT staff. That person would need to understand the business and the technology and be able to “speak both languages effectively,” Zecher says.

Another option is to use automation and avoid the need for reprogramming, says Tung. If the developer can push a button and transform the algorithm into a form used by the IT department—C++, for example—doing so will save time and reduce recoding risk. The MathWorks survey maintains that “incorporating technical computing applications directly into business-critical production systems can offer accelerated time-to-market and cost advantages.... By taking models directly into production, no time is taken to recode into another language, which potentially eliminates the recoding risk. Testing of these production processes can also be automated. Automation speeds up the model implementation and integration processes and frees up valuable IT resources, which could be redeployed to, for example, work on data frameworks and communication engines.”

Although that approach can speed development time, it’s likely to encounter resistance, the MathWorks survey adds. “The sell-side, with its decades-old internal libraries of code, usually in C++, is traditionally against adopting production-ready models, preferring to re-code, though there are some signs that attitudes are changing. The buy-side on the other hand is more agile and willing to integrate code into production more quickly.”

Automation also maintains the analytic quality that an analyst builds in. “When you can automate the process of taking that algorithm and making it, let’s say, an Excel macro or making it into a .NET component or whatever in an automated way, you’re able to maintain that quality because automation means you’re not introducing manual errors,” says Tung.

DEPLOYMENT AND MAINTENANCE

These comments aren’t meant to downplay an IT department’s value. When an algorithm has been tested and approved by compliance, it still must be converted into a form that can use large-scale data and be deployed widely throughout the organization. It’s unlikely that the developer/analyst will do that work, except perhaps in very small firms. That means the IT staff will assume responsibility for integrating the algorithm into the firm’s computing infrastructure and managing it. “Some people call it life cycle management, some people call it IT infrastructure, but [it’s] the idea of putting things under source control, of having change management, of building unit testing,” Tung says. “That’s sort of some of the nuts-and-bolts of managing

software components that the IT guys care a lot about. If you’re going to build a tool, you need to make sure you can manage it through an organization.”

Zecher agrees that investment management firms that haven’t done so need to adopt the software industry’s development standards for software development. These standards include version control (i.e., preserving older versions of code), strong documentation, unit testing, and regression testing. This isn’t regression testing in the mathematical sense, he explains. It’s a technique in which code changes are tested against previous outputs to determine if the changes have introduced any faults or bugs.

COST CONSIDERATIONS

Markets change, which means that models must adapt or lose their value. Chan monitors maximum drawdowns and stop-loss triggers as indicators that a strategy is misfiring. He cites an example in which a strategy experiences a 10% maximum drawdown in backtesting. After going live, however, the strategy produces a 20% drawdown. That variation would lead Chan to question whether the model still works and would lead him to stop trading with it until he’s reviewed and possibly modified it.

Strategies that trigger stop-loss limits are another sign that a model is not performing properly. Although some traders might halt trading temporarily with the strategy, Chan believes that hitting a stop-loss shouldn’t be ignored. “If for some reason your live trading triggered a stop-loss, one should not just forget, stop trading for just one day, and get back into it the next day,” he says. “That really is an indication that we should revisit the strategy. A stop-loss is something much more serious than pausing a trading. It should really cause a reexamination of the strategy.”

Revising or replacing algorithms has an economic cost, however, and firms should consider how to minimize that cost in advance. Tung points out that each iteration often requires recoding, retesting, and running compliance checks before final deployment. How can firms improve the software development and management process so they can make changes quickly and efficiently? Tung returns to the idea that the solution is to automate processes whenever possible. “If you can automate a lot of those steps where the environment in which the person creates the idea automatically generates it for deployment, then the bar or the

cost of doing an iteration or doing one evolutionary cycle is pretty darn low,” he says. “That enables the organization to be much more agile and nimble in changing and evolving their tools and techniques because the risk and the amount of effort are minimized.”

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KEEP GOING

“Evaluating New Methodologies in Asset and Risk Allocation,” *CFA Institute Conference Proceedings Quarterly* (December 2013) [www.cfapubs.org]

“Knowing the World,” *Financial Analysts Journal* (November/December 2013) [www.cfapubs.org]

“The Difference between Model Ambiguity and Uncertainty,” *CFA Institute Take 15 Series* (August 2013) [www.cfawebcasts.org]

Evaluating the Evaluators

WHO RATES THE RATING AGENCIES?

By Maha Khan Phillips

When the European Commission announced in June 2013 that credit-rating agencies would have to follow stricter rules and guidelines, it simply made official what was already inevitable—rating agencies face a game-changing set of circumstances. The new rules cover a wide range of issues, such as ownership structures, transparency requirements, and

calendar dates for rating EU sovereigns. They also allow investors to sue agencies found to be in breach of the legislation.

“Credit-rating agencies will have to be more transparent and accountable when rating sovereign states. The new rules will also contribute to increased competition in the ratings industry, currently dominated by a few market players, and will reduce the overreliance on ratings by financial market participants,” said Michel Barnier, commissioner for the Internal Market and Services Directorate General.

The legislation was widely expected, having been in discussion for a year and a half. It followed the US Securities and Exchange Commission’s review of credit ratings in the United States—a requirement under the Dodd–Frank Act.

Nonetheless, the regulation has received a mixed response. Some fund managers worry that it is too prescriptive, given that credit ratings are a fundamental part of the market and a necessary benchmark for investors. Others believe that rating agencies needed a slap on the wrist. All are in agreement, however, that credit-rating agencies don’t have as much credibility as they used to.

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NOT AN OPTION: BUSINESS AS USUAL

Credit-rating agencies came under heavy fire during the financial crisis after high ratings were given to subprime assets, which were subsequently downgraded to junk status. In 2009, the California Public Employees’ Retirement System (CalPERS) filed a lawsuit against Moody’s Investors Service, Fitch Ratings, and Standard & Poor’s (S&P), which together dominate the market, over losses suffered in structured investment vehicles (CalPERS settled with Fitch in 2011).

Further lawsuits were issued, most recently by California

Attorney General Kamala Harris, who in 2013 filed against S&P, alleging that it violated the False Claims Act. “For years, S&P placed its priority on maintaining its market share, instead of the investors who trusted in its supposedly objective ratings,” she said. “When the housing bubble burst, S&P’s house of cards collapsed and California paid the price—in billions. S&P must be held accountable for its conduct that contributed to one of our country’s worst financial crises,” she added.

Rating agencies have come under fire in particular because of the way they are remunerated. The fact that issuers, rather than investors, pay rating agencies creates a potential conflict of interest. The SEC highlighted this conflict of interest in its own report: “An arranger may have multiple NRSROs (Nationally Recognized Statistical Rating Organisations) analyze a proposed structured finance product and select the one or two NRSROs that provide the desired credit ratings (i.e., engage in ‘rating shopping’).... This creates an incentive for the NRSRO or NRSROs to provide preliminary estimations desired by the arranger in order to be hired to produce the final credit rating for the transaction.”

In a briefing note, BlackRock, the \$13 trillion fund manager, suggested that “ratings shopping” can be minimized by requiring credit-rating agencies to be engaged to rate a deal prior to offering up a detailed collateral review. BlackRock warned that credit-rating agencies need to be reformed, not eliminated, and further argued that regulators should “acknowledge that credit ratings have value for investors—punitive measures or those that attack the fundamental business of credit-rating agencies are detrimental to investors.”

WHAT’S NEXT?

So, where has all that discussion and legislation left the rating agencies?

“It’s hard to believe that nothing is going to change after all of this has happened. Business as usual is not an option for rating agencies anymore. They have just been through a near-death experience,” says Amin Rajan, chief executive of CREATE-Research, the UK-based investment forecasting think tank.

Rating agencies themselves say that a lot has been learned over the period.

“Like many organisations, we have learnt lessons over the course of the financial crisis,” says Martin Winn, S&P’s vice president of communications in the EMEA region. “We’ve made a lot of changes to reinforce the integrity, quality, and performance of our ratings. We have changed the way we rate almost every type of security that was adversely affected by the financial crisis. And we have introduced

Rating agencies face new challenges in the aftermath of “a near-death experience.”

Regulatory reforms, lawsuits, changing investor expectations, and new competitors have combined to change the environment for rating agencies.

Structural factors and limited alternatives for investors may be enough to preserve rating agencies’ business model in the short term.

new methodologies that make our ratings more transparent, easier to understand, and easier to follow.”

He points out that the firm publishes ratings on more than a million debt instruments. “The performance of US mortgage-related securities ratings over the financial crisis has been very disappointing and something we very much regret, but if you look more broadly at our ratings, they have continued to perform well over the crisis,” he says.

Since 1981, only 1.1% of companies globally that were rated investment grade have defaulted within five years, compared with 16.4% that were rated sub-investment grade. Every sovereign borrower that defaulted in the past 40 years had sub-investment grade ratings at least a year before default, according to Winn.

A spokesperson for Fitch Ratings was equally adamant that in the long term, the agency has performed well. “Our longevity underscores the fact that the basic rationale for credit ratings continues to exist and institutional investors value the work that we do and recognize the value we bring to the capital markets,” she said.

Olivier Beroud, head of EMEA at Moody’s, makes a similar claim. “The fundamental reason ratings exist is because they are highly relevant to the functioning of capital markets, as there is an ongoing need for independent, globally comparable opinions on credit risk. And global comparability is one of the key attributes of our ratings. Investors in particular are interested in what Moody’s has to say and weigh our opinions into their decision making.”

COMPETITION

To a small degree, fund managers are voting with their feet. “The big change that we see with a lot of our clients since the financial crisis is much higher awareness of the conflicts of interest that the regular rating agencies have, by being compensated by the issuers of debt,” says Joachim Klement, CFA, partner at Wellershoff & Partners, a Swiss-based consultancy. “We recommend that our clients hire independent credit-rating agencies, which are paid by the investor rather than issuer. A lot of asset managers we advise use that as a differentiating factor and a key selling point.”

According to the *Financial Times*, eight of the nine registered credit-rating agencies in the United States follow the issuer-pay model, with only Egan-Jones Ratings Company, the smallest, holding out as an investor subscription model.

Yet fund managers and investors have had little in the way of options. Moody’s, Fitch Ratings, and S&P control 90% of the estimated \$10 billion industry. Smaller players, such as Egan-Jones and CreditSights, are gaining a foothold, but it is not a very significant one. Others are making new challenges. For example, rating companies based in Brazil, South Africa, India, Malaysia, and Portugal formed a consortium to launch Arc Ratings, which announced, “Working together, [the agencies] will provide ratings answers to the new multi-polar world economy in direct competition

with US-centric agencies.”

Another relative newcomer is Morningstar, which acquired privately held credit-rating firm Realpoint for \$52 million in 2010 to boost its credit research capability. At the time, Joe Mansueto, chairman and chief executive, said that Morningstar wanted to restore credibility to the credit-rating business.

“There is definitely a greater level of mistrust, and I think that has opened up the acceptance of new entrants like Morningstar. We certainly see a demand out there, and there are now more voices in the marketplace,” explains Haywood Kelly, vice president of equity and credit research at Morningstar.

The firm serves three different markets: “We have a lot of buy-side investors who subscribe to our research on both the equity and credit side,” Kelly explains. “We work with a lot of financial advisers, particularly intermediaries, largely in the mutual fund business. We also serve individual investors.”

Morningstar’s traditional Analyst Rating for Funds uses a five-tier scale with three positive ratings (gold, silver, and bronze), a neutral rating, and a negative rating. For credit research, however, it offers up traditional ratings ranging from AAA to D. Four key components drive Morningstar’s credit rating: business risk, cash flow cushion, solvency score, and distance to default. This approach offers consistency across different markets—something that fund managers, such as BlackRock, are worried will be affected by differing global regulations.

Morningstar’s credit-rating business also adopts a hybrid business model. “It does do issuer-pay business for the issuers of commercial mortgage-backed securities, but we also have a subscriber model on the surveillance side,” explains Kelly, who believes that part of the issue is that there are very few alternative pay models that work. “There has never been a firm who can cover in any depth the entire universe,” he says. “Nobody has come up with another business model or solution that would obviate the need for the issuer-pay model.”

Others point out that investors are too used to getting a free lunch. They don’t want to have to pay for ratings.

There is also an issue of fairness, according to Winn. “No business model is perfect. They all carry advantages and disadvantages and all bring with them potential conflicts of interest,” he says. “We nevertheless think that the ‘issuer-pays’ business model that we and others operate under provides the greatest transparency to the market because it allows all the ratings to be available publicly, free of charge to all investors, and provides a level playing field for the market. It avoids all the issues of selective disclosure that you get with an investor-pays or subscriber model, where you have a privileged class of investors with special access to ratings information,” he argues.

MARKET STRUCTURE

Complacency may be another factor. The three big providers aren't going anywhere, not anytime soon. "There seems to be a lot of inertia. It's a tough nut to crack. The market has done it this way for so long," says Kelly. "One of the big hurdles that we or any new entrant faces is that asset managers, the big boys of bonds, have it written in their policy statement for decades that they need a big investment rating from S&P or Moody's."

This problem is one that CFA Institute and other institutions have raised with regulators. "In the case of money market funds, the guidelines developed by the regulators are forcing managers to hold certain credit instruments because of their credit rating. And that has the potential of increasing systematic risk," points out Rhodri Preece, CFA, director of capital markets policy at CFA Institute.

Klement agrees: "How to disentangle these guys [from the market] is the problem. In reality, the rating agencies are indirectly written in stone for most institutional investors by basically adopting investment policy statements that rely on a certain rating of a bond before they can invest in it or not invest in it anymore. I seriously have no good answer to what to do about that. The only thing I would say is to follow the worst rating rather than the best."

UNDESERVED RELEVANCE?

But credit ratings do perform an important service in the industry. As BlackRock's briefing note pointed out, ratings provide asset managers with standardized opinions of credit across asset classes. End investors use ratings to compare portfolios and to define minimum investment criteria.

"The absence of independent ratings would leave end investors exposed solely to the managers' assessment—for example, of whether a security is 'investment grade' or 'high yield.' As such, references to third-party credit ratings are beneficial protections for end investors, and their use in investment guidelines should be preserved," according to the firm.

Managers use ratings as a reference point. But they shouldn't take them any more seriously than that, believes Adam Smears, head of fixed-income research in the investment division of Russell Investments. "If you look at almost every active manager, they will inevitably present their risk to you and exposures using a rating scale," he says. "With credit portfolios, you are always presented information in that context. Managers always reference credit-rating agencies, which give a common language for all investors looking at credit risk."

For asset managers, the real issue is about whether they are being paid enough to take credit risk, according to Smears. "Very few asset managers that you run into would actually say that the credit-rating agencies influence whether they buy or sell a bond," says Smears. "But if I'm going to

talk to a manager and I want to understand what their fundamental risk is in their portfolio, then it is useful to have a common point because we don't all have the same analysis or methodologies."

Rating agencies themselves argue that fund managers were never meant to use their analysis as anything more than a yardstick. Many active managers have their own teams, undertaking similar analysis. Last year, German asset manager Union Investment challenged S&P's, Moody's, and Fitch's ratings for sovereign bonds, saying they were "no longer adequate for forward-looking investors." Union Investment says its own country rating is based on a "systematic, uniform, and transparent evaluation of countries' credit standings," which draws on macroeconomic fundamentals as well as on measurable social and political indicators.

Another firm that conducts its own research is Los Angeles-based Payden & Rygel. "We have always approached rating agencies and what they do as nothing more than a data point in our analytical process. Whether we are looking at a corporate credit or a structured bond, we have always considered the rating agencies' opinions, but our analyst team performs its own analysis totally independent of what the rating agencies put out," comments James Sarni, CFA, managing principal at Payden & Rygel.

The firm has client investment guidelines that it adheres to as part of its agreements with its clients. "So, in terms of satisfying the legal requirements of what we do, we will always make sure that we invest in securities that meet those minimum requirements," says Sarni. "If a rating agency assigns an issuer a BB rating but, based on our own analysis, we think the issuer is equivalent to a BB-, we may not invest in that issuer's bond if we are not being adequately compensated for the risk we see in the credit."

Sarni says that the firm is comfortable with the work of the major rating agencies. However, he thinks rating agencies could focus more on responsible investment issues.

"Rating agencies haven't really focused on ESG [environmental, social, and governance] issues in their analysis. Obviously, they may touch on business risk, which may have an ESG connection, but they don't provide an ESG rating or a numeric, quantitative value."

Consultants say that this is an area where the smaller rating agencies can start to distinguish themselves from the pack. As for the big three, they will always remain the significant players in the market.

"Rating agencies remain relevant, for want of something better," says Rajan. "Whether they deserve to be is another matter."

Maha Khan Phillips is a financial journalist based in London and author of the novel *Beautiful from This Angle*.

KEEP GOING

"The Ethics of Credit Rating Agencies: What Happened and the Way Forward," summarized in *CFA Digest* (August 2013) [www.cfapubs.org]

"Post-Crisis Markets, Expectations, and Asset Allocations," CFA Institute online course (December 2013) [www.cfawebcasts.org]

"An Overview of Alternatives to Credit Ratings," *Enterprising Investor* (March 2012) [blogs.cfainstitute.org/investor]

Dissonant Harmonies

REGULATORS ARE STILL STRUGGLING TO HARMONIZE RULES FOR OTC DERIVATIVES

By Sherree DeCovny

After a big year for OTC derivatives reform in 2013, regulators worldwide are still struggling with rule harmonization. If all the global markets are not on the same page, trades may migrate to jurisdictions with the most lax rules.

The accomplishments are considerable. The definition of a US person was clarified over the summer, and the US clearing mandate was phased in without a glitch. In addition, the US Commodity Futures Trading Commission (CFTC) and the European Commission (EC) announced a “Common Path Forward” to bring transparency and lower risk to the worldwide swaps market. They proclaimed the rules in the two

regions to be almost identical, although the regulatory calendars are not always synchronized. They committed to working together to close any remaining gaps to prevent regulatory arbitrage. Importantly, they agreed that in a situation where an entity must comply with both sets of requirements, the European rule will prevail.

The Common Path Forward announcement identified two material differences between regulations.

The first relates to consistent data fields, access to data, and other issues related to privacy, blocking, and secrecy laws. The second relates to initial margin coverage.

The regulators in the United States and Europe recognize that sharing data across borders is critical to the markets. But Europe has extremely strict rules on data privacy and transporting data across borders. The two regions take a similar approach to trade-repository reporting, but some participants are concerned that too many repositories exist. Because the data are not aggregated, information may be incomplete or inaccurate, so regulators cannot make informed decisions.

And then there is the margin issue. In September 2013, the Basel Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO) released the final framework for margin requirements for derivatives that are not centrally cleared. All financial firms and systemically important non-financial entities that engage in derivatives that are not centrally cleared will have to exchange initial margin and variation margin (mark-to-market payments) commensurate with the counterparty risks arising from such transactions.

The framework allows two exemptions from initial margin

requirements: (1) physically settled foreign exchange forwards and swaps and (2) fixed, physically settled FX transactions associated with the exchange of principal of cross-currency swaps. Variation margin on these derivatives, however, still must be exchanged. A one-time rehypothecation (when banks and brokers use assets that have been posted as collateral by their clients for their own purposes) of initial margin collateral is permitted in certain conditions.

To manage the liquidity impact of the margin requirements on market participants, the rules establish a universal initial margin threshold of €50 million, below which a firm would have the option of not collecting initial margin. The framework also allows for a broad array of eligible collateral to satisfy initial margin requirements, thus further reducing the liquidity impact.

The requirement to collect and post initial margin on trades that are not centrally cleared will be phased in over a four-year period beginning in December 2015 with the largest, most active, and most important derivatives market participants.

The CFTC and EC rules concerning derivatives-clearing organizations and central counterparties (CCPs) are based on international minimum standards. In both sets of rules, trade counterparties have to pay a fixed initial margin and a variation margin. Clearinghouse members also have to contribute to a default fund that enables the CCP to stay afloat in a crisis.

The rules differ in their treatment of initial margin coverage for cleared swaps. One part of the debate is whether to set a higher default fund contribution for cleared swaps to offset a slightly lower initial margin payment, or vice versa. Another issue is whether regulators should intervene by resetting the initial margin of a CCP to tighten or loosen cyclical pressure if they see a crisis coming. The United States is leaning toward a slightly higher initial margin and lower default contribution, whereas Europe is leaning in the opposite direction.

“I don’t see it as a US versus EU issue,” says Paul Landless, counsel at Clifford Chance in Singapore. “I see it as different CCPs globally having different views.”

COMPLICATIONS

The Common Path Forward provides some clarity for market participants, but in November 2013, the CFTC issued controversial staff guidance, called the “Cross-Border Rule” by some. Essentially, it said that when a person in a US branch of a non-US bank trades a swap with a foreign counterparty, the transaction comes under US rule. This rule would hold even if the trade is booked in the foreign jurisdiction.

KEY POINTS

Final rules in the United States and Europe are essentially identical, but the regulatory calendars are not synchronized.

Main sticking points are initial margin coverage and data issues.

Equivalence poses more complex challenges for Asian regulators.

Another dispute was about who must register as a swap execution facility (SEF). Michael Philipp, partner for Investment Management and Securities Industry Practice at Morgan, Lewis & Bockius in Chicago, explains that if the platform is located in the United States, it needs to register as a SEF. A platform outside the United States also must register as a SEF if it allows access to a US person as defined in the cross-border guidance, which includes the foreign branches of a US swap dealer. For example, if a London-based platform allows the London branch of a US bank to access it either directly or indirectly, the platform should register as a SEF. Going one step further, if the New York branch of a foreign bank wants to trade a swap on a London-based platform, that London venue must be registered as a SEF.

Phillip further points out that non-US persons do not have to trade on a SEF, which is driving a separation between the liquidity pools in Europe and the United States. There is a liquidity pool in Europe in which non-US persons are trading. There is another liquidity pool for transactions between US persons and perhaps between a US person and a non-US person.

EU policymakers were surprised by the CFTC's staff guidance. A spokeswoman for EU Commissioner Michel Barnier publicly stated that the rules go against the letter and spirit of the Common Path Forward agreement and are a step away from global interoperability.

In December 2013, the Securities Industry and Financial Markets Association, the International Swaps and Derivatives Association, and the Institute of International Bankers filed a lawsuit challenging the CFTC's Cross-Border Rule. These associations maintain that the CFTC unlawfully circumvented certain requirements by characterizing its regulations as "guidance"; failed to conduct any cost-benefit analysis, as required by law; and conducted a flawed rule-making process. Additionally, the associations claim that the CFTC imposed a series of rules that are contrary to the spirit and the letter of international cooperation and may harm global markets.

"The Cross-Border Rule further creates significant financial, legal and administrative burdens on market participants that could harm liquidity and the ability of end-users to manage their risks," the associations said in a prepared statement. For example, a firm could be required to execute the same trade on two different platforms and clear the same transaction through two different clearinghouses. Transactions also could be required to be reported in two jurisdictions.

The associations claim that the confusing process around the development of the Cross-Border Rule and the CFTC's lack of coordination with the US SEC or foreign regulatory bodies is having serious consequences. Non-US counterparties have become increasingly reluctant to transact with US-based dealers, US-based corporations, and other US-based derivatives end users, and even with non-US dealers that have US personnel involved in the transaction.

IMPLICATIONS FOR ASIA

With the focus on equivalence between Europe and the United States, Asia's situation may have received less attention but involves greater complexity.

The US and European rules focus on non-FX swaps, and they contain plenty of exemptions for FX swaps and forwards because less risk is associated with these short-term instruments. Asia-Pacific accounts for only a small percentage of global notional interest rate swap volume, but it accounts for a significant percentage of FX swaps. Yet, the language in the US and European rules affects Asia directly.

Hong Kong, Singapore, Tokyo, Australia, and China are in direct competition with each other, so Asia has been probably the least harmonized part of the world. But that situation has changed because the region's regulators are demanding that their concerns be heard.

"We're seeing letters being written jointly for the first time," says Landless. "We're seeing coordinated responses, under the IOSCO Asia-Pacific Committee, telling the Europeans to loosen up their equivalence philosophy when they're looking at Asian CCPs."

Some of the thinking is cutting edge. Most Asian jurisdictions allow swaps dealers to use a clearinghouse in a foreign country. The Australians allow the data to be reported to a repository outside Australia. Singapore and Hong Kong decide independently—without going through a protracted process like that of the CFTC or the EC—whether another jurisdiction's regulations are equivalent to their own. Nevertheless, in some jurisdictions trade reporting is illegal because it violates secrecy laws.

EVOLUTION AND ADAPTATION

On 21 December 2013, the CFTC approved Australia, Canada, the European Union, Hong Kong, Japan, and Switzerland for "substituted compliance purposes" with respect to certain swap provisions of Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The comparability determinations apply to a broad range of entity-level requirements. For the European Union and Japan, the CFTC also approved substituted compliance for several key transaction-level requirements. In January 2014, the CFTC gave no-action relief to non-US swaps dealers regarding compliance with the transaction-level requirements until 15 September 2014.

The CFTC also signed a memorandum of understanding (MOU) with the Monetary Authority of Singapore stating that the two regulators will cooperate and exchange information in the supervision and oversight of regulated entities that operate on a cross-border basis in the United States and Singapore. The scope of the MOU includes markets and organized trading platforms, central counterparties, trade repositories, intermediaries, dealers, and other market participants.

As for Europe, the European Market Infrastructure Regulations rules on trade reporting are effective beginning 12 February 2014. However, the revised Markets in Financial Instruments Directive rules, which govern the European derivatives trading platforms known as "organized trading facilities," will not be implemented until the end of 2016.

The jurisdictions' rules may not contain many differences, but in some cases, the dissimilarities are fundamental. The debate continues on just how harmonized the rules must be.

Sherree DeCovny is a freelance journalist specializing in technology and finance.

BEWARE OF DOG

**Are tougher
compliance
standards more
bark than bite?**



By Maha Khan Phillips

Regulations around compliance and risk are changing the investment management landscape. Although public scrutiny has primarily focused on investment banks, asset managers have not remained unscathed. Asset managers have had to rethink their approach to compliance and operational risk management.

“Everyone is getting their houses in order. But after the London Whale, nobody wants to talk about it. The emperor has no clothes on. Nobody wants to be caught out when the next scandal hits,” suggests the head of public relations for one UK asset management company.

Regulation was a “game changer” for asset managers in 2013, according to Ernst & Young. Its report *2013: The Year of Compliance* highlights a number of key observations. First, the reporting procedures that many firms, even midsize players, had in place before the financial crisis are probably insufficient to effectively handle the complexity of data aggregation and analysis that is now required in the new regulatory environment.

Since the height of the financial crisis, the US Securities and Exchange Commission has charged more than 150 firms and individuals with regulatory offenses and has collected \$2.6 billion in fines. The Commodity Futures Trading Commission has expanded its jurisdiction, and the European Union’s Alternative Investment Directive is also adding new legal and compliance requirements.

Thus, the Ernst & Young report points out, “the added costs of compliance could not have come at a less opportune time—during the nascent industry recovery following the financial crisis, when many firms were looking back at excessive infrastructure spending made during the past bubble. With the benefit of hindsight, many firms now see their past spending during the exuberant days of the bubble as poorly planned.”

When Deloitte surveyed 86 chief risk officers or their equivalents from asset management businesses around the world, 94% of respondents said that their boards and/or executive management teams are spending more time on oversight of risk compared with five years ago. According

Illustration by Jesse Lefkowitz

to Deloitte's findings, published in the report *Exploring Evolving Risks and Challenges*, 80% of risk officers said that their boards now review and approve their organizations' risk management policy and/or enterprise risk framework as well as their risk appetite statement.

Two-thirds of the institutions reported an increase in spending on risk management and compliance. A majority of institutions participating in the survey (58%) plan to increase their risk management budgets over the next three years, and 17% anticipate that there will be annual increases of 25% or more.

Less than 25% of institutions, however, rated their technology systems as extremely effective or very effective, and 40% were concerned about their capabilities in the management of risk data.

Gordon Barnes, manager of business risk management and operational investment management due diligence at Cambridge Associates, now spends much of his time looking at how managers are preparing for new regulation, whether it is about ramping up technology or hiring new people. "People have hired and added to the compliance teams," he says. "The other thing we are seeing is that a lot of managers have engaged third-party compliance consultants or experts because there is so much to keep up with and they want to make sure they aren't missing anything."

He believes that the challenge for asset managers is to integrate compliance into their daily activities. "It is not just about portfolio managers; it is about everyone at the firm," he says. "When you take an action, you should always be thinking at the back of your mind, how does this affect risk and compliance considerations? The chief executive can't possibly police every action taken on a day-to-day basis. He or she needs to be informed and be a leader, but everyone else needs to do their part, as well."

Now, he suggests, chief compliance officers often sit on the trading floor so they can see what's going on: "Chief compliance officers are obviously there for regulation, but they are also there to help the staff understand that compliance isn't a scary thing. They are there as a resource."

CULTURE

However, industry commentators say no compliance effort works without the right management culture. "Scandals will always happen," says Amanda Rowland, partner and head of asset management regulation at PricewaterhouseCoopers (PwC) in London. "But you reduce the number of incidents when you have the controls to pick up when someone does something wrong. But also, it's about having the culture and

values in a business that demonstrate integrity."

PwC's own survey on the compliance function of UK asset management firms revealed that asset management firms and companies are still nervous about compliance: 100% of firms believe that there is a lack of appropriately qualified compliance staff available in the market, and the majority do not see this changing over the next two to three years. Interestingly, 35% of asset managers do not think that their compliance function is currently in a position to cope with future demands.

"Regulators are trying to get to a place where compliance and risk have a key role in the business," says Rowland. "The cultural mindset should be one which stops errors and fraudulent transactions from ever happening, rather than having compliance and risk as a line of defence in case something goes wrong."

FUTURE SCANDALS

So, has anything really changed?

"Ultimately, this is all window dressing without the ultimate managerial input," says one consultant who wished to remain anonymous. "An organisation which sidelines compliance and doesn't allow it to have an active seat at the table will never get anywhere. Investment managers aren't stupid. They get very good at telling investors what they want to hear, and they tick the right boxes. But that doesn't mean that, underneath, they actually do anything."

But others take a very different view. "I do think the overall trend is a positive one for asset managers. They generally are able to sustain and control a certain level of compliance, which is important at the moment," says Chris Addy, CFA, president and chief executive officer of Castle Hall Alternatives, a Canadian operational due diligence specialist.

He notes that an important compliance provision is to have a segregation of duties between front office research and back office due diligence. "As an investment adviser, what happens if I find a fund that I think will post stellar performance but may not be exemplary in terms of operations?" he asks. "In cases like that, segregation is very important."

The firm looks at 20 risk factors—divided among the business risk for the asset management company, the legal risk of the fund structure, and the operational risk of the control environment—for its investor clients. "The trick," says Addy, "is to make sure that the compliance function within any firm is genuinely empowered."

Maha Khan Phillips is a financial journalist based in London and author of the novel *Beautiful from This Angle*.

**THE TRICK
IS TO MAKE
SURE THAT THE
COMPLIANCE
FUNCTION
WITHIN ANY
FIRM IS
GENUINELY
EMPOWERED.**

THE DATA WE HAVE PRODUCED SHOW THAT OVER QUITE A LONG PERIOD OF TIME, THE BANKS' OWN RISK MANAGEMENT PROCESSES OR SYSTEMS MUST HAVE BEEN DEFECTIVE TO THE TUNE OF BILLIONS OF POUNDS.

How Much Does Misconduct Cost Banks?

Just how much money do banks lose by having to pay out for bad behavior? The London School of Economics (LSE) attempted to find out. It analyzed the fines and sums that banks have had to pay out for inappropriate practices, such as manipulation of LIBOR or the mis-selling of payment protection insurance in the United Kingdom.

The LSE discovered that the top banks have had to pay out a total of £150 billion since 2008.

"We wanted there to be some sort of objective assessment about how well the banks are doing when they say that they are trying to restore public trust and be more ethical," explains Roger McCormick, visiting professor at the LSE, who spearheaded the project. "We did think it was strange that nobody was compiling any really useful information about conduct costs. When we looked at places where the banks were supposed to report conduct costs, such as in sustainability reports, we were drawing a blank because they weren't putting the data out."

However, most of the information is available in the public domain; it's just well hidden, not very accessible, and certainly not available in aggregate form. With limited resources, the group narrowed the focus to 10 well-known banks and covered the five-year period. Researchers trawled through regulators' reports and accounts, and

other "inadequate material." "The process itself of trying to get this information shows up the inadequacy of the situation as it stands," McCormick explains. "Banks get away with providing far too little information."

Five of the banks responded to requests for help with information. "Of the five we talked to, we had quite good discussions," he says. "They were of varying quality, inevitably. Of those five, only one came back with detailed comments about the figures we gave them before the deadline. That was Santander. The patchwork nature of the response from the banks themselves was interesting. Some of the banks that I thought would be more obstructive or evasive were more interested in having a conversation, whereas others were not constructive at all."

The group wants to build on this initial project. "The data we have produced show that over quite a long period of time, the banks' own risk management processes or systems must have been defective to the tune of billions of pounds," says McCormick. "Have they made steps to improve on that? The obvious response is that we must very much hope so. How do we check it? That's a great concern for the management of banks and their shareholders and for the rest of us—because it is a matter of public concern."

Bank Conduct Costs (2008–2012)

Bank	Total Costs, 2008–2012 (£ billions)	Provisions and Contingent Liabilities as of	
		31 Dec. 2012 (£ billions)	Total (£ billions)
Bank of America	30.41	23.58	54
JPMorgan Chase	18.52	6.13	24.65
UBS	23.69	0.95	24.65
Citigroup	8.71	3.13	11.84
Lloyds Banking Group	5.87	3.37	9.24
HSBC	4.03	2.22	6.25
Barclays	3.06	2	5.06
Royal Bank of Scotland	1.73	2.51	4.24
Santander	2.7	1.44	4.14
Goldman Sachs	1.76	2.19	3.95
Total	100.48	47.52	148.02

Note: These figures should be read subject to the points made under "Notes on the Interpretation of the Figures," which can be found at LSE Blogs.

Source: Roger McCormick, "Conduct Costs: Definition and Reporting Issues," LSE Blogs (<http://blogs.lse.ac.uk/conductcosts>).

QUALITY Control

Can new research help investors
define a "quality" stock?



By Susan Trammell, CFA

Unless you're a deep-value investor, you're probably already filtering for quality in your value screens. Benjamin Graham spoke of hunting for quality stocks at a reasonable price, so quality investing isn't new. But where quality fits into a trading strategy or even how it is defined differs among asset management and research firms. We can take a stab at it by describing quality investing as a framework for discerning a company's potential for strong future profitability.

Although ranking stocks on the basis of a quality score may not be new, the practice was given a shot in the arm in the early 2000s with the collapse of firms like Enron, whose market caps far exceeded their fundamental valuations. Joseph Piotroski's so-called F-Score, introduced in 2002, and Joel Greenblatt's "magic formula investing," which debuted in 2005—and their variations—became popular tools for analyzing companies' financial health.

Portfolio managers have their own magic formulas for testing the strength of firm characteristics that drive returns. But whether the formulas are newly minted or have pedigrees that go back decades, they continue to evolve on the basis of new research, further backtesting, and tail events. We looked at some recent research into quality investing to report how the findings are shaping investment strategies at some representative firms.

EVOLUTION OF A PREDICTIVE VARIABLE

Although growth investing and value investing have at times outperformed each other for long stretches, value has outperformed growth over the long haul. According to the two general theories about the value premium, value stocks are discounted relative to their fundamentals because the market is pricing in the presumption of unperceived risk in those securities or because the market has erroneous expectations about future earnings. Eventually, the market corrects its error and fully prices in quality, and so the undervalued stocks outperform in the future.

Measures of firm quality may help investors analyze sources of risk or improve estimates of future profitability. Holding all else equal, similarly priced firms with lower operating risk and higher, more stable profitability should generate higher average returns than unprofitable firms. Thus, screening for quality can help improve value-oriented trading strategies. This conclusion is counterintuitive to popular explanations of the value premium.

Robert Novy-Marx, a finance professor at the Simon Graduate School of Business, University of Rochester, New York, was playing with some theoretical models related to the value premium when he began to focus on the ratio of cost of goods sold (COGS) to assets. Although prior accounting studies had looked at the revenue-to-assets ratio as a predictor of future profitability,

there was no research on gross profitability, which Novy-Marx defines as revenues minus COGS, scaled by assets. Because gross margins are driven by pricing power and asset turnover measures capital productivity, multiplying gross margins by asset turnover should have greater power as an explanatory variable than either ratio alone.

In “The Other Side of Value: The Gross Profitability Premium” (*Journal of Financial Economics*, 2013), Novy-Marx shows that controlling for gross profitability helps explain a wide range of trading strategies and most earnings-related anomalies. The data suggest that gross profitability has roughly the same power as the ratio of book value to market cap (a basic ratio for identifying under- or over-valued securities) in predicting the cross-section of average returns. Moreover, the ratio of gross profits to assets was found to be stronger than other earnings variables, such as free cash flow or EBITDA, in predicting the relative performance of various stocks.

THE GROSS PROFITABILITY PREMIUM

In the data, gross profitability is a powerful predictor of long-run growth in gross profits vis-à-vis net sales, earnings, free cash flow, and dividends. In other words, sorting a value-oriented group of stocks on gross profitability is essentially a growth strategy. Profitability strategies sell firms with a higher cost of doing business (essentially, those with higher COGS) and acquire firms that use assets more productively. Sorting a group of value stocks on gross profitability ranks stocks by growth prospects. Novy-Marx observed that a portfolio of value firms with good growth prospects has significantly higher average returns and lower volatility than a portfolio of value stocks with poor growth prospects.

To consider the performance of value-weighted portfolios sorted on profitability, Novy-Marx examined portfolios constructed from a large sample of NYSE equities over July 1963–December 2010 and sorted into quintiles on the basis of gross profitability. The portfolio of stocks with the highest gross profitability produced an average excess return relative to the portfolio of stocks with the lowest gross profitability of 0.31% a month, with a test statistic spread of 2.49—despite the fact that the strategy was a growth strategy.

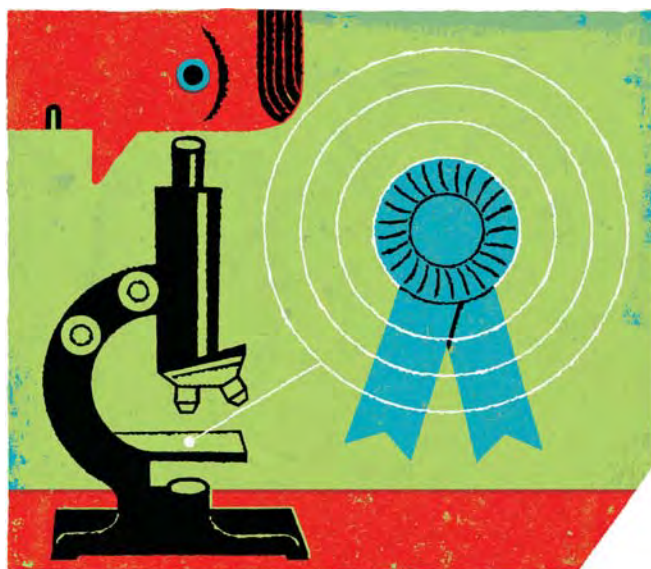
Adding a profitability strategy to an existing value strategy also reduces overall portfolio volatility—despite doubling the investor’s exposure to risky assets. The monthly average return to the value strategy is 0.41% a month, with a standard deviation of 3.27%, compared with a standard deviation of 2.94% for the highest-profitability portfolio. An investor using the two strategies together would capture both strategies’ returns, 0.71% a month, with no additional risk.

Profitability generally performs well in periods when value performs poorly, and vice versa. The mixed profitability/value strategy never had a losing five-year period over the sample. Because the performance of strategies based on gross profitability is strongly negatively correlated with value, including the ratio of gross profits to assets as a quality consideration alongside valuation signals can provide a hedge for value investors.

TRUE ECONOMIC PROFITABILITY

In the new economy, where intellectual capital may be a company’s most valuable asset, the ratio of gross profits to assets picks up on dimensions of growth that valuation methods constructed on book values may miss. Gross profitability is unencumbered by bottom-line distortions caused by classifying costs as operating or capital expenses. It may also be less susceptible to window dressing than other measures of profitability, such as operating or net earnings.

“Analysts have focused on earnings quite a bit as a measure of profitability, but I don’t think it is very informative. It treats many things that I think of as investment—things you should be doing because they increase your future profitability, like investing in your labor force—as expenses,” says Novy-Marx. “Such expenses reduce GAAP earnings, making the company appear less profitable. Gross profits is the cleanest accounting measure of true economic profitability.”



Novy-Marx’s research on gross profitability has been cited by Dimensional Fund Advisors (DFA) and AQR, among other firms. DFA has long looked at the relation between current profitability and subsequent returns. In “Profitability, Investment and Average Returns” (*Journal of Financial Economics*, 2006), Eugene Fama and Kenneth French, who are consultants to DFA, examined profitability in the context of the valuation equation and investments. Around the time the study was published, DFA started to exclude some companies that were trading at high prices and that had very low profit levels or cash flows.

“There are several measures [of profitability] that work well empirically for this purpose,” Eduardo Repetto, co-CEO and chief investment officer of Austin, Texas-based DFA, says. “At the time, we did not have a unifying view as we have now. After analyzing many of them, we felt very comfortable with direct profitability—or, as Ken and Gene call it, operating profitability—as a measure of recurring profits scaled by the company book value, as a proxy for expected profitability.”

Illustration by Timothy Cook

DFA computes direct profitability as operating income before depreciation and amortization minus interest expense, divided by book value. In the white paper “Applying Direct Profitability to Value Stocks” (2013), Gerard O’Reilly and Savina Rizova reported that a portfolio constructed of high-profitability value stocks produced an average annual return of 17%, compared with an average annual return of 11.7% for a portfolio of low-profitability stocks, over 1975–2012. Direct profitability’s predictive power appears to be even more robust in other developed markets and in emerging markets.

“The insights gleaned from the valuation equation are very important,” Repetto says. “They give you a framework on what to look for and what should be related to the expected return of a company.”

BUILDING A SYNTHESIS

In their working paper “Quality Minus Junk,” Cliff Asness, Andrea Frazzini, and Lasse Pedersen hypothesized that there are four drivers of quality—profitability, growth, safety, and payout—and that, all else being equal, stocks with a higher degree of each of these characteristics should command a higher price. (These measures are drawn from the literature, including the work of Novy-Marx, who has consulted with the Greenwich, Connecticut–based AQR.) They then constructed a trading strategy that is long high-quality stocks and short low-quality stocks to test whether high-quality stocks significantly outperform low-quality stocks.

“We combed the literature and synthesized four lines of research,” Asness says. “These are the things you should pay more for, regardless that some may be offsetting. In theory, every company shouldn’t sell for the same multiple when there’s a very low price-to-book. Not all companies are equal.”

Three to six measurements were collected for each of the four quality factors. These measurements included gross profits over assets (profitability), five-year growth of return on equity (growth), low idiosyncratic volatility (safety), and equity net issuance (payout). A single quality score was calculated for each stock in each month for a large dataset of companies in the United States (starting in 1951) and 24 other countries (starting in 1986).

In a preliminary analysis, Asness, Frazzini, and Pedersen examined whether the quality characteristics were persistent over time and found that stocks categorized as high quality at time t tend to remain high quality up to 10 years later. The authors also examined whether quality is related to stock prices. Using regression analysis, they found that quality is positively related to stock prices, even when including additional control variables (firm size and previous returns) and country–industry fixed effects.

They then built six stock portfolios on the basis of size (large and small market capitalization) and three quality levels: the top 30%, the bottom 30%, and the middle 40%. The researchers’ strategy went long quality stocks (those in the top 30%, with large and small market cap) and short “junk” stocks (those in the bottom 30%, with large and small market cap). The returns of the QMJ (quality minus junk) factor strategy were positive and significantly different from zero for both the US sample and the international sample.

QUALITY IS A WAY TO ADD VALUE OVER TIME, ESPECIALLY WHEN YOU MARRY IT WITH VALUATION.

Finally, the researchers conducted a time-series regression to determine whether variations over time in the price of quality are due to measurement noise or reflect prevailing market conditions. The regression coefficient associated with the price of quality was, as expected, negative and significant, which means that a higher price of quality in the present is associated with lower future expected returns for the QMJ factor portfolio. This result shows that variations in price of quality are not driven by noise alone.

“There is little rational justification for why high-quality stocks should command a high return,” Frazzini says. “In the paper, we show that despite earning a large return premium, high-quality stocks appear safer, not riskier, than junk stocks. This is hard to reconcile with a risk-based explanation of the quality premium. In short, the high returns earned by quality stocks are still a puzzle.”

Adds Asness: “We find that high quality is associated with high prices, but not high enough. As a result, high-quality stocks earn high subsequent returns. We believe quality is different enough to crack the big time of anomalies—market, size, value, and momentum. We advocate adding QMJ as a fifth factor to the model.”

A FUNDAMENTAL APPROACH

MFS has stayed true to its roots as a fundamental bottom-up investment company since its founding in 1924. Most of the Boston firm’s investment styles are quality oriented. In the white paper “Quality and Value: The Essence of Long-Term Equity Returns” (October 2013), Katrina Mead, CFA, Jonathan Sage, CFA, and Mark Citro presented their findings from a review of the 1,000 largest US equities (by market cap) over 1975–2013. Value was a higher driver of performance than quality, but companies that were both high quality and inexpensively valued with respect to fundamentals delivered the most consistent outperformance. Over the 38-year period, owning stocks that met the high-quality/low-valuation criteria would have resulted in cumulative excess returns of nearly 432%, or an annualized out-performance of more than 510 bps.

“When we wrote the paper, we were trying to quantify how much value a strategy that was focused on both quality and valuation could have added historically as compared to ones focused on just quality or just valuation. To capture the quality characteristics, we focused on quantitative metrics that MFS broadly equates with quality companies,” says Mead, a member of MFS’s large-cap US and global value portfolio management teams. “We have developed an appreciation for those attributes that lead to outperforming portfolios and reduced volatility. Quality is a way to add value over time, especially when you marry it with valuation.”

Mead, Sage, and Citro used three quantitative characteristics that correlate well with characteristics of high-quality companies that MFS's fundamental process identifies. Return on equity (ROE), stability of ROE, and balance sheet strength capture company characteristics that are consistent with those that MFS's investment team considers high quality. Mead walked us through each metric.

Although return on invested capital (ROIC) may be a better metric than ROE for evaluating the level of returns a business is capable of generating over time, ROIC is more labor intensive to compute and isn't available historically for a large subsection of companies in the market. In contrast, ROE is readily available for a majority of companies going

INVESTORS UNDERAPPRECIATE HOW SUSTAINABLE AND PERSISTENT THE RETURNS OF HIGHER-QUALITY COMPANIES TEND TO BE.

back many years. The variability of ROE over time captures how consistently companies have generated returns that exceed their cost of capital. A strong balance sheet is an important protector of a franchise—it puts a company in a better financial position to control its own destiny.

"Highly leveraged businesses don't have a great deal of flexibility. When something unexpected happens, it can put a lot of stress on the company to do uneconomic things to satisfy creditors," Mead says. "Having a good balance sheet helps to increase your confidence level that the company has the ability to sustain itself over time. It's an important source of downside protection." The ratio of assets to equity is used to measure the strength of a company's balance sheet and is readily available for a large number of companies going back many decades.

Quality alone is insufficient for outperformance. The effect of owning high-quality stocks regardless of valuation can be startling. When the authors shortened the time frame to 1975–1980—excluding the period that coincided roughly with the bull market propelled by the Nifty Fifty, which resulted in extended valuations for the highest-quality companies—the cumulative excess returns from a quality-only investment strategy soared to 24%, compared with only 2.1% over the original 38-year period. Investing in quality without considering valuation would not have been a winning strategy.

"I think investors underappreciate how sustainable and persistent the returns of higher-quality companies tend to be," Mead says. "If you can own that persistence, the compounding effects over time can be significant. We believe the opportunity is getting better as the investment time frame of the market becomes shorter and shorter term."

COMPETITIVE MOATS

With an ever-greater proportion of the valuation process taking place behind computer screens, investors are looking for quantitative data that will help them better

assess—without meeting managers or talking with competitors—what a business is capable of.

GMO makes a strong case for using quantitative measures as a way to identify companies that operate in what Warren Buffett calls *competitive moats*. These companies exhibit persistent, above-market profitability because of such sustainable advantages as brand recognition, intellectual capital, and entrenched networks. GMO argues that these companies are often overlooked by the market because they are stable generators of profits that lack volatility and are thus penalized by risk takers in the market. In theory, high-quality stocks may be underrewarded in the short term. When the market realizes its error and prices in the premium that high-quality stocks should command, investors are rewarded.

Based in Boston, GMO launched its first quality fund in 2004, but it dates its fundamental approach to quality investing to the early 1980s, a watershed period when many managers took a fresh look at their models as they exited the bull market of the late 1970s. Today, GMO's valuation framework has three anchors: historical profitability as measured by ROE, return on assets, return on sales, and levels of profit margins throughout the income statement; profit stability throughout economic cycles; and the use of leverage to generate earnings.

"All companies introduce leverage, but we're trying to get as nuanced a view of leverage as possible," Kimball Mayer says. "We're looking at operating leverage, the treatment of leases, and whether the company is using financial engineering to lower the volatility of its earnings. We find that sustainable higher profitability is generally associated with a minimal use of leverage."

GMO's white paper "Profits for the Long Run: Affirming the Case for Quality" (June 2012), which Mayer co-authored, theorizes that the factors that predict the survivability of corporate profitability under any scenario can be identified *a priori*. The paper presents the relative returns of the largest 1,000 companies (by market cap) in the United States over 1965–2011 and of all companies in the EAFE Index over 1985–2011 with respect to profitability, profit volatility, leverage, a combined quality score, and beta exposure. All companies were sorted into approximate quartiles and their relative performances compared.

The low-risk portfolio outperformed the high-risk portfolio across both markets in each factor, the combined quality score, and beta.

RED FLAGS

Although Research Affiliates has published little of its research on quality because of its proprietary nature, the leader of that research team, Vitali Kalesnik, shared some of the firm's findings in correspondence. When studying quality, the Newport Beach, California-based firm uses composite signals for three factors—distress, growth, and accounting red flags—and combines the signals with perennial value measures to differentiate high-quality stocks that have low market prices relative to their fundamentals.

First, financial distress. On average, firms that have lower return volatility and higher debt-servicing capacity, rely less

on external financing, and are able to pay out dividends or repurchase stocks—and older firms—are less distressed. Using portfolio tests, Research Affiliates has observed that distressed value stocks have a 14.40% annual return, on average, compared with nondistressed value stocks, which have a 15.75% average annual return. As a result, screening for distress increases the portfolio return by about 135 bps and significantly lowers portfolio volatility from 22.36% to 17.80%.

Next, the firm constructs a composite signal of growth prospects. Profitable firms with a solid track record of consistent earnings growth, stable levels of inventories, and investments in intangibles related to future profitability, such as branding and R&D, are likely to be growing firms. The portfolio analysis is then repeated. Excluding firms with poor growth prospects adds 196 bps while decreasing volatility from 21.12% to 18.95%.

Finally, Research Affiliates looks for accounting red flags, defined as persistent deviations of earnings from cash flows. The firm uses several accounting variables—including accruals, net operating assets, change in accruals, and earnings smoothness—as measurements. Among value stocks, excluding firms with questionable accounting increases the portfolio return by 225 bps and reduces volatility from 20.21% to 19.78%.

The value added by screening for the three quality factors appears to be consistent when the screening is repeated in studies of the firm's international, small-company, and

emerging-market portfolios.

Some question whether quality should even command a premium. Quality should earn incremental rewards only when it takes the market by surprise, says Rob Arnott, CFA, principal at Research Affiliates. "The risk of default is probably not going to take anyone by surprise, so that probably won't earn outside returns. Growth is pretty fully priced. The market probably doesn't pay close enough attention to accounting manipulation. Each quality factor may have a different impact on future returns. Are we likely to be rewarded for any of these three?"

FOR WHAT IT'S WORTH

The classic fundamental shop that builds a portfolio of carefully selected stocks is becoming rarer. Indexing, quantitative models, and momentum investing are rising themes as managers seek to construct best-of-breed portfolios. New research will continue to shape quant-driven screens to assess firm quality. But even these tools may have their limits.

"We're constantly doing research and tweaking our models because models can be fooled," GMO's Mayer points out. "Industry groups may benefit from extraordinary cycles as homebuilders did during the housing bubble, and so human intervention is needed. That said, it's pretty hard to become a quality company and it's hard to 'un-become' a quality company. High-quality companies are long-term generators of capital. That's worth something to me."

Susan Trammell, CFA, is a financial writer based in New York City.

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BIT BY BIT

Has Bitcoin opened the door to a world of decentralized money and cryptocurrencies?

By Nathan Jaye, CFA

To some investors, Bitcoin may be an opportunity to generate a little extra return. Other observers see it as an unsustainable fad. And still others argue that something much greater has begun—an era of monetary innovation, decentralized money, and cryptocurrencies. In a dual interview about these and related issues, Andreas Antonopoulos (author of the forthcoming book *Mastering Bitcoin*, adviser to Bitcoin startups, and co-host of the Internet radio program *Let's Talk Bitcoin!*) debates the significance of Bitcoin with Michael Falk, CFA (partner at Focus Consulting Group and chief investment strategist of Mauka Capital LLC).

What does 2014 hold for Bitcoin?

ANTONPOULOS: I think we've touched on a lot of pent-up innovation. In the financial services industry, innovation requires permission, and with Bitcoin, you no longer require permission. As a result, we're seeing this tsunami of startups that are innovating at the edges of the Bitcoin network, providing new services and new financial solutions.

A lot of that innovation is not just on the currency side, but it's on Bitcoin-as-a-platform for providing a whole host of other capabilities and services.

FALK: I would agree that the popularity of Bitcoin—while I do not believe it is going to flourish—has stoked some potential innovation. What remains to be seen is what forms those innovations take and whether they are beneficial to society as a whole.

How do you feel about Bitcoin as an investment?

FALK: I don't care for it myself. In terms of classic economic supply and demand, there is a limited supply of Bitcoin. When you look at some of the numbers, it appears that roughly the top 500 holders of Bitcoin own some 30% of what has already been "mined." We have a supply-demand constraint, which is perhaps increasing the value of it beyond what it should be, and that's part of the reason it cannot become an alternate currency.

ANTONPOULOS: I don't see Bitcoin as an investment either. I see it as a currency and primarily as a means of exchange, not as a store of value—although that depends on the country in perspective. It's much more profitable as an investment in the developing world and in countries afflicted by runaway hyperinflation, where Bitcoin offers a safe haven from corrupt governments that other assets cannot offer because of strict currency controls. For those countries, it offers some interesting investment opportunities.

How much acceptance of Bitcoin are we seeing in the investment world?

ANTONPOULOS: What we're seeing at the moment is individual investors who are primarily speculating in Bitcoin because they see the possibility for pretty nice returns. At the same time, I've talked to a number of organizations that are trying to create avenues for institutional money to enter Bitcoin. I've talked to five or six organizations that are trying to set up funds that will



allow institutional investors to buy a Bitcoin—either managed funds or, more interestingly, index-based funds that simply provide a direct avenue into buying the currency, almost like an ETF.

How will Bitcoin integrate into existing structures of the financial industry?

ANTONPOULOS: I see it as a two-stage process. It's very similar to what happened in the early days of the Internet, when the Internet was actively competing against telecommunication companies and disrupting their business models. At first, there was massive resistance from the communication companies. Eventually, some of them cooled off and tried to co-opt and adapt it. Today, all telecommunications run on top of the Internet rather than the Internet running on top of these telecommunication systems.

That was not something that anybody could see happening, but it did. I think Bitcoin's integration with the financial system is going to start with smaller banks that want to start dabbling in Bitcoin. Then, their internal operations will start offering services around Bitcoin to their customers. They'll start co-opting the idea that if this is going to disrupt the financial industry in any way, they'll be one of the early adopters (and at least gain from some of the disruption and just not simply sit on the sidelines and get disrupted).

What are potential issues around taxation?

FALK: If a digital currency is decentralized and private to the user, then we now have money flowing around—if I can use the term “money”—and this money is not going to be traceable to an individual. Well, if we don't have money traceable to an individual, then that upends our entire tax system.

I'm not going to color that as a positive or negative—it's just a fact. If we were to move towards a freed currency, then the tax system would have to accommodate it in some different ways, such as a sales tax or consumption tax or VAT [value added tax]—something away from an income tax. Otherwise, there would be no way to collect. We would need a significant change in infrastructure to be able to allow it to function on a bigger scale, which is one of the reasons I doubt its efficacy.

ANTONPOULOS: It is a fact that we now have decentralized money that cannot easily be traced and is not tied to individuals. It is digital cash. The invention of the modern income taxation system, which is less than 100 years old, depends on being able to track money flows in every stage of every transaction. It's really a short-term experiment, and it's about to get disrupted. Governments will have to adapt to a new reality where people revert back to systems that are more like cash and to systems that cannot be tracked to individuals. That was the case 100 years ago, when people didn't have payroll taxation, when they didn't have income taxation that was tracked by governments.

This modern experiment of income tax is something that is not going to be easily sustainable in an environment where individuals can not only transact peer to peer but, more importantly, transact peer to peer on a global basis. So, it transcends borders too. Yes, governments will have to

AT THE MOMENT, WE HAVE MORE THAN 100 ALTERNATIVE CURRENCIES IN THE CRYPTOCURRENCY SPACE, RUNNING IN PARALLEL TO BITCOIN.

adapt. I don't know if that's a good thing or a bad thing, but it is a fact. We're going to have to find other ways to gain the revenue for the things that we want to expend on society.

FALK: Even if it were possible for governments to adapt—which I have doubts about with our current situation—it would be a Herculean effort to make that work. The size of the government today and the potential needs of the citizenry of modern countries are much, much greater. The ability to pay for police, pay for fire [departments], and pay for education would fundamentally change in such a way that would be more than just destabilizing.

ANTONPOULOS: Yes, government size will have to change. We're going to have to find new solutions. However, one of the interesting things is that programmable money actually offers solutions. One of the discussions going on at the moment is the possibility of using “cryptocurrency” to do direct income redistribution within the block-chain system. What that means is creating algorithmic solutions to redistribute cryptocurrencies—from the holders that have the most to the holders who have the least—in an algorithmic and predictable way that cannot be corrupted.

So, with challenges also come solutions that can affect other aspects of society. But the existing system of national currencies that are tightly controlled by central banks and allow a massive income taxation that is mostly focused on the lower-income class is going to be disrupted.

FALK: Who makes the decision to make the algorithmic reprogramming?

ANTONPOULOS: The decision is made by the programmers of the cryptocurrency. By adopting it, you vote that you like it.

FALK: You're saying it's the inclinations of those programmers, whoever they are, public or private? How can the world or whichever country [is affected] be comfortable with this group—behind the curtain, so to speak—making that decision for everybody else?

ANTONPOULOS: That's not how it works. I'm talking about people offering in an open market a number of competing solutions, all of which are openly developed in a completely transparent way, and letting individuals have a choice between currencies. This is the same discussion we're having about the Internet: “What will happen if everybody can just speak up without any editorial control?” The end result is you have a much broader marketplace of ideas, and people start making better choices. Currencies are now a free marketplace, and people will make choices about which currencies they want to use. And they'll make those choices not only based on value but also based on the

WHAT YOU'RE TALKING ABOUT IS SMALL POCKETS OF POPULATION IN THE 193 COUNTRIES THAT DON'T HAVE THE WORLD RESERVE CURRENCY. IF ONLY A PERCENTAGE OF THE POPULATION OF THOSE COUNTRIES ADOPTED IT, YOU'D HAVE HUNDREDS OF MILLIONS OF PEOPLE AROUND THE WORLD.



political considerations that are encoded in the algorithm.

Bitcoin itself encodes a very specific political consideration. It encodes Austrian economics' sound-money principles of limited supply. That's not the only way you have to do it. There are other ways you can do it. Essentially, we're talking about algorithmic solutions to these key monetary decisions, and quite honestly, I'd rather trust the programmer, where I can see the code and how it works, than Ben Bernanke, whom I can't vote for and who runs the Fed without accountability.

FALK: A wisdom-of-the-crowds approach sounds good, but it requires four basic enablers, of which at least three are presently insufficient with your programmers. First, there's not a diversity of opinion. Second, there are not independent opinions, opinions that aren't determined by those around them. And third, the wisdom may not be as decentralized as you described if all the people are of a common local knowledge, even if from different localities. I'm not certain that both your programmers as well as central bankers are not problematic.

What would it be like to have multiple digital currencies?

ANTONOPOULOS: At the moment, we have more than 100 alternative currencies in the cryptocurrency space, running in parallel to Bitcoin. In 2014, I think we're going to see more developments within Bitcoin that allow you to layer other currencies. If you think of Bitcoin as a network, then Bitcoin as a currency is the first app. The Bitcoin network was the Internet. Bitcoin the currency is e-mail. Now, we're inventing the next layers, the web, things that will go on top of it.

Within Bitcoin the network, you can run currencies other than Bitcoin. That allows for other currencies to ride on top, to take advantage of the network effect, take advantage of the "hashing" power that secures the network and create essentially a free marketplace where people have a very, very broad range of choices in currencies that are all global, that are fungible, and that are all digital and electronic. That will allow for a very different approach to what it means to choose a currency, what money means to a society, and the relationship between society's money and the state.

Is society ready for these kinds of changes?

ANTONOPOULOS: Society's not ready for a lot of things. Society is not ready for global warming. Society is not ready for peak oil. Society's not ready for all kinds of choices in a new money and currency system. All those things are happening anyway. It's simply a fact that this technology is now here. As an invention, it happened and you can't un-invent it. I don't think US society is ready for it because this society has a world currency that's relatively stable and that, at least on the surface, appears to be solid and hasn't been hit by hyperinflation. But there are 193 other currencies, and most of them are really, really poorly managed.

What kind of adoption are we seeing for Bitcoin in the Third World?

ANTONOPOULOS: When I go to these countries and I talk about this topic, the discussion is not "Why should we use Bitcoin?" They already know why. The discussion is "How do we use Bitcoin?" because they really, really need alternatives. If your country has an unstable currency, your family is losing all of the funds that you have worked a lifetime for, the funds that you hope to bequeath to your family and create a future for them. So, the idea that you might have a choice is less easy for the government to block.

These countries have the technological infrastructure, the literacy, and they have the crisis. All three combined creates a very, very right foundation for these currencies to be adopted.

Can you give an example of this?

ANTONOPOULOS: Well, all you need is an application on your mobile phone. I witnessed a couple of gentlemen in Argentina exchanging escrow funds for an apartment through Bitcoin. They were transacting an entire apartment—just over US\$1 million—in Bitcoin. While they were both residents of Argentina, they both had their funds outside the country in US bank accounts. The idea of doing that transaction with wire transfers and the resulting costs and counterparty risk was too much, so they actually did the transaction in Bitcoin.

These were people in their mid- to late 60s who had no idea how to do any of this. They had a couple of young people helping them figure it out because the incentives were there. That single transaction may have saved them US\$100,000 to US\$150,000 in fees and costs. There's a will, so they find a way.

Do you characterize Bitcoin as a fiat currency?

FALK: I certainly would. How is Bitcoin not just a different kind of fiat currency? And if so, why would we believe that it can't end up with similar problems and challenges over time?

ANTONOPOULOS: It is a different fiat currency. But it instills some controls by predictable algorithm, not by non-accountable bureaucracy. That's the only difference. Otherwise, yes, it's a fiat currency. The fiat behind it is the computational power of the network, not the armed forces of a central government. Other than that, it is a fiat currency, absolutely. It is not backed by anything other than the silicon investments and network effect that give it value and the transactional

utility it has. The only difference is that you can predict how it's going to unfold because it operates on an algorithm that doesn't change, so that gives you a level of certainty and trust in the system because you can't do QE5 with Bitcoin.

FALK: I think that's a very fair statement. The challenge here is that trust. In the US, we bring a very different lens to this question because we have been fortunate enough to have the global reserve currency. That notwithstanding, people will have more faith in the dollar or more faith in the euro or more faith in the yuan based upon what [those governments] may or may not do in the future. The point here is the trust in the transactional utility. Bitcoin would have to gain a substantial level of trust to even become part of a conversation about being a currency.

ANTONOPoulos: I think it's already become part of the conversation of being a currency. There are already probably several million users—but certainly more than a million—in Bitcoin. And because of its transnational reach, you're not talking about a single country switching over. What you're talking about is small pockets of population in the 193 countries that don't have the world reserve currency. If only a percentage of the population of those countries adopted it, you'd have hundreds of millions of people around the world.

Having a limited supply, how much is deflation a risk?

ANTONOPoulos: Unlike traditional currencies, you have the ability of mathematical divisibility of the currency units, which means that you can continue to transact, practically speaking, in smaller and smaller units if a deflationary effect kicks in. Yes, it does have a slightly anti-consumption incentive. It does lead to more of a savings attribute.

FALK: I'm a big fan of savings. My point is that having a slight anti-consumption attribute could be detrimental for capital formation and future growth. In societies that have much less stable or functional currencies, do we want these societies to have a slight anti-consumption attribute? Or do we want them to spend more? I think we want them to spend more. It is a concern to have that savings exist in a form that is not necessarily beneficial for capital formation for a society.

ANTONOPoulos: At the moment, I think Bitcoin is one of those situations where it's almost like a tech sector stock—they're simultaneously investing in the future of the ecosystem and the technology. It's not just savings; it's also investments in some form. There's also a possibility in the future of using Bitcoin within the ecosystem to buy the stock of digital corporations that offer share certificates globally as Bitcoin holdings.

In much of the Second and Third Worlds, the number of people who have access to trade on the stock market is minuscule, so you have the possibility of these people who have now converted into Bitcoin having access not just to a stock market but to a global stock market that crosses borders and can invest in new technologies. That's an interesting possibility. This is not like buying gold bars that you bury in your basement. Just because you have Bitcoins doesn't mean they have to sit around and do nothing.

EVEN TO TALK ABOUT POTENTIAL PROBLEMS IN THE CODE BASE, I THINK, TREMENDOUSLY ERODES TRUST. IT MAY NOT HAPPEN, BUT THE POTENTIAL FOR IT TO HAPPEN, EVEN IF IT'S MINUTE, IS A MAJOR TRUST ISSUE.

FALK: That all sounds great. But that is quite a reach from today, and I don't see us getting anywhere close to that on a large scale in terms of numbers of users.

ANTONOPoulos: I think technologies have a way of surprising us in terms of their speed of adoption.

FALK: Correct. They do. As well as the speed of collapse.

What could derail Bitcoin momentum at this point?

[Editor's Note: This interview was conducted prior to allegations of money laundering against the CEO of a Bitcoin exchange and before the recent cyber attacks on two Bitcoin exchanges.]

ANTONOPoulos: I don't see too many ways that Bitcoin can be derailed by external influences. You can't shut it down. You can't ban it. I think more likely, or somewhat likely, is the possibility of a problem within the Bitcoin code base, but even that would have to be a type of very insidious bug that causes a long-term problem without being noticed and cannot be fixed.

Even in that case, I think you'd have a very interesting phenomenon. If Bitcoin did collapse in that highly improbable scenario of an internal failure, then the very next day, you'd see Bitcoin 2.0 with lots of improvements. All of the people who've already bought into the idea of cryptocurrencies would have a renewed opportunity to jump in on the ground floor. I'd lick my wounds and jump right back in, and I think a lot of people would do that because the core concept of cryptocurrencies and technology persists. To me, that's the main message. Bitcoin the network survives even if Bitcoin the currency falters.

FALK: Even to talk about potential problems in the code base, I think, tremendously erodes trust. It may not happen, but the potential for it to happen, even if it's minute, is a major trust issue. I don't like to forecast, but I expect apathy to start creeping in because this is something that requires people's trust.

So, I see the potential for growing apathy—that it was perhaps an interesting idea but it didn't pan out. I want to be specific. I'm speaking about Bitcoin specifically. I think it makes a lot of sense to have currency transaction potential in this manner for those who are comfortable. I don't see cryptocurrencies on the near-term horizon on anything other than a marginal stage in the world.

Nathan Jaye, CFA, is a member of CFA Society San Francisco.



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The Long, Winding Road to a Uniform Fiduciary Rule

By Kurt N. Schacht, JD, CFA



Representing CFA Institute on the US Securities and Exchange Commission (SEC) Investor Advisory Committee, I recently had the privilege of voting to recommend that the Commission approve a fiduciary standard for investment brokers advising retail customers.

But it still remains a long, winding road. Although the US Dodd–Frank Act gave the SEC authority to create a regulation that would impose a uniform fiduciary duty for retail investment advice, and a January 2011 SEC report recommended that the agency proceed with a rule, the agency failed to take action for more than two years. When the SEC returned to the regulatory proposal in March 2012 and asked for industry and public input on the costs and benefits of imposing a fiduciary rule, it did not take long for tensions to fester along predictable lines.

Brokers—who are currently held to a “suitability standard” and whose commission-based funding models can create conflicts of interest—find themselves on one side of the spectrum. At the opposite end are registered investment advisers, who have long been held to a more stringent “fiduciary standard.”

Meanwhile, the Department of Labor is working on a separate fiduciary rule proposal aimed at brokers who offer retirement investing advice. Not surprisingly, this proposal has been criticized by the broker/dealer industry. A major point of concern is that brokers would have to conform to two separate fiduciary standards. It now appears that the SEC will hold off on any fiduciary rule proposal until the Department of Labor releases its own, currently slated for August. Once again, the road has gotten longer.

The reality is that most investors do not understand the difference between fiduciary and suitability standards, according to a 2008 study commissioned by the SEC (the RAND Study). The study indicated that the majority of typical retail investors were confused about the titles and duties of their financial services providers.

On top of investor confusion, bad investments are often sold because of the high sales commissions they generate. Indeed, the recently released 2014 CFA Institute Global Market Sentiment Survey, which polled CFA Institute members on their outlook for world capital markets in the coming year, again points out the mis-selling of products by financial advisers as the most serious ethical issue facing local markets in the

REFLECTING MEMBERS' SENTIMENTS, OUR JULY 2013 COMMENT LETTER TO THE SEC REITERATED OUR CONCERN ABOUT THE DIFFERENT STANDARDS OF CARE CURRENTLY REQUIRED OF BROKER/DEALERS AND INVESTMENT ADVISERS WHEN PROVIDING THE SAME SERVICES TO CLIENTS.

coming year. (See related article on page 40). We have also studied how countries around the world are trying to deal with the potential for commission payments to motivate inappropriate advice (see related article on page 42).

Reflecting members' sentiments, our July 2013 comment letter to the SEC reiterated our concern about the different standards of care currently required of broker/dealers and investment advisers when providing the same services to clients.

We also maintained that the range of services offered by broker/dealers has evolved over time and the lines defining “advice giving” have become blurred. We do not believe the US Congress envisioned this overlap when it originally established two separate statutory frameworks/standards of care for advisers and broker/dealers. Thus, the SEC should restore the original intent through regulations that clarify that the fiduciary duty standard applies when providing personalized investment advice—particularly to retail investors—regardless of whether the provider is a registered investment adviser, a broker/dealer, or another type of investment professional.

This issue is not merely a US concern. Canada is considering similar action, and both the United Kingdom and Australia already have “best interests” standards.

We will continue to monitor these developments globally and work toward shaping public policy that strengthens investor confidence and market integrity.

Kurt N. Schacht, JD, CFA, is managing director of Standards and Financial Market Integrity for CFA Institute.

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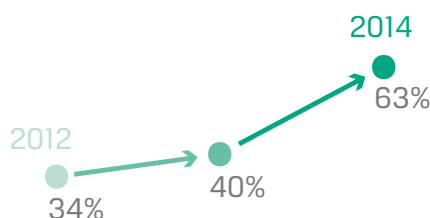
2014 Global Market Outlook: Investment Professionals Optimistic about Economy

By Jamie Underwood

Investment professionals appear increasingly confident that global and local economies will grow in 2014, according to CFA Institute members who offered their views on financial markets, ethical issues, and performance as part of the 2014 Global Market Sentiment Survey (GMSS).

In all, 63% of survey respondents indicated that they think the global economy will expand in 2014 compared with only 40% of members who expressed the same optimism in the 2013 survey (see Figure 1). This sentiment is shared across regions, with

FIGURE 1
Percent of Members Expecting the Global Economy to Expand



members in the United Kingdom expressing the most optimism (78% expecting expansion), followed by Brazil and Germany (74% and 70%, respectively). Members in China are more cautious, with only 48% expecting the global economy to expand in the coming year; however, this is notably higher than the 21% who expected global growth for 2013.

So, what are the biggest risks for global capital markets in 2014 (see Figure 2)? Thirty-one percent of survey respondents cited weak economic conditions as the biggest threat, followed by political instability (25%) and systemic disruptions (20%).

When asked to reflect on factors that would impact local markets in 2014,

68% of survey respondents collectively identified the end of central bank “quantitative easing” as the most significant potential negative impact on their home market’s performance. Members in some markets also identified political instability as the biggest risk to their local economy—most prominently in India, where 78% cited political instability as the biggest risk to their home market in 2014, likely reflecting tensions in advance of general elections. Respondents in South Africa (53%), Brazil (38%), and the United States (37%) expressed similar concerns.

REGIONAL PERSPECTIVES

Respondents in the Europe, Middle East, and Africa (EMEA) region expressed the most optimism about prospects for global economic growth (69%), with sentiment less confident in the Americas (62%) and Asia Pacific (56%).

In EMEA, members considered the easing of sovereign debt challenges as the main positive influence on global capital markets in 2014; 79% of survey respondents indicated that the progress of recovery in Europe will have a positive impact on local markets. In terms of ethical issues affecting local markets in EMEA, 30% of respondents were concerned about mis-selling by

financial advisers, followed by market fraud at 21%.

In Asia Pacific, Japan was the most optimistic about its local economy expanding in 2014 (73%); Hong Kong was the most pessimistic about its own economic progress (37%). Results varied by country when Asia-Pacific members were asked about ethical issues. Most countries in the Asia-Pacific region, such as Singapore, cited market fraud as the most serious local ethical issue for 2014.

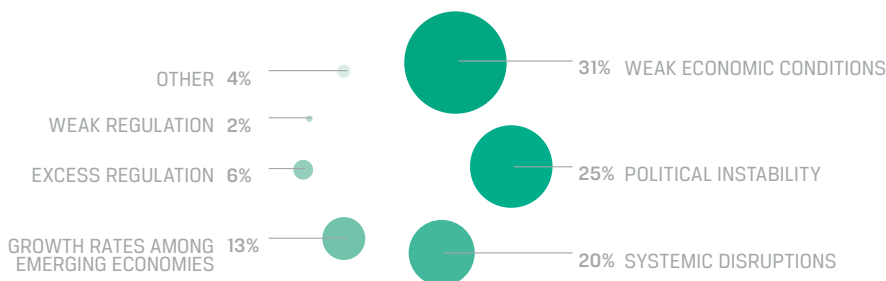
In the Americas, sentiment about the global economy was largely in line with that of global survey respondents. When asked to rank ethical issues in their local markets, members in Canada (34%) cited mis-selling by financial advisers, whereas members in Brazil (52%) and the United States (23%) expressed concern about market fraud. In the Americas region, mis-selling and market fraud tied as the greatest ethics-related concern for 2014.

Jamie Underwood is a communications specialist at CFA Institute and former assistant editor of *CFA Institute Magazine*.

KEEP GOING

Review the complete GMSS report and survey results: www.cfainstitute.org/gmss.

FIGURE 2
Biggest Risk to Global Capital Markets in 2014



Note: Total percentage may not add up to 100% due to rounding

Investor Protection and Crowdfunding

By Mirzha de Manuel

The “crowdfunding” buzzword has been heard more often in recent months. In October 2013, the US Securities and Exchange Commission (SEC) proposed rules as directed by the Jumpstart Our Business Startups (JOBS) Act that would allow crowdfunding from the general public, and the European Commission launched a consultation inviting citizen input on the value of possible action to promote crowdfunding in Europe. CFA Institute is paying close attention to these regulatory initiatives, in particular their potential impact on investor protection and their potential to stimulate economic growth and job creation.

Crowdfunding involves many individuals pooling small amounts of money to finance an initiative. It sometimes has a pro-bono or “socially conscious” vein to it, with funders not seeking any return or compensation. In other cases, crowdfunding platforms are used as a tool to raise equity or debt, typically by small entrepreneurs.

Because crowdfunding is a young industry undergoing a continuous process of innovation, policymakers on both sides of the Atlantic are tackling it for the first time, following divergent approaches.

In the United States, the SEC is seeking to implement a safe harbour from US securities rules for companies raising up to \$1 million through registered platforms. (For comparison, the average size per equity campaign in the EU is €50,000, but it can reach €5 million in some countries. The EU, which is at a much earlier stage in the process relative to the United States, is consulting on all forms of crowdfunding, but some member states have already come up with their own approaches.)

Political interest in crowdfunding comes from its potential to help bridge the funding gap for small businesses and entrepreneurs. And while this potential may be significant, it does not come without risk to citizens—who, through crowdfunding, turn into direct lenders or investors, many times without appropriate knowledge and experience. The UK Financial Conduct Authority estimates that 50% to 70% of new ventures collapse.

From the inception of the US JOBS Act, CFA Institute has been vocal on potential risks for investors. And CFA Institute has not stood alone: In March 2013, former SEC chair Mary Schapiro warned the law’s scope was “so broad that it would eliminate important protections for investors in very large companies.” In effect, the JOBS Act provides exemptions for companies with up to \$1 billion in annual revenue—well above the threshold to receive SME (small- and medium-sized enterprises) support in Europe (where the threshold is €50 million). Moreover, the JOBS Act opens crowdfunding to companies of any size.

In the European Union, the Prospectus Directive provides full exemption for issuances under €100,000 in 12 months. In addition, the Directive does not apply to issuances under €5 million, but member states may impose their own

requirements. The diversity of national rules makes it difficult for SMEs to seek funding across Europe. To increase investor interest in SMEs, a single market would reduce differences across a wider pool of issuers.

Crowdfunding platforms themselves also need a single market. Their business models rely on bringing together large number of issuers and investors. In Europe, however, platforms are currently operating under disparate national rules or under exceptions to those rules. The lack of common rules on platforms adds complexity to the market and makes the emergence of EU-wide operators unlikely, to the detriment of issuers and investors because of access issues and increased cost.

BECAUSE CROWDFUNDING IS A YOUNG INDUSTRY UNDERGOING A CONTINUOUS PROCESS OF INNOVATION, POLICYMAKERS ON BOTH SIDES OF THE ATLANTIC ARE TACKLING IT FOR THE FIRST TIME, FOLLOWING DIVERGENT APPROACHES.

Italy was the first country in Europe to devise a specific framework for crowdfunding. Qualifying companies (those with no more than €5 million in sales) may raise up to €5 million. They must also fulfil strict requirements to demonstrate that they are new ventures, employing highly qualified staff and investing on research and development. In order to protect retail investors, an investment professional needs to subscribe at least 5% of each issuance so that at least one due diligence is carried out.

The United Kingdom has followed suit and proposed to open equity-based platforms to retail investors who self-certify their sophistication or commit to invest no more than 10% of their net investible portfolio in unlisted shares. It is unclear, however, how these limits will be enforced and supervised, and the burden of due diligence is placed indirectly on platforms.

In sum, a scattered crowdfunding market will be a disservice to investors and entrepreneurs in Europe. Action is therefore needed to come up with a reasonable framework, striking the right balance between investor protection and access to investment opportunities. Over the coming months, CFA Institute will engage with regulators in Europe and the United States to communicate the investor perspective.

Mirzha de Manuel is director of capital markets policy for CFA Institute.

Restricting Sales Inducements

GAUGING THE IMPACT OF POLICY REFORMS AND OTHER SOLUTIONS TO MIS-SELLING

By Ed McCarthy

Individual investors need access to high-quality financial advice that is objective and fair and puts the client's interest first. Regulators and policymakers around the world recognize this need, and several countries have launched initiatives to improve investors' access to such advice. These initiatives include efforts to bring greater transparency to the financial advice industry and also to address mis-selling. Some regulators have examined limits or bans on sales inducements, which can include payments, commissions, gifts, or kickbacks associated with the sale of investment products. These inducements, which are often paid to advisers by distributors, can lead to mis-selling that results in advisers putting their own interests before the needs of their clients. Other regulators have made improvements in the clarity required from financial advisers in reporting fees and conflicts of interest.

This problem is not new—CFA Institute members have been aware of it for years. In the 2013 Global Market Sentiment Survey (GMSS), CFA Institute members in Europe, the Middle East, and Africa most frequently identified mis-selling of products by financial advisers as the top concern. Respondents to CFA Institute's 2014 GMSS ranked mis-selling, broadly defined, as the most serious ethical issue globally (see related article on page 40).

In January 2014, CFA Institute released "Restricting Sales Inducements: Perspectives on the Availability and Quality of Financial Advice for Individual Investors." The report reviews the challenges facing regulators and policymakers and provides examples of regulatory actions being considered and taken in multiple national markets. It also includes the insights of CFA Institute members on potential solutions to reduce the risk of mis-selling and their views on how these solutions might change the investment landscape.

BANNING INDUCEMENTS

Regulators and policymakers are working to address this problem in their national markets but there is no single, easy-to-implement solution. Although banning inducements is one option, bans can have both positive and negative consequences. Bans will eliminate some conflicts of interest from the market for financial services. A ban on inducements may encourage improved training for advisers in some markets and may produce simpler products for investors as well as require a higher duty of care from advisers in some jurisdictions.

But there are concerns about some of the unintended consequences that a ban on inducements may bring, such as fewer firms targeting and servicing smaller investors or less product choice and reduced access to advice for retail investors.

In the United Kingdom, for example, firms have cut back on staff and are no longer targeting less-affluent customers.

In markets that ban commissions, new platforms with direct-to-consumer or low-cost/low-service investment options are expected to proliferate. This shift may result in aggressive direct-to-consumer advertising of financial products, a practice that may lead to instances of inappropriate investments sold to retail clients without proper oversight.

In an inducements survey of 514 CFA Institute members conducted between 22 May and 28 May 2013, respondents reflected this cautious attitude toward imposing bans. Although 48% believed that "inappropriate commission payments by product producers" are a main cause of mis-selling, only 15% identified "completely banning commission payments by product producers" as the most important reform needed.

INCREASING TRANSPARENCY

Some jurisdictions are attempting to avoid these undesirable consequences and are focusing instead on increased transparency. Transparency should be part of any solution aimed at addressing mis-selling because simplified disclosures that give investors the information they need to make informed decisions can only improve the investment experience. Transparency should start with fee transparency, including a more informative breakdown of the fees that investors pay. Investors need to be informed about all the fees that they are paying and about the origin of each of those fees (from the adviser, the distributor, or any other participant). It is also important to pursue uniformity in fee disclosures across jurisdictions to allow comparability of fees across markets, especially in the European Union (EU), where manufacturers can "passport" investment products across borders within the single market.

As with outright bans on inducements, however, there is a limit to what increased transparency can achieve because investors are subject to behavioral biases and cognitive limitations. Numerous studies show that investors can hold ingrained misperceptions about the cost of financial advice. Often investors believe investment advice should be free and will resist paying a fee for advice, even a fee that is relatively nominal and not recurring.

Despite investors' misperceptions, the May 2013 survey respondents strongly favored increased transparency as an important reform to end mis-selling. Forty-six percent identified improved product information disclosure to clients; 65% supported mandated full product-cost structure disclosure; and 60% identified mandated clear disclosure of all commission payments received by distributors before investment.

THE EU EXPERIENCE WITH PRIIPS

The CFA Institute report on restricting sales inducements reviews regulatory and policymaking initiatives from multiple countries in Africa, the Americas, Asia Pacific, Europe, and the Middle East. In the EU, for instance, the initiatives illustrate the need to pursue uniformity in fee disclosures across jurisdictions to allow comparability of fees across markets. In 2012, the European Commission published a draft regulation on packaged retail investment products (PRIIPs). These products include investment funds, life insurance, retail structured products, and certain types of pension schemes. The proposed regulation includes a key investor information document (KIID). The KIID is a short (likely two-page) pre-contractual document outlining the key features of the investment product and its main disclosure requirements, including objectives and investment policy, risk and reward profile, charges, past performance, and practical information.

It is envisaged that the KIID will help to improve product-level transparency and facilitate greater comparability among investment products, thereby complementing other initiatives relating to product distribution.

A COMPLEX PROBLEM

There is no simple solution to the problem of inducements and mis-selling. Banning inducements or commissions and forcing fee-for-service models could stratify the investment market. There is a risk that wealthier investors will willingly pay fees for high-quality advice while less-wealthy investors will resist paying and may end up without any advice at all. The need for investment advice is not all-or-nothing.

It exists along a continuum, with some needing a great deal of advice and some needing none but most investors needing advice somewhere in the middle of that great divide.

Among the May 2013 survey participants, the most popular solutions to mis-selling that did not involve inducement or commission bans were (1) revising commission structures to eliminate those that encourage volume sales (tiered commissions) and (2) setting equal commission levels (as a percentage of management fee) for all products in the same category. CFA Institute encourages financial advisory firms to explore such reforms as self-regulatory mechanisms that can address some of the conflicts of interest in the adviser-client relationship without the need for outside regulatory forces.

If more transparency is to be welcomed, it needs to be in a form that investors can use and not too burdensome to financial firms. Complete and comparable disclosure around fees that is concise, coupled with disclosures about all potential conflicts of interest, would go a long way toward building trust in advisers and give investors the information that they need.

Ed McCarthy is a freelance financial writer in Pascoag, Rhode Island.

KEEP GOING

"Restricting Sales Inducements": <http://cfa.is/inducementsreport>

"Packaged Retail Investment Products": <http://bit.ly/priipsreport>



At a recent joint CFA Institute-CFA Society Emirates panel discussion on the rights and protection of retail investors in the Middle East, panelists (pictured left to right) James Berry, managing partner, James Berry & Associates; CFA Society Emirates President Amer Khansaheb, CFA, MSc PM, managing director of Khansaheb Investments LLC; and Greg Pogonowski, an independent financial adviser with Lime Financial in Dubai, participated in the event. Moderated by Tony Tan, CFA, head of Standards and Financial Market Integrity for CFA Institute in Asia Pacific, panelists discussed how financial products are currently approved and marketed by financial institutions in the region; the role of regulators in protecting investors versus the challenges faced by private bankers and wealth managers in selling products; whether investor education would help prevent mis-selling of financial products; and which remedies (if any) are available to retail investors both locally and internationally when they face problems of mis-selling.

PART III OF A SERIES

The Facebook IPO: Ethical Violations or Not?

By Dorothy C. Kelly, CFA

Was the Facebook IPO marred by ethical violations? Part I of this series presented a brief case study related to the Facebook IPO, and Part II evaluated the case facts from the perspective of the Professional Conduct Program (PCP). Part II concluded that had the investment banker involved been a member or candidate under the jurisdiction of the PCP, staff would, after a confidential investigation, most likely have closed the matter with no action taken against the banker for his conduct during the IPO road show.

Part III reviews the aftermath of the Facebook IPO, explores the feedback and comments of readers who completed an online survey regarding the banker's conduct, and identifies a potential challenge and opportunity for CFA Institute and its members.

As at least one survey respondent noted, Facebook shares have performed well since the May 2012 IPO—at least for investors with time horizons exceeding 16 months. Traders who had hoped for a quick profit were disappointed when, on the first day of trading, Facebook shares opened at \$42.05 and hit a high of only \$45 before closing at \$38.23 per share—just pennies more than the original offering price of \$38. But investors have been rewarded for their longer time horizons, patience, and fortitude. Shares traded as low as \$17.55 in September 2012, yet 12 months later, shares were trading above \$50.

Technical glitches plagued the early hours of the Facebook IPO, and one reader commented that it was a “NASDAQ debacle! ... It was a mess ... confusing and not accurate as far as buys and sells.” The US SEC agreed—and fined NASDAQ \$10 million for “poor systems and decision making” relating to the Facebook IPO.

The SEC also investigated allegations of selective disclosure following media reports that Facebook had “advised analysts for underwriters to reduce revenue and earnings forecasts” during the IPO road show for institutional investors. The investigation, which was triggered by the decline in the stock price rather than specific allegations of wrongdoing, has yet to reveal any wrongdoing on the part of Facebook or its underwriters.

Meanwhile, the US judicial system has also failed to identify evidence of wrongdoing. In February 2013, a US judge dismissed 4 of the more than 40 shareholder lawsuits filed in the aftermath of the IPO. In a 70-page opinion, the judge wrote that Facebook “repeatedly made express and extensive warnings in the company’s registration statement, drafts of the registration statement, and in its final offering documents about the trend of increased use of mobile applications ...

stating that ‘the loss of advertisers, or reduction in spending by advertisers with Facebook, could seriously harm our business.’” In addition, the judge noted that federal securities laws impose no obligation to disclose financial projections, stating that “courts throughout the country have uniformly agreed that ‘internal calculations and projections are not material facts that are required to be disclosed’ in a registration statement.” The court found that “even if internal projections could be considered material to the IPO ... plaintiffs had not demonstrated that the Facebook projections would have ‘significantly altered the total mix of information in the marketplace’ considering that these disclosures were publicly disseminated.”

The online survey regarding the case study in Part I of this series was open to the public and revealed some interesting data for investors, members, and regulators. A plurality of readers—presumably, members and candidates—indicated that the conduct of the investment banker complied with the CFA Institute Code of Ethics and Standards of Professional Conduct.

More significantly, a notable percentage of readers, approximately 30%, faulted the banker for having “failed to ensure that Main Street investors received the same information as research analysts and institutional investors.” As one reader commented, “Yes, all investors should read an S-1 cover to cover prior to investing, but the practical reality is that they don’t.” It seems that some individuals expect more than public access to material information regarding an investment; they want all potential investors to *receive the same information*—even if the potential investors are unwilling to read and analyze the publicly available information or pay a research analyst to do the work for them.

Regulators may be interested to know that a majority of respondents, 57%, indicated that if they had been the banker, they would have “insisted that Facebook disclose its internal revenue forecasts simultaneously via the S-1 and a public announcement on its corporate Facebook page.” Several readers faulted the current IPO process in the United States. One reader observed, “I really don’t think very many Main Street investors are able to participate in these offerings,” while another was more blunt: “The IPO process in the US is a slimy, closed affair, with no public participation.”

What is very clear from the Facebook IPO is that many potential investors interested in participating in the equity markets have limited understanding of the capital markets, the IPO process, or the risks involved. That lack of knowledge hinders their ability to be wise consumers of financial

Educate and engage the Main Street investors you know. Go to www.cfainstitute.org and click on the Future of Finance icon to download a copy of the “Statement of Investor Rights” today.

services and thus hinders their financial security. As noted by Robert Stammers, CFA, director of investor education at CFA Institute, “Investors who are not financially sophisticated or have limited experience investing in single company stock investments may be taking on more risk than they realize by investing in IPOs.” Take, for example, the retired widow who, by her own admission, “was caught up in the Facebook IPO hype” (Southern District of New York, *Morgan Stanley & Co. LLC v. Uma M. Swaminathan*, Case 1:2012-cv-08040). She placed an order with Vanguard to purchase 6,200 shares of Facebook at a limit of \$42 on the first day of trading, betting “practically ... all my retirement money in this stock purchase.” The widow, who thought it “would be a good investment,” received 5,000 shares at \$41.25, less than her limit order, but she had not expected the stock price to decline from its IPO value. In June 2012, the widow filed a claim with the Financial Industry Regulatory Authority (FINRA) for \$105,000 to cover actual damages relating to her unrealized losses, \$500,000 in punitive damages, \$1,000,000 in pain and suffering, and treble damages of \$315,000, naming Facebook, Vanguard, NASDAQ, and Morgan Stanley as the parties at fault.

In her claim, she argued that Morgan Stanley “informed its own privileged clients that it was downgrading the future earnings of the stock right before the IPO day so that its clients could sell on the open market. Meanwhile, the very same Morgan Stanley also upped the initial price of the IPO and issued more shares, diluting the value just to suck more suckers into the stock.” According to her claim, her “entire life savings went into” the Facebook IPO. Although she was not nor had ever been a client of Morgan Stanley, she had an expectation that the financial services firm had an obligation to distribute its proprietary analyst research to all investors and was at fault for not doing so.

Such a lack of understanding about the capital markets among individual investors harms not only the individuals themselves but also the financial services industry and those who work within it. When individual investors take ill-advised risks and suffer the consequences, the industry suffers consequences along with them. The Facebook IPO provided Swaminathan as well as the media and regulators another opportunity to criticize the industry and its participants—sometimes unfairly. Morgan Stanley, for example, which had forwarded a copy of the amended S-1 to all of its institutional and retail investors, had to defend its actions not only to the SEC and the Massachusetts Securities Division but also against an arbitration claim from an individual with whom it had no business relationship. The firm eventually filed a lawsuit to block the arbitration claim on the grounds that she was not a client.

The longer-term consequences of the knowledge gap among retail investors are even more severe. The woman who purchased the Facebook shares argued that she felt “jilted” and that her confidence was “permanently stricken.” She, like others, has been left with the idea that the financial services industry favors “privileged institutional investors” and is rigged against individual “Main Street” investors. This notion hurts her and others’ prospects for achieving

financial security as well as the reputation and future prospects of all those who work in the industry. Like many others, she does not recognize that institutional investors include asset managers who have a fiduciary responsibility to protect the financial interests of their clients, many of whom are retirees like her.

For its part, the Professional Conduct Program works diligently to investigate allegations of wrongdoing by members but recognizes that some criticisms leveled against members are unfair. Regardless of the media headlines, staff members conduct confidential investigations, looking at all the facts and evidence and applying the Code and Standards to determine whether it is more likely than not that the member has committed a violation. The organization is committed to both fair process and confidentiality, so a member or candidate who has been unfairly accused will be spared reputational harm if the professional conduct investigation is closed with no disciplinary action.

As stated earlier, the Facebook IPO provided the media and regulators an opportunity to criticize the industry and its participants—sometimes unfairly. But it also revealed a limited understanding of investing risks and rewards among many retail investors, which, in turn, highlighted a significant long-term opportunity as well as a challenge for CFA Institute and its members. In a world of uninformed buyers, the well-informed can profit in a variety of ways: The unscrupulous, for example, may seek to take advantage of the uninformed, but a more sustainable approach is for financial professionals to offer knowledge, skills, and abilities to those who need them on an ongoing basis for a reasonable fee. Individual investors need knowledgeable and trustworthy professionals to help them navigate the complexities of the market and make wise choices about the risks and rewards of investing.

CFA Institute and its more than 200,000 members and candidates have important roles to play in educating both the media and retail investors about the capital markets. It will take more than time and ethical conduct by members and candidates to rebuild trust in the industry; it will take bolder voices aimed at educating and engaging Main Street investors about the risks as well as the rewards of investing. Rebuilding trust in the industry will require engaging and assisting Main Street investors—cautioning them about the risks associated with overvalued IPOs and educating them about both the risks and the rewards of long-term investing. For its part, the PCP will continue its work in building trust through fair, objective, and confidential investigations.

Dorothy C. Kelly, CFA, is the director of training and outreach for the Professional Conduct Program at CFA Institute.

If you are aware of potential violations of the Code and Standards by a member or candidate, we encourage you to contact Professional_Conduct@cfainstitute.org.

Members seeking guidance in applying the Code and Standards to their professional activities should contact ethics@cfainstitute.org.



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SUMMARY SUSPENSION

In May 2013, FINRA permanently barred Carnes from association with any FINRA member in any capacity. FINRA found that Carnes violated FINRA Rules 3270 and 2010 by participating in an unapproved private securities transaction in violation of his former firm's policy. FINRA also found that Carnes violated FINRA Rules 8020 and 2010 by providing a false and misleading response to an inquiry from FINRA regarding the Form U5 his former firm filed reporting the matter.

Program investigation of an industry-related matter. Because he did not request a review, the Summary Suspension became a **Revocation** on 16 December 2013.

On 1 October 2013, CFA Institute imposed a **Summary Suspension** on **Sean Kenneth Hannon (US)**, a lapsed charterholder member, automatically suspending his membership and right to use the CFA designation. Hannon was suspended for his failure to cooperate with a Professional Conduct Program investigation of an industry-related matter. Because he did not request a review, the Summary Suspension became a **Revocation** on 31 October 2013.

Effective 21 November 2013, **Kim Husebye (Canada)**, a charterholder member, **Permanently Resigned** his membership in CFA Institute and in any member societies, and his right to use the CFA designation, in the course of an investigation of an industry-related matter by the Professional Conduct Program.

We are seeking volunteers to serve on the following advisory committees that promote ethical practice in the investment industry:

- If you are interested in these and/or other opportunities, please visit the "Community" link on www.cfainstitute.org and select "Volunteer" for more information.

We are always looking for motivated members ready to take on influential leadership roles in our Charlottesville, New York, London, Hong Kong, and Brussels offices. Learn about our open positions and competitive compensation packages at: www.cfainstitute.org/careers.



High Anxiety

By Ralph Wanger, CFA

Recently, I re-watched the movie *High Anxiety*, directed by and starring Mel Brooks. Mel Brooks movies are usually hilarious, but the opening sequence of *High Anxiety* made me want to cry. You see an airport and a Lockheed Constellation (with its four propeller-driven engines; graceful, curved fuselage; and triple tail—probably the most beautiful passenger aircraft ever built) about to land. The plane touches down, taxis, and parks on the tarmac, and a high stairway is wheeled up. The door opens. An attractive stewardess in a crisp TWA uniform comes to the top of the stairs and says goodbye to the passengers as they disembark. The women are in dresses or pantsuits, and the men are all in coat and tie plus a hat.

I did not see any unshaven youth in cargo shorts, flip-flops, and a backpack. I saw no one carrying more than a purse or a briefcase. Cell phones and laptops were still unimagined. I felt a wave of nostalgia and bitterness.

If there is one skill that all CFA Institute members have mastered, it is the ability to maneuver as an airline customer. Fares are low, but the ambience in a 737 is like a subway car without the fashion sense.

The real harm has been caused not by the airlines' attempt to raise the fares but by charging for checking your suitcase. They want \$25 and 20 extra minutes of your time to use their antiquated baggage-handling system. The predictable result is a big decline in the amount of baggage checked and a massive increase in the number of carry-ons with wheels, backpacks, grocery bags, and anvils—all of which we try to cram into the overhead bins.

I have talked to people expert in occupational safety regulations and workers' compensation claims, and none of them would allow a robust young factory worker to maneuver heavy items above his head. Airline passengers are exempt. The airlines have got to think

of a system to keep everyone from bringing their entire household possessions into the aircraft cabin, killing and maiming their fellow passengers.

The very least that airlines could do would be to order new planes designed with the storage areas under the seats instead of over the seats. The next project should be to retool their baggage handling to take 10 minutes off the wait time at the carousel and then charge the \$25 for carry-ons, with checked baggage free.

In my research on the airline industry, I did discover how a certain US airline hires flight attendants. They have four criteria:

(1) **APPEARANCE:** Candidates should be youthful, well groomed, and smiling. They must be thin in order to maneuver through the new 10-inch-wide aisles on the planes about to be delivered. (Very few passengers will be able to get through the narrow aisles. In order to reach the toilet, passengers will attach themselves to a zip line, and when the button is pressed, the pilot will pitch the plane up 10 degrees in order for the passenger to slide gracefully toward the bathroom. When the passenger is finished, the pilot will pitch the plane down 10 degrees so the passenger can glide back to his seat.)

(2) **ATTITUDE:** Flight attendants must be courteous, patient, safety conscious, and empathetic.

(3) **HEALTH:** Attendants must have agility, strength, endurance, and immunity to at least 50 airborne illnesses.

(4) **FAMILY:** All candidates must bring their mother into the fourth and final interview. If the applicant is able to pass all these criteria, then the airline will offer the job to her mother.

What should one do with airline stocks? My advice: nothing at all. Airlines have an unnerving tendency to file bankruptcy every so often owing to



fierce competition. In the United States, Southwest Airlines has been the best performer, but since the end of 1999, its stock has been volatile but trendless. Outside the United States, there are too many “national pride” airlines that have new planes, fine service, and unlimited subsidies.

The golden age of airline stocks was in the 1958–1965 period and ended when the Lockheed Constellations were replaced by Boeing 707s. The advent of the jet engine was a technological transformation with many consequences. For US airlines, which enjoyed regulated fares until 1978, it was a prosperous time of growing demand as flight times halved, costs went down, and profit margins took off. Airline stocks were the best-performing stock group. Our little firm had three financial analysts, and one worked full-time on the airlines.

By 1966, the airlines had made the switch to all-jet fleets, and competition erased the profitability in the sector. Our airline analyst was reassigned to better industries. Airline stocks were demoted to speculative trades at best. Like the railroads a century earlier, airlines changed the world but were lousy stocks.

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

Illustration by Robert Megawick

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6	American Express	AXP	3.13%
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8	Goldman Sachs	GS	2.80%
9	US Bancorp	USB	2.76%
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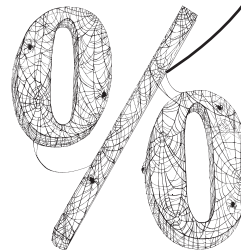
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