The Institutional Market Meets Environmental, Social, and Governance Investing

By Julie Gorte, PhD, and Melissa Platner, CAIA®
The Institutional Market Meets Environmental, Social, and Governance Investing

By Julie Gorte, PhD, and Melissa Platner, CAIA®

Twenty years ago, there was investing and there was socially responsible investing (SRI). The former took very little notice of the latter, and when most finance professionals talked and thought about SRI it was as a niche for investors who were prepared to sacrifice competitive returns in order to indulge their passions.

That was then.

Today there is a much richer ecosystem of investing disciplines built around sustainability, which has replaced SRI both substantively and linguistically as the core concept of this investment discipline. Sustainable investing is now broad enough to encompass multiple approaches, including both negative and positive screening, engagement and stewardship, thematic investing, impact investing, and environmental, social, and governance (ESG) integration. And the discipline is growing rapidly.

Sustainable funds pulled in $21 billion in net flows in 2019, marking the fourth consecutive year of record annual net flows (Hale 2020). Assets are rising far faster than investment assets generally (Hale 2019), and portfolio managers and financial analysts are increasingly using information about ESG factors, whether they describe what they do as “sustainable investing” or not.

For example, the Schroders 2019 Institutional Investor Study, covering 650 institutional respondents with more than $25 trillion in assets, notes that the proportion of institutional investors that do not believe in sustainable investments has declined from 20 percent two years ago to 11 percent in 2019. Three-quarters of institutional investors expect sustainable investments to increase in importance over the next five years. Morningstar’s 2018 Sustainable Funds U.S. Landscape Report noted that most of the growth in sustainable investing over the past decade has been driven by institutional investors.²

Similarly, the Callan Institute, in its 2019 ESG Survey, found that “U.S.-based institutional investors are increasingly incorporating ESG considerations into their investment decision-making process,” with about half of the survey’s respondents either incorporating ESG or thinking about it (Blanton and West 2019). That is nearly double the number since the first survey was completed in 2013. Callan also found that although, historically, endowments and foundations (E&Fs) have led investment in ESG and sustainable strategies, the growth rate of public plan adoption has surpassed that of E&Fs, with 49 percent of public funds incorporating ESG factors in 2019, up from 15 percent in 2013.

There are several reasons for the growing interest among institutional investors. First and perhaps foremost, people want it. Morningstar found that 72 percent of investors are at least moderately interested in sustainable investments and that this interest—often most associated with millennials—actually spans generations.³ It also spans genders, though women have a slightly greater preference for sustainable investments.

Another reason for the growth in interest among institutional investors is that the notion that sustainable investing somehow entails a performance penalty has been debunked. Morningstar, in its landscape report cited above, notes that “the weight of the research evidence suggests no systematic performance penalty associated with sustainable investing and possible avenues for outperformance based on reduced risk or added alpha. The performance of sustainable funds is consistent with that observation.” A robust body of literature has probed the quantitative connections between sustainability and financial performance, and that increasingly underscores what Morningstar found: There is no performance penalty to being more sustainable, and often there is outperformance (Friede et al. 2015).

Institutional investors increasingly are recognizing the value of ESG integration from a risk perspective as well. In fact, according to Callan’s survey, 57 percent of recent ESG adopters (2015–2019) implemented an ESG approach due to an increased sense of fiduciary duty and 43 percent did so to improve the overall risk profiles of their portfolios. Addressing stakeholder concerns was also a large determinant.

Corporate governance has long been considered a factor in fundamental analysis, but environment and social factors more
recently are being included in analysts’ observations and evaluations of companies and portfolios. More specifically, two sustainability themes that increasingly have captured attention—and often are particularly attractive from the perspective of returns as well as the interests of institutional stakeholders—are gender equality and climate change. Investors’ interest in using the tools of finance and investing to capture the performance benefits of investing in companies with more diverse leadership teams and to participate in the transition to a low-carbon economy now more often find expression in sustainable portfolios.

It is also important to note that the increased interest from institutional investors has helped to refine and focus the direction of sustainable investing, define best practices, and increase understanding about the financial implications of investing sustainably.

In this article, we’ll look at institutional interest in and uptake of ESG strategies, including broad ESG trends and developments, and what we’re seeing through our work with institutional investors.

**BROADER TRENDS AND DEVELOPMENTS IN THE ESG SPACE**

The sustainable investing conversation has centered on some of the most prominent trends in the ESG space. Four that are particularly noteworthy are:

1. The strength of the business case for sustainable investing;
2. Growing use of sustainability-related data and factors in all investing, whether it calls itself “ESG” or not;
3. A growing debate about standards and ratings; and
4. Widespread interest in specific themes, including climate change, environmental risk, and gender equality.

Let’s look at these trends in detail, then we’ll explore how they’re being applied in institutional markets.

**THE BUSINESS CASE FOR SUSTAINABLE INVESTING**

The history of sustainable investing in the United States spans about four decades, and for most of that period the general perception was that this was a market niche for investors who were more passionate about their values than their financial health and were willing to accept inferior returns to invest in alignment with those values. It was unusual to find the biggest institutional investors thinking about incorporating ESG (or at least “E” and “S”) considerations into portfolio construction or engagement, much less writing about them. But during the past five or so years, this has changed profoundly.

Now, substantial research links various aspects of sustainability to financial outcomes, and it’s coming not just from academia but from major financial institutions concerned about investment. That literature has grown both in depth and breadth as well. Bank of America Merrill Lynch, for example, pointed out in Subramanian et al. (2019) that following a strategy of “buying stocks that rank well in ESG metrics would have outperformed the market by up to three percentage points per year over the past five years.” Friede et al. (2015), in a larger analysis of more than 2,000 other empirical studies, showed that roughly 90 percent of those studies found a non-negative relationship between corporate performance on ESG and financial performance, meaning that the large majority found that ESG was correlated with either outperformance or did not harm financial performance. The majority, in fact, found that ESG was associated with outperformance.

Building on that literature, Cornerstone Capital Group concluded that “applying an ESG lens is consistent with fiduciary duty” and, moreover, is essential to fiduciary duty. These kinds of papers have become ever more common over the past decade; we at Impax Asset Management have collected more than 850 studies linking sustainability with positive or nonnegative financial performance.

New papers also have come out linking sustainability to risk in ways we’re familiar with, such as volatility, but also in some areas not so common, such as the performance of mergers and acquisitions, factor investing, bankruptcy and financial distress, tail risk, and reputational risk (Gorte 2019a). Subramanian et al. (2019) shows that between 2005 and 2015, 90 percent of bankruptcies were at companies with poor environmental and social scores. Wu et al. (2017) looked at comparable ESG and non-ESG indexes through an entire economic cycle and reported that the ESG portfolio (FTSE4Good) performed better and recovered its value faster after the 2008 financial crisis than a comparable non-ESG portfolio (FTSE 350).

Several recent papers have focused on tail risk or so-called black swan events. Shafer and Szado (2018) provides quantitative evidence that investors see strong ESG practices as a hedge against left-tail risk or a large drop in value. They suggest this could be because better sustainability practices reduce firms’ vulnerability to litigation and environmental disasters, which can make noticeable dents in companies’ value.

That theme is echoed in Subramanian et al. (2019), which notes that sustainability-related controversies have cost investors $534 billion in market capitalization losses over the past six years.

The literature examining connections between sustainability and other indicators of competitiveness and performance is also expanding. There are papers that correlate sustainability performance with innovation (Cook et al. 2018) and human capital management (Eastman 2018), and these studies have found that sustainability is positively and significantly correlated with other outcomes that are often positive for investors, such as productivity, resilience, environmental performance, litigation, and access to capital (Gorte 2019a).

Gender equality and diversity are issues that are becoming a significant focus for
investors. New studies continue to support the correlation between more gender-diverse leadership and financial outperformance. In Hunt et al. (2019), McKinsey updated its research on the relationship between inclusion and diversity and financial performance. The study included more than 1,000 companies in 12 countries and correlated the diversity of leadership with profitability (earnings before interest and taxes, or EBIT, margin) and value creation (economic profit margin). It found that companies with more diverse leadership teams performed better on the two measures, and the results were statistically significant. Moreover, companies in the top quartile for gender diversity in leadership were “21 percent more likely to outperform on profitability and 27 percent more likely to have superior value creation.” Subramanian et al. (2018) found something similar: S&P 500 companies with higher scores for diversity (a measure that includes board diversity, women in management, and diversity/inclusion policies) generally had higher return on equity than companies with lower scores. Other recent research also links gender diversity in company leadership with better risk management, better talent management, and innovation.\(^5\)

Climate change also has emerged as a focus of the business-case literature, mostly over the past five years. In 2016, work done by the Center for Social and Sustainable Products and South Pole Group showed that almost all (10 of 11) climate-friendly investment indexes showed higher returns than their respective conventional benchmark, and in eight of the 11 indexes, the risk-return ratio was superior for the climate-friendly indexes.\(^6\) In et al. (2019) found that a carbon-efficient portfolio based on revenue-adjusted greenhouse gas emissions generated positive abnormal returns since 2010. Templeton and Reid (2019), using a technique that advances in artificial intelligence have only just made possible, analyzed more than 5 million pages of company announcements from the approximately 1,600 companies in the MSCI World Index over the past two decades and found that companies that had positive press and announcements regarding climate change, such as commitments to or accomplishments in reducing emissions, “saw share price outperformance of 1.4 percentage points per year over the MSCI World Index—outperformance of 26 percent.”

**The Governance & Accountability Institute recently noted that 60 percent of the companies in the Russell 1000 Index are publishing sustainability reports. This is encouraging, but it’s insufficient to meet investors’ growing needs for sustainability information.**

**GROWING USE OF SUSTAINABILITY FACTORS IN INVESTING**

Whether investors consider themselves sustainable investors or not, there is growing agreement that sustainability factors and performance have financial materiality and are useful in investment management on the part of investors of all stripes. The CFA Institute’s 2019 financial reporting survey, which polled a random sample of more than 28,000 CFA charterholders, found that more than half the respondents support reporting on specific ESG factors and that these disclosures should be mandatory; a large majority also believe that securities regulators should develop ESG disclosure standards.\(^7\)

As evidence that the materiality and impact of ESG performance on financial outcomes increasingly is accepted by investors, there is a growing demand for good data that can be integrated into portfolio construction. The major difference, at the moment, between financial reporting and ESG reporting is that the former is mandatory and governed by standards, but the latter is largely voluntary or discretionary. SEC Regulation SK requires reporting of all material factors and discusses a few examples of environmental and other factors that could be considered material. ESG reporting, however, is not governed by standards, except where a specific jurisdiction requires a specific type of reporting. (For example, the United Kingdom now requires certain companies to report on gender pay ratios and specifies how they must be measured.) As a result, ESG reporting is patchy and often not comparable between companies, and that presents a significant challenge for investors.\(^8\)

The Governance & Accountability Institute recently noted that 60 percent of the companies in the Russell 1000 Index are publishing sustainability reports. This is encouraging, but it’s insufficient to meet investors’ growing needs for sustainability information. This is because reporting is not standardized enough to allow full comparison between peers and because 40 percent of the companies in the Russell 1000 do not publish sustainability reports, which hinders comparability among peers and raises questions about how to interpret or rate missing data.\(^9\)

Currently, there are very few required reporting regimes for sustainability data, and those that do exist often are limited to a single issue (e.g., required reporting on gender pay ratios in the United Kingdom). But that is changing quickly. Several voluntary reporting protocols have been developed and are penetrating the market, including the Global Reporting Initiative, which covers all ESG subjects; the Sustainability Accounting Standards Board (SASB), which focuses on material ESG reporting for each industry and sector; as well as the Climate Disclosure Project (CDP) and the new Task Force on Climate-Related Financial Disclosure (TCFD),
both of which focus on reporting climate risks and opportunities. A new body of literature is emerging that compares these reporting protocols, examines their relevance to financial outcomes, and describes emerging best practices, including the Council of Institutional Investors’ 2019 report, “Sustainability Reporting Frameworks: A Guide for CIOs” (Brauer and Davis 2019). Goldman Sachs also recently produced a report about the fast-changing regulatory landscape of ESG reporting (Tylenda et al. 2019). It notes that many new capital market regulations are emerging, particularly in Europe; the number of capital market regulations that speak to ESG reporting or integration has nearly doubled globally since 2015.

CONFUSION ABOUT STANDARDS AND RATINGS

Lately there has been a fair amount of commentary about the lack of agreement among sustainability ratings. Some have advanced the idea that this lack of ratings agreement is a handicap for investors, or a signal that ESG analysis is not yet mature enough to be suitable for use in financial decision-making.

It is true that ratings from some of the major ESG raters might not agree as much as some people expect; Berg et al. (2019) found that the average correlation of ratings among five leading ESG ratings providers was 0.61, which Goldman Sachs described as “lower than expected” (Bingham et al. 2019). But the fact that different raters come to different conclusions with respect to corporate sustainability—a topic at least as multifaceted as corporate financial health—should be no surprise. Despite decades of experience in financial analysis, sell-side financial ratings often disagree, and dispersion in these ratings is so familiar as to be almost commonplace. In fact, different ratings often give investors access to different points of view on what makes a company a good investment, or what makes it sustainable; the dispersion in ratings might, in fact, be a resource for investors who know how to assess corporate sustainability, just as dispersion in sell-side ratings gives buy-side analysts access to multiple views of future financial prospects. It’s probably fair to say that any system that attempts to boil down something as variable and wide-ranging as “sustainability”—a term that encompasses environmental impacts of all sorts, workplace practices, safety, product safety, community impact, cybersecurity, and dozens of other variables—never will lend itself to a simple cookie-cutter approach any more than financial ratings do.

We believe it is likely that much of the investor confusion or concern over differing ESG ratings will resolve itself when more investors become more familiar with the landscape of sustainability. It can be daunting for institutional investors who have spent years mastering the intricacies of financial ratings to confront a new kind of rating that requires just as much work and knowledge to grasp as financial analysis does, and it is perhaps natural to wish that there were a single, widely agreed upon way to measure sustainability. But the world is just not that simple. In the long run, we think the diversity of opinion on sustainability is a source of insight and strength, not a handicap. It’s how markets work.

THE RISE OF THEMES: EQUALITY AND CLIMATE CHANGE

There are countless themes and disciplines within sustainable investing, but two have gained widespread prominence during the past five years—gender equality and climate change.

GENDER EQUALITY

Over the past five years, the market has gone from mostly ignoring gender as a relevant or material investment factor to making it a focus issue that merits serious attention in any portfolio, not only gender strategies. Mainstream Wall Street firms have taken to voting against all-male boards, and, in a few cases, have also voted against boards with only a token woman on them. Goldman Sachs recently announced that it would no longer take companies public unless the board has at least one woman or non-white board member.10 A robust literature has emerged linking measures of gender equality with financial performance or competitive performance, superior risk management, and access to capital, innovation, and talent management.

Gender diversity and other measures of equality have long been recognized as societal issues that must be addressed, but only recently did these issues really take firm hold in financial markets. It isn’t clear why that has happened now, but one possibility is that it was inevitable as the world becomes more densely populated and competition becomes sharper for market share. Companies that can get the best from their entire workforces are, in the long run, simply better positioned to compete in such a world than those that maintain traditional societal forms of discrimination. Another driver of financial markets’ attention is of more recent origin: Although sexual harassment and abuse have long been an attribute of most human societies, recently the stigma attached to these issues has risen from trivial to substantial. Cline et al. (2018) showed that companies whose senior executives were involved in sexual indiscretions suffered immediate losses on the order of 4 percent when chief executives were involved and continued to lose value for another year, with total losses amounting to 12–14 percent of firm value. Markets, as well as society, are waking up to the toll that sexual discrimination and harassment extracts.

CLIMATE CHANGE

Climate change is an issue that has a much shorter history than discrimination but one that threatens every company, society, and economy on Earth. The issue was first identified in the 1950s, and scientists began warning about it in succeeding decades, without much impact. But over the past decade, the issue has become more and more important, and investor attention is increasingly
devoted to the risks and opportunities climate change presents. It is now common to see use of the term “climate crisis” to describe the implications for our economies, societies, and investments, and many investors have gone from seeing climate change as a long-term issue that didn’t merit much attention to something that is having impact now. Moreover, until about five years ago, most investors probably saw climate risk as affecting big emitters—utilities, materials companies, energy companies, and industrials—but presenting little in the way of risk or opportunity to other sectors. Now, investors are waking up to the fact that climate-related physical risk can affect any company, any security issuer, anywhere, anytime.

Investing with an eye toward climate-related risks and opportunities is hardly limited to divestment, or the somewhat broader measure of regulatory and litigation risks embodied in managing portfolio carbon footprints. Physical risk—vulnerability to events that are growing more likely with warming, including extreme precipitation, tropical storms, floods, fires, droughts, sea level rise, and an expanding range of many diseases and pests—may affect any company, not just the big emitters. The data investors and companies need to accurately understand that the nature of physical risk is rudimentary at the moment, but it is developing quickly, as is clear in communications such as the recent announcements about Moody’s acquisition of the physical risk data provider Four Twenty Seven and MSCI’s acquisition of carbon risk rater Carbon Delta.

Estimates of the economic impact of climate change range from around 5 percent of global gross domestic product (GDP) to as much as 20 percent of global GDP annually by the end of the century. However, all of the economic estimates of climate risk are (and acknowledge being) underestimates of the full scope of damage, which includes risks of forced mass migration and conflict, as well as other risks that are fiendishly difficult to predict with precision. That said, the climate crisis is not only about risk: There are also climate-related opportunities available to investors who know how to look for them.

Innovative companies are emerging and expanding their services to address challenges around food, transportation, water, energy and resource management, and other areas that are particularly challenged by a changing climate.

The massive environmental issues we face are spurring a growing set of solutions. Innovative companies are emerging and expanding their services to address challenges around food, transportation, water, energy and resource management, and other areas that are particularly challenged by a changing climate. Companies creating plastic alternatives, plant-based meat alternatives, and technologies designed to slash carbon dioxide emissions, for example, are blazing a path to a more circular economy.

Mercer recently updated its climate change modeling white paper, “Investing in a Time of Climate Change—The Sequel 2019,” finding that “investing for a 2°C scenario is both an imperative and an opportunity” for investors. It’s an imperative because, “for nearly all asset classes, regions and timeframes, a 2°C scenario leads to enhanced projected returns versus 3°C or 4°C and therefore a better outcome for investors,” the report states, going on to note that a 2°C scenario is an opportunity because “although incumbent industries can suffer losses … there are many notable investment opportunities enabled in a low-carbon transition.”

Mercer further estimates that fossil fuels will lose 100 percent of their value by 2050, so investors with long-term horizons, such as pension funds, need to evaluate the risks to their portfolios of holding these incumbent fossil fuel investments and look instead to the industries of the future, those that contribute to a low-carbon transition and long-term sustainable economy. Mercer notes: “Financial regulators, particularly for pension funds, are increasingly reinforcing this message by formalizing the expectation that investors should consider the materiality of climate-related risks and manage them accordingly, consistent with their fiduciary duties.”

APPLICATIONS IN THE INSTITUTIONAL MARKETS

Clearly, more and more institutional investors view ESG integration as an industry best practice. As noted above, incorporation of ESG has doubled since Callan started its ESG survey in 2013, with adoption by public funds increasing at the highest rate most recently. In fact, we have seen that “integration” of ESG factors across entire institutions’ portfolios (versus carving out impact or thematic sleeves of the whole) has become a popular way for institutional investors to implement ESG investing.

The largest institutional investors have fully incorporated ESG into their portfolios at the highest rate (Blanton and West 2019). In the past, institutions may have incorporated ESG analysis through exclusionary screens and bespoke strategies in specialized areas of their portfolios to meet the needs of their investment teams as well as stakeholders. As data has improved, so has the level of sophistication and awareness of the investment value of ESG information, and we’ve seen a movement toward implementation of ESG analysis across entire institutional portfolios. This has allowed investors to better pinpoint areas of fiduciary risk in terms of governance, as well as risks derived from negative social and environmental
impacts across various asset classes. It also has enabled investors to identify opportunities to capitalize on long-term sustainability growth trends.

**Evolving Public Policy**

For example, the State of Illinois recently enacted legislation mandating that any state or local entity that manages public funds incorporate language into its investment policy statements to address material ESG risks and opportunities as well as integrate these ESG factors into their investment decision-making process. The brainchild of Illinois State Treasurer Mike Frerichs, The Sustainable Investment Act asserts that ESG and sustainability factors “are used to more comprehensively analyze an investment based on its risk profile and return potential” and that ESG factors should complement “traditional financial and technical analysis.” The Act states that “[t]he use of sustainability factors has been shown to minimize risk and maximize returns and is considered a best practice in the investment industry” and that “integrating these factors helps public funds better fulfill their fiduciary duty.” The Act defines sustainability factors as data related to corporate governance and leadership, the environment, social capital, human capital, and business model and innovation.

We are seeing the beginnings of legislative changes to encourage sustainable investing and sustainability disclosure. But demand from investors of all stripes is the primary factor driving many of the largest investment consultants to develop internal processes to evaluate the strength of a manager’s ESG research and profile as well as implement policies to address these material concerns. Also, over the past few years, we’ve seen consultants begin to include an ESG rating alongside a traditional rating or recommendation to provide additional information to investors interested in the manager’s alignment of ESG best practices, investment philosophy and process, and the firm’s own ESG profile. This increased due diligence is generally designed to highlight the authenticity and quality of the manager’s approach, the manager’s understanding of material ESG risks, and how the portfolio management team applies this understanding to portfolio construction. Institutions are thus asking their consultants to use ESG factors to better identify and mitigate portfolio risks as well as to seek out managers and investment opportunities.

The expanding use of third-party ratings agencies and investment consultant rubrics has increased access to broader and deeper datasets at a lower cost, making ESG data available to more than just the largest institutions with the most resources. The expanding use of third-party ratings agencies and investment consultant rubrics has increased access to broader and deeper datasets at a lower cost, making ESG data available to more than just the largest institutions with the most resources. Furthermore, as implementation of outsourced chief investment officer (OCIO) arrangements proliferate beyond large defined benefit or defined contribution plans, with dedicated OCIO search firms and OCIO consultants popping up across the country to offload some of that fiduciary risk, the need for an understanding of these material ESG factors and how to fully and intentionally integrate them into portfolios will only become more critical.

**Demand for Engagement and Impact**

For many institutional investors, simply incorporating an evaluation of ESG factors into the investment process to create ESG-friendly portfolios is not enough. Increasingly, engagement and impact are core activities that institutional investors also are looking for in asset managers and consultants. They want managers who don’t just stop at analysis but engage in dialogue with the companies they hold to identify opportunities for improved sustainability performance. Climate Action 100+, the investor-led initiative formed to persuade the world’s largest corporate greenhouse gas emitters to improve governance on climate change, now includes more than 370 institutional investors with more than $35 trillion in assets under management.

Institutional investors are also more often choosing managers and consultants who walk the walk on sustainability, holding themselves accountable to the same high standards they expect from the companies in their portfolios. Consultants are more frequently asking questions about firms’ “authenticity” as well as to what degree asset management resources are being used to apply ESG research. Public funds, such as those in Illinois, are looking for strong diversity and inclusion policies from their advisors and asset managers and are not only asking detailed questions during the request for proposal stage but also are incorporating diversity requirements into their investment policy statements and public programs.

Suffice it to say that there is now widespread interest in and adoption of ESG and sustainable investing strategies in the institutional marketplace. We expect this to continue—it is not a fad but a long-term secular trend. Moreover, the sustainability issues that institutional investors increasingly are focused on—from climate change to gender equality—are not going away. To the contrary, they are only going to become more compelling, urgent priorities in the years ahead. Increasingly, both individual and institutional investors are going to insist, across a range of issues, that their investment dollars be part of the solution to global problems.

© 2020 Investments & Wealth Institute. Reprinted with permission. All rights reserved.
challenges rather than part of the problem. There is already substantial research indicating that women and millennials want to invest in this way, and thus, so will their financial advisors and consultants and so will the institutions they join and manage. The transition to a more sustainable global economy is underway, and with it come new risks and new opportunities that all investors will need to confront. Sustainable investing will continue to grow because investors will be looking for opportunities to invest in the next economy, not the last one. We believe that over the long term, this will better serve investors, society, and the planet.

Julie Gorte, PhD, is the senior vice president for sustainable investing at Impax Asset Management LLC and Pax World Funds. She earned a BS in forest management from Northern Arizona University and MS and PhD degrees in resource economics from Michigan State University. Contact her at j.gorte@impaxam.com.

Melissa Platner, CAIA®, is vice president for institutional business development at Impax Asset Management LLC. She earned a BA from Davidson College and an MBA from the University of Connecticut. Contact her at m.platner@impaxam.com.

ENDNOTES
5. For a summary of recent literature on these topics, see Gorte (2019b).
12. “MSCI to Strengthen Climate Risk Capability with Acquisition of Carbon Delta” [September 9, 2019], https://www.msci.com/documents/10199/e834ae4b-de68-ee6a-6dfc-e38eaaaf68.
13. For an enumeration of these estimates, see Gorte (2018).

REFERENCES
Subramanian, Savita, Jill Carey Hall, and James Yeo. 2018. Women on the X-Factor. Bank of America Merrill Lynch [March 7].

CONTINUING EDUCATION
To take the CE quiz online, go to www.investmentsandwealth.org/IWMquiz

INVESTMENTS & WEALTH MONITOR
23

© 2020 Investments & Wealth Institute. Reprinted with permission. All rights reserved.