IMTC

STATE OF THE INDUSTRY 2020

MARKET & TECHNOLOGY TRENDS



IMTC Perspectives

Contents

I. 2019 in Review, 2020 Ahead	3
II. Transformative Tech Trends	
III. Regulatory Developments	7
IV. AI: Are We Ready?	9
V. The Year of Sustainable Investing	10
VI. Conclusion	13
VII. Endnotes	. 14

2019 in Review, 2020 in Focus



With 2019 in the rearview, Kevin Bliss, IMTC's investment expert, took stock of the central themes and drivers that influenced investment sentiment during the year. Geopolitical risks loomed large in 2019 and remain key market movers during the first few weeks of the new year. Shifting focus to the year ahead, Bliss highlights five of 2019's main takeaways and offers an outlook for 2020.

A fixed income portfolio manager for nearly 20 years, Bliss managed a variety of strategies across sectors and currencies. Before joining IMTC, he managed portfolios at DWS Group—one of the world's leading asset managers—with EUR 752bn of assets under management (as of 30 September 2019).

1. Tech Keeps on Disrupting

Technological innovation transformed a variety of business operations in 2019, and there's no sign of that changing in 2020. As disruptive tech brings about major shifts for auto, retail and manufacturing businesses, several sectors could be bracing for impact.

In the year ahead, investors can expect retail to remain under pressure. With the democratization of e-commerce comes hyper-competitive pricing as the industry succumbs to the "Amazon effect." The efforts to attract customers result in traditionally low pricing being pushed even further down.

A reckoning could also be in store for auto manufacturers. As companies like Tesla deepen their foothold, Ford, GM and Chrysler will have to grapple with debt burdens, meeting capacity and preparing for the inevitable day when hybrid vehicles become the standard. Traditional auto manufacturers could end up shuttering their plants and scaling back production.

One Bloomberg Op-Ed made the case that "other peoples' money" was in fact the real tech innovation of the decade:¹ after all, without it, disruptive tech companies can't disrupt. Innovation will likely continue resulting in the overhaul of both broad industry operations and the intricacies of investor workflows alike. As investors free up cash flow by utilizing what IMTC calls InvestTech, they can redeploy funds back into the disruptive technologies that will enable market-wide transformations in 2020 and beyond.

2. The US Consumer is Resilient

Despite lackluster global growth, it's hard to discount the consumer. The US consumer is always tough to bet against. That remained true throughout 2019 when spending levels persisted despite volatility.

There were several bouts of uncertainty within the investment community given the shockwaves from the prolonged US-China trade war that hampered business investment forecasts; still, the US consumer was spending steadily on the back of a healthy jobs market and lower rates.

Personal balance sheets shaped up nicely over the past three to four years. This too should persist unless there is a wholesale change in confidence or in consumers' personal unknowns. After weathering 2019, it's hard to imagine a situation that could "break" investor confidence in 2020. If the jobs market, low-rate environment for borrowing and tame inflation persist, sectors like housing, entertainment, food & beverage, communication and travel and leisure could be bolstered and offset a tough year in autos, retail and energy, according to Bliss, who remains neutral on tech and banks.

3. Central Banks Make Moves

The G-7 central banks continued an accommodative stance over the past year. The Fed opted for rate cuts three times in 2019—after 2018 ended a cycle of progressively hiking rates—to address an economy that "wasn't quite robust enough."

Once again, geopolitical uncertainty underscored market volatility, especially related to trade outlooks. The European Central Bank doubled down before Draghi's tenure came to an end, resulting in China, Japan, Scandinavia and Switzerland all pumping money into their respective economies. The central banks' accommodative stance also propped up equity markets. With Christine Lagarde at the helm in 2020, the European Central Bank could expand its mandate beyond price stability to include employment.

4. Investors Sought Safe Haven in the US

Lower global rates led to pockets of overheating and a 'melt up.' With lots of cash available yet few places to deploy it and get a decent return amid negative yields in Europe and Japan, investors turned towards equities and US credits, some even purchasing without hedging exposure. Inflows of global money and the sell-off of negative yielding paper further propped up domestic markets.

Whether the US is running too hot remains a question to be seen in 2020, bearing in mind that when market returns are more than 25%, the following year typically averages 7% returns. Additionally, the domestic political climate remains uncertain, and unpredictable policies could lead to the dislocation of the auto and energy sectors.

5. Geopolitical Risks Loomed Large

Europe was marked with a poor political backdrop and lack of growth during 2019. The UK is more than just its GDP; it's also a communications and corporate hub, and when the UK "hurts," it impacts global trade and poses widespread economic ramifications. On the heels of Prime Minister Boris Johnson's landslide victory in the latest election, it was difficult to hang projections on whether the UK would be a source of positive news flow.

Still, Brexit appears to be a certainty, and even if a negotiated exit takes years to finalize, analysts and strategists can get finally get clearer forecasts in place. As the UK and Europe's future growth trajectories diverge, 2020 will likely be marked by Johnson and Trump aligning to forge a special relationship.

Following recent geopolitical shifts, the two major risks on the table during 2019–Brexit and a comprehensive US-China trade pact—now feel more like appetizers rather than the main course for 2020. Major headlines related to Iran shaped the start of the new decade, and whether oil prices will continue to be impacted remains a central question. Given more energy independence for the US, the risk of a price shock, although still impactful, will not be able to derail US growth as it might have in the past.

Transformative Tech Trends

Beyond traditional market movers, a key piece of the 2020 puzzle will be innovation—technology that's disrupting industries and transforming the investment landscape in 2020.

Greenwich Associates forecasts that among major tech trends driving change in 2020, "meaningful automation" will take the fixed income markets by storm. In fact, the firm reported that electronic trading levels—Greenwich's professed metric of choice for gauging innovation within fixed income—spiked significantly YoY: during 2019, electronic trades in the US corporate market increased by \$2bn per day compared to 2018.²

As investment managers continue the shift from active to passive fund management, widespread adoption of InvestTech solutions will follow. The active to passive evolution has already led to a spike in companies formally delegating roles related to digital transformation in a bid to drive growth by addressing traditional, analog business functions with digital and tech-forward approaches through the utilization of data and online systems.

In addition to regulation that requires greater transparency surrounding fees to strengthen investor protections, the growth of more cost-effective passive investing platforms has also caused asset managers to shift their fee structures to remain competitive. Investment and asset managers like BlackRock and Vanguard have increased fee pressure by providing investors with the option to invest in vehicles that offer little to no fees and great returns.³

Asset managers have struggled to remain competitive in a landscape that is facing increased pressure from the combination of fee competition, rising costs and asset growth. According to Ben Phillips, a principal and investment management chief strategist at Deloitte Consulting, "[This is] a really bitter cocktail for an industry that never had to worry about fixed costs, fees or money showing up."⁴

Despite their past success, active funds have decreased in popularity among investors due to their high fees and lack of performance. According to Morningstar, only three of the top 10 funds worldwide are actively managed. Bloomberg data revealed that Fidelity's highest performing active fund (Fidelity Contraband) saw an outflow of over \$93bn, while its highest passive fund (Fidelity 500 Index Fund) received an inflow of about \$124bn in the past year. Moody's Investor Services released a statement in March, predicting that "index funds are poised to overtake active management in the US by 2021." Only time will tell if this prediction will come to pass, but trends in the current economic environment are already supporting investments in passive funds over their active counterparts.

WealthTech

An up-and-coming solution to these trends across the investment management space is WealthTech—the creation of technology-based solutions specifically tailored to the wealth management space. Forbes defines WealthTech as a subset of FinTech that combines wealth and technology with the goal of providing digital solutions to enhance personal (and professional) wealth management and investing. WealthTech has already spurned the invention of several niche solutions that have allowed firms to adapt to a low-fee environment and to target different client demographics than they might usually attract.⁵

For example, the emergence of robo-advising solutions has garnered investor interest due to their low fee structure (0.25% commission) and low-to-no account minimum. These innovations, which utilize algorithms to provide investors with digital financial advice based on risk tolerance and goals, could be the answer to the industry-wide shift from performance-based to goals-based investment management,⁶ according to BCG's report *Global Wealth 2019: Reigniting Radical Growth*.

PwC stresses that the emergence of alternative asset managers will also play a role in broadening the product range that was initially dominated by banks. However, as alternative asset managers fill the product offering void, there will be a period of sustained product regulation.⁷ PwC reports that addendums to the Dodd-Frank and AIFMD transparency reporting will be accompanied by shadow banking legislative initiatives (that began in 2014 and 2016), for example.

RegTech

As investment managers fight to remain competitive through the utilization of technology, they must grapple with ensuring compliance to new and expanding regulatory requirements. To that end, spending related to regulatory investment technology, or "RegTech," is slated to skyrocket. Greenwich estimates that spending on compliance technology will peak in the coming year despite many companies slashing budgets.



Source: Greenwich Associates, 2019

The research firm largely attributes this to more stringent regulations and increased reputational risks associated with public scrutiny. PwC forecasts that in 2020, asset managers should expect increased reporting requirements and better planning for recovery and resolution—especially involving those of the clients.

Still, there's a tradeoff here, as Greenwich indicates that "firms may be pulling back the reins on compliance budgets, but many are doing so by taking a more proactive approach toward technology investment in lieu of personnel expenditures."⁸

Regulatory Developments

Regulators themselves will also utilize technology in order to ensure asset adherence to new compliance rules. According to PwC, regulators could soon be able to increase oversight by obtaining realasset time access to an manager's investment portfolio, which they can crossexamine using market data.

Overall. experts expect future asset management regulation to focus heavily on increased transparency at all levels, thus environment where creating an noncompliant managers will be unable hide. These regulations will require investors to share greater information regarding their investment strategy and prove their efforts to obtain client information, validating their KYC and AML processes.

increased regulation, investment With professionals will need to find a more compelling value proposition to remain competitive in an ever-changing industry. Technological solutions for reporting and disclosures that contain accurate and timely information will be invaluable tools for ensuring transparency and data security. Technology will also be used to facilitate the regulatory measures, including tax disclosures in MiFID II/III and FATCA, for example. Only the providers capitalizing upon technological advantages with the ability to scale will be able to survive-both from a regulatory and a competitive standpoint.

Since 2013, from South Africa countries to requiring Switzerland have begun defined contribution pension funds to provide more detailed reporting to their home regulators, demonstrating greater transparency the need for regarding investment activities. Following this, the OECD has driven a consistent campaign of anti-tax avoidance measures through the Base Erosion and Profit Shifting (BEPS) project.⁹ These steps initiated the asset management regulations in place today, creating a world where each country's reporting of profits, taxes paid and employee norms are commonplace.

Additional layers of current regulation include the UK's Retail Distribution Review (RDR), which began in 2012 with the aim of leveling the playing field in the investment industry.¹⁰ The RDR was thought to be a "fair deal" for retail investors to heighten transparency and better estimate that value-to-cost for each customer. It has impacted the qualification requirements of advisors and their execution of investment activities, business models and industry cost structures.

MiFID II is another example of additional pressures on the cost structures within the asset management industry. MiFID II, implemented by the EU in 2018, focuses on providing investors with greater transparency and regulation—including everything from explicit costs and fees to defined target markets and stringent requirements for providing investors with accurate data.¹¹ It is expected that Brexit will also spark the beginning of MiFID III, due to a number of revisions that will be needed to adjust MiFID II and account for the UK leaving the EU.¹²

The US Foreign Account Tax Compliance Act (FATCA) established in 2010 requires US taxpayers living abroad to report under FATCA and ensure compliance with US tax law. With FATCA, asset managers will have to utilize extensive KYC and AML systems to capture key tax data and assure regulators they are not involved in tax avoidance activities. However, FATCA has been renounced by many institutions for a lack of reciprocity towards the US's partner countries and for potentially imposing a financial burden on US taxpayers living abroad.¹³

Big Data and Cyber Risk

With all these new technologies comes more data that can be utilized for better performance. Big Data will play an integral role in assisting asset managers to better understand their customers and align products, pricing, risk and financial data to facilitate the flow of information across all relevant parties.

The collection and location of 'behavioral information' will be used to create tailored products and reach more clients. Social listening will also be an important step for asset managers; for example, by utilizing social media outlets to gather data on customer feedback, sales teams can continue to tailor their products and improve their offerings for customers.

Utilizing more technology comes with greater risks to cyber security. And technology could provide the solution to counteract that risk. According to BCG, financial services firms are 300 times more likely to be targeted by a cyberattack than other companies and cyberattacks carry a higher cost for banks and wealth managers than for any other sector. Despite this growing threat, many financial institutions are ill-equipped to effectively respond to these threats. BCG notes that many firms fail to prioritize cybersecurity issues, overemphasize prevention over detection and response, lack security awareness and suffer from the "operational stress" of previous cybersecurity incidents.

The firm found that the greatest threats come from within the company: through human error and having employees fall victim to phishing, spoofing and credential theft schemes, leaving the company vulnerable. Annual losses across the financial services industry due to cyberattacks have reached tens of billions of dollars. Cyberthreats not only compromise a firm and its clients, but they also can compromise a firm's compliance and adherence to regulatory requirements.

This has opened yet another channel for technology to transform the financial services world. Firms must develop a risk-based strategic plan and adopt an operating model that addresses strategy, governance, risk management and culture. In conjunction with those steps, companies can improve their regulatory posture and boost operational capabilities by utilizing machine learning and AI technologies specifically geared toward cybersecurity. and proper anti-virus software.

As all these innovations emerge in the investment management space, and regulatory developments follow, the asset management landscape is evolving past a point of no return. It will become imperative for asset managers vying to remain competitive to explore new technologies and become impermeable to outside threats both on- and off-line.

IMTC's Legal Counsel offers perspective on key questions related to the emergence, and growing prevalence, of AI.

Machine learning, commonly referred to as "Artificial Intelligence" (AI), has been a hot topic for decades; but until recent years, that conversation has been relegated to the realm of science fiction. Now, nearly every industry is exploring how AI can integrate with their current operations to automate certain business processes. Scholars and technology experts still debate what computer automated-processes should be considered AI. The term has taken on a life of its own—being applied across a vast spectrum of computer-enabled applications.

Ultimately, machine learning/AI can be boiled down to four key features: the ability for a program to scan and understand large swaths of data, the processing of this data to recognize patterns, applying these patterns to generate rules and forecast future projections, and dynamically changing the underlying rules of the program in response to new data.

Various use cases range from simply automating administrative processes, to photo and image recognition and financial forecasting/price discovery. Despite these advancements, early adopters and regulators need to be vigilant about AI deployment. It is important to consider factors related to the quality of data, soundness of the programing and the data processing. Regulators and early adopters of AI should be asking themselves the following questions before deploying an AI solution to the commercial market:

Is the data from a reliable/secure source? How are you ensuring the integrity of this data?

These questions must be answered first, as data is what drives AI. If the data is inaccurate, corrupted, or otherwise incomplete, the output of the AI program will be inaccurate, and it will improperly self-program to identify false patterns.

If AI is powering a decision that impacts an individual, how can decision-making be audited?

When AI is applied to high-stakes situations, such as criminal identification or financial decision-making, it is necessary to be able to see how the AI program came to its conclusion. This is an issue because AI programs operate as a "black box," where no one can see how the decision was made, but only see the outputs. For example, in finance, how can an asset manager be confident that the AI program is accurately identifying and applying a client's risk-preferences in making financial decisions if all they see is a recommended trade? If this "black box" problem is not addressed, it will be the asset manager that is liable for any improper investment decision.

What are you asking the AI program to accomplish? Is the program designed to appropriately complete this task?

As previously mentioned, AI programs are primarily designed to answer a specific question by assessing data points and recognizing patterns. However, finding a correlation between two data points is not the same as showing causation between the two. Additionally, the AI program may be missing other key data points in deciding a specific result. AI developers must be careful in designing and testing their AI programs to ensure it is considering all factors and appropriately accounting for them.

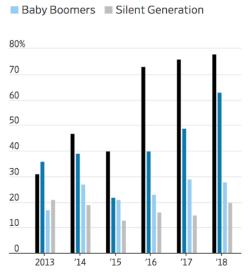
The Year of Sustainable Investing

The emergence and rise of InvestTech across the asset management space has also led investment managers to seek innovative solutions to improving customer engagement amid major shifts in investor demographics, including the movement of wealth from retiring baby boomers to millennials. This rise of this investor class coincides with another booming trend: ESG investing. In fact, several firms and PMs have already dubbed 2020 The Year of Sustainable Investing.

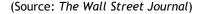
Millennials now hold one-sixth of the wealth and as a whole are actively seeking alternative investments that focus on social impact.¹⁴ In fact, surveys from Morgan Stanley, Fidelity and Nuveen Asset Management found that 95% of affluent millennial investors want to take the environment/climate issues into account with their investments,¹⁵ while 77% have already put money towards impact investing and were also eager to invest in tech and innovations that fundamentally transform investing at its core.¹⁶ Nuveen even reported that 92% of high net worth millennials ranged from "somewhat" to "very likely" in probability of putting their entire allocation into "responsible investing."

Percentage of high-net-worth investors who have reviewed their portfolios for ESG impact

■ Millennials ■ Generation X



Source: 2018 U.S. Trust Insights on Wealth and Worth; Bank of America



Forbes outlines the advantages of digital brokerage accounts from platforms like Robinhood or eToro that have a large millennial following due to their utilization of technology, which offers increased investor control and accessibility via their respective applications. Micro-investment platforms have also gained popularity by allowing investors to save and invest money in small amounts. Now, traditional asset managers have begun broadening their product range in order to compete with the rise of these types of platforms.

In August 2019, the Business Roundtable redefined the purpose of a corporation to focus its efforts on benefitting all stakeholders, rather than just shareholders. Though the terms differ by only two-characters, this statement, signed by 181 CEOs, represents the push for companies, organizations and individuals to acknowledge and better account for environmental, social and governance (ESG) factors.¹⁷ According to a Natixis ESG investing survey published in May 2019, six out of 10 institutional investors incorporate ESG factors into their decisions and analysis. Roughly 60% of these investors implement ESG investment strategies in order to align investor values with that of their investments, and 38% employ ESG investment strategies to minimize headline risks, and 20% do so to help generate higher risk-adjusted returns.

In order to adapt to heightened investor interest in sustainable funds, the number of ESG mutual funds and ETFs grew about 50% in the past year to 351,¹⁸ from the world's largest asset managers, including Vanguard Group, Nuveen and BlackRock Inc. all launching new funds.

A growing number of investors have also disclosed that they employ ESG investment strategies because of the long-term value of an ESG investment. ESG investing has the potential to both improve performance and achieve an investor's financial goals, said Natixis, proving that ESG investing can align assets with personal values to generate alpha.

Morgan Stanley reiterates this perspective in the report *A Yield-Focused ESG Approach*, stating that companies with a strong ESG profile are less prone to environmental, social and governance related issues, fines and possible litigation.¹⁹ By following available ESG guidelines and techniques, companies can proactively mitigate outstanding issues.

Regulation was the paramount point of discussion surrounding the ESG sector throughout 2019. Despite \$12tn sustainable investing assets under management,²⁰ ESG guidelines remain in flux. Considering that 65% of institutional investors believe that ESG investing will become an industry standard within the next five years,²¹ it's evident that now more than ever ESG requires set standardization.

Investments in European and US ESG-oriented funds increased 44% between the end of 2014 and the end of 2018, reaching a total of EUR 761bn.²² Yet, until 2019, the ESG sector existed with little regulation, measurements and even a standardized definition. However, with growing influence of external pressures—including investor concerns, social objectives, fintech development and economic and political imperatives—the international regulatory landscape of the ESG sector has been experiencing a significant shift in its foundational principles.

Courts have enforced certain protections for ESG investors, for example applying Securities Fraud Laws, or through regulatory action through the FTC Section 5, which relates to unfair or deceptive practices. Using 10b-5, the SEC and investors may seek damages from an issuer of Green Bonds for making false statements related to ESG initiatives if those comments are deemed a material factor influencing an investment decision. Under FTC Section 5, if a company makes a false statement about an environmental or sustainable practice, the FTC can levy a civil penalty against that company.²⁴

While the SEC has rejected imposing market-wide ESG regulation and disclosure standards, it does call for the release of specific ESG line item requirements and anti-fraud rules. Still, in July 2019, SEC Chair Jay Clayton stated his hesitancy to have the SEC require rigid standards or metrics for ESG disclosure. While the lack of required disclosures has arguably resulted in 'greenwashing' and cherry-picking of ESG information, most international companies believe it is in their best interest to disclose ESG reporting due to lobbying organizations, such as SASB and peer pressure.

Within the US, SASB has been a major force under FASB aiming to ensure that relevant social and environmental measures are accounted for within general accounting principles. Failing to disclose ESG information can end up causing more harm than good, as was demonstrated through Legal and General Investment Management's removal of Exxon Mobile from its \$6.2bn Future Worlds Fund because it did not meet the ESG fund's minimum disclosure requirements.²⁵

Recently, the European Union has taken the lead on implementing ESG regulations. This past June, the European Commission released a Sustainable Finance Taxonomy,²⁶ which includes technical screening criteria of 67 activities across 8 sectors, methodologies for evaluating an activity's impact on climate change and general guidance and case studies for investors. The EU has already begun implementing the first phase of the Shareholder Rights Directive II, with the second and final phase to begin in September 2020. This directive focuses on improving corporate governance of companies whose securities trade on EU regulated markets, with a specific focus on ameliorating shareholder rights and engagement.

Though these initiatives only currently apply to the European Union, it is only a matter of time before they ripple out and begin to influence the regulations of several nations, including the US. Companies and asset managers alike are increasingly accounting for and disclosing ESG information in order to demonstrate to investors that they are progressively improving their observance of ESG factors and better managing risks and opportunities.

Conclusion

As InvestTech continues taking shape and offering solutions that fundamentally overhaul certain investment functions and approaches, financial professionals aiming to remain competitive must adapt to this shift. Embracing technologies that disrupt and enable transformations across the investment management landscape will be a crucial part in generating alpha.

With these changes comes newer, more stringent regulatory requirements, and technology can provide solutions for maintaining compliance while assuring data quality. Offerings like IMTC's NOVA platform are a must-have in a technology stack for any investment managers seeking to maintain an edge of their peers.

NOVA, the cloud-based enterprise solution, was purpose-built utilizing automation to streamline front-, middle- and back-office functions. In a world of emerging WealthTech and RegTech, IMTC has led the pack in reimagining processes ranging from portfolio construction and optimization to risk and compliance monitoring and reporting.

Stay ahead of the curve and abreast of the latest developments, only at imtc.com.

LEARN MORE

Contact us at (646) 992-4676 or email us at info@imtc.com

OFFICE LOCATION 300 Park Ave, 14th Floor

New York, NY 10022

WWW.IMTC.COM

ENDNOTES

¹ Ovide, S. (2020, January 2). *Other People's Money Was the Tech Innovation of the Decade*. Retrieved from https://www.bloomberg.com.

² Greenwich Associates. (2020, January 6). *Top 10 Market Structure Trends for 2020*. Retrieved from https://www.greenwich.com.

³ Cannon, C., Massa, A. and Waite, S. (2019, Aug. 8). *Asset Managers With \$74 Trillion on Brink of Historic Shakeout*. Retrieved from https://www.bloomberg.com.

⁴ Ibid.

⁵ Cheng, M. (2019, February 19). *The Future of Wealthtech*. Retrieved from https://www.forbes.com.

⁶ Boston Consulting Group. (2019). *Global Wealth 2019: Reigniting Radical Growth*.

⁷ PwC. Asset Management 2020: A Brave New World. Retrieved from https://www.pwc.com.

⁸ Greenwich Associates. *Top 10 Market Structure Trends for 2020*.

⁹ Organization for Economic Cooperation and Development (2019). Retrieved from

https://www.oecd.org/tax/beps/.

¹⁰ PwC. Asset Management 2020.

¹¹ Intelliflo. *Nine things financial advisory firms need to know about MiFID II.*

¹² Ricketts, D. and Agini, S. (2019, December 16). *Brexit to spark Mifid III, warns former MEP Swinburne*. Retrieved from https://www.fnlondon.com.

¹³ The Economist. (2015, February 19). An Englishman's home. Retrieved from https://www.economist.com.
¹⁴ Herlean, G, Forbes Finance Council. (2019, April 2). How Millennials Are Changing the Future of Investment. Retrieved from https://www.forbes.com.

¹⁵ Morgan Stanley, Institute for Sustainable Investing. (2017). *Sustainable Signals: New Data from the Individual Investor*. Retrieved from https://www.morganstanley.com.

¹⁶ Fidelity Charitable. <u>(2018)</u>. *Impact Investing: At a Tipping Point?* Retrieved from https://www.fidelitycharitable.org

¹⁷ Business Roundtable. (2019, August 19). *Business Roundtable Redefines the Purpose of a Corporation to Promote* 'An Economy That Serves All Americans.' https://www.businessroundtable.org

¹⁸ Bloomberg. (2019, October 5). Why aren't advisers warming up to ESG? Retrieved from investmentnews.com.

¹⁹ Mehlman, J. and Harrison, S. Morgan Stanley. (2019, January 7). A Yield Focused ESG Approach.

²⁰ USSIF. (2018, October 31). *Report on US Sustainable, Responsible and Impact Investing Trends*.

²¹ Natixis. (2019, May 16). *ESG Investing Survey: Investors Want the Best of Both Worlds*. Retrieved from https://www.im.natixis.com.

²² The Evolving Approaches to Regulating ESG Investing. Retrieved from https://www.morningstar.com.

²³ In relation to green investing, the Rule complements the SEC's mandatory contingent environmental disclosure requirements, found in Regulation S-K. The Rule serves as a broad catchall anti-fraud provision that fills the gaps between the periodic and continuous mandatory disclosure requirements of the Exchange Act by creating liability for certain material misrepresentations or omissions

²⁴ As a response to many civil penalties, the FTC published "The Green Guides" in 1992 and were revised in 1996, 1998 and 2012. The guidance they provide includes: 1) general principles that apply to all environmental marketing claims; 2) how consumers are likely to interpret particular claims and how marketers can substantiate these claims; and 3) how marketers can qualify their claims to avoid deceiving consumers.

²⁵ *The Wall Street Journal*. (2019, September 22). *The Potentially High Cost of Not Disclosing ESG Data*. Retrieved from https://www.wsj.com.

²⁶ European Commission. (2019, June 18). *EU taxonomy for sustainable activities*. Retrieved from https://ec.europa.eu/info/publications/sustainable-finance-teg-taxonomy_en.

²⁷ Trucost, S&P Global. (2019, March 18). 2019 ESG Trends – What to Watch.

²⁸ SSE Initiative. (2019, May 15). ESG Reporting Guide 2.0. Retrieved from https://sseinitiative.org.

²⁹ Fitch Ratings. https://www.fitchratings.com/site/esg/faq

This paper is intended for information and discussion purposes only. The information contained in this publication is derived from data obtained from sources believed by IMTC to be reliable and is given in good faith, but no guarantees are made by IMTC with regard to the accuracy, completeness, or suitability of the information presented. Nothing within this paper should be relied upon as investment advice, and nothing within shall confer rights or remedies upon, you or any of your employees, creditors, holders of securities or other equity holders or any other person. Any opinions expressed reflect the current judgment of the authors of this paper and do not necessarily represent the opinion of IMTC. IMTC expressly disclaims all representations and warranties, express, implied, statutory or otherwise, whatsoever, including, but not limited to: (i) warranties of merchantability, fitness for a particular purpose, suitability, usage, title, or noninfringement; (ii) that the contents of this white paper are free from error; and (iii) that such contents will not infringe third-party rights.

The information contained within this paper is the intellectual property of IMTC and any further dissemination of this paper should attribute rights to IMTC and include this disclaimer.