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The Educated Retail Investor: A Response to "Regulating Democratized Investing"

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The Educated Retail Investor: A Response to "Regulating Democratized Investing"

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I. INTRODUCTION

Abraham Cable's article *Regulating Democratized Investing* is not only topical, but also necessary.[1] Cable's article tackles the debate on regulating mobile-first investing apps in a sophisticated fashion that carefully considers the interests at stake such as investor protection, market protection, and market accessibility.[2] It largely opposes paternalistic regulation, which would raise unsurmountable barriers at the entrance of the stock market for retail investors.[3] But it concedes to a form of regulation that in Cable's own words "serves ultra-retail investors a modest portion of what they really want."[4]

We strongly appreciate the subtle analysis that Cable carries out in his Article as well as his well-thought-out proposal. However, we are not entirely persuaded that a solution that "serves ultra-retail investors a modest portion of what they really want" would be fully satisfactory.[5] In addition, we fear that Cable's proposals would further discourage investors with limited financial

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1 Abraham J.B. Cable, *Regulating Democratized Investing*, 83 OHIO ST. L.J. 671 (2022).

2 *See generally id.*

3 *See id.* at 677–79, 698.

4 *Id.* at 710.

5 *Id.*

means from participating in the stock market and, through that, in the corporate sector.[6]

Historically, investing in the stock market has proved to be a strong investment venue over time.[7] Setting restrictions that disproportionately affect investors with smaller financial means could acerbate income and wealth inequality.[8] It could also be socially divisive, by further fostering an "us" against "them" perception of the economy, because the lowest wealth and income percentiles would be—and feel—excluded from a capitalistic system that precludes them from participation.[9] Nor should we assume that alternative activities such as gambling and shopping that people excluded from full participation in the stock market may carry out are less risky for their finances—as long as people are actually aware of the risks associated with investing in company shares.[10]

Conversely, easing access to the stock market has several advantages. First, the stock market can be a strong saving technology for retirement and a good source of income.[11] Second, a more accessible stock market facilitates a more demographically heterogeneous share ownership.[12] This, in turn, has positive impacts on diversity in corporate governance.[13] Third, citizen involvement in the stock market and in corporate governance increases citizens' agency and can promote social cohesion.[14] After all, it is hard to conceive a form of inclusive capitalism without an accessible stock market—and mediately to the corporate sector—for all.[15]

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[6] *See generally* Sergio Alberto Gramitto Ricci & Christina M. Sautter, *Harnessing the Collective Power of Retail Investors*, *in* A RESEARCH AGENDA FOR CORPORATE LAW (Christopher M. Bruner & Marc Moore, eds., forthcoming 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4147388 [https://perma.cc/42DM-5J2C].

[7] *See* Jill E. Fisch, *GameStop and the Reemergence of the Retail Investor*, 102 B.U. L. REV. 1799, 1832 (2022) ("As SEC Commissioner Hester Peirce recently observed, 'Our financial markets are among the greatest wealth-generating machines ever developed by any society,' . . . ." (quoting Hester M. Peirce, *Prosperity's Door*, U.S. SEC. & EXCH. COMM'N)) (July 21, 2021), https://www.sec.gov/news/speech/peirce-prosperity-door-072121?utm_medium=email&utm_source=govdelivery [https://perma.cc/7D4U-MYCD]).

[8] *Id.* at 1833–84.

[9] *See* Lynn Stout & Sergio Gramitto, *Corporate Governance as Privately-Ordered Public Policy: A Proposal*, 41 SEATTLE U. L. REV. 551, 559–69 (2018) (discussing social and economic issues in American capitalism); *see also* Sergio Alberto Gramitto Ricci & Christina M. Sautter, *Corporate Governance Gaming: The Collective Power of Retail Investors*, 22 NEV. L.J. 51, 56–62 (2021) (discussing how the GameStop frenzy was fueled by a sense of revenge against Wall Street).

[10] *See* Fisch, *supra* note 7, at 1825.

[11] *See id.* at 1831–32.

[12] *See* Gramitto Ricci & Sautter, *supra* note 6 (manuscript at 2–3).

[13] *See id.* (manuscript at 7) (arguing that democratizing access to share ownership fosters diversity in corporate governance).

[14] *See* Stout & Gramitto, *supra* note 9, at 559–69.

[15] *See generally* LYNN STOUT, SERGIO GRAMITTO & TAMARA BELINFANTI, CITIZEN CAPITALISM: HOW A UNIVERSAL FUND CAN PROVIDE INFLUENCE AND INCOME TO ALL (2019)

We suggest an alternative approach. Our proposal heavily relies on investing education and engagement. Investing education should be mandatory at least at the high school level for all. It ought to encompass classes on personal finance, financial markets, and corporate governance.[16] In addition, citizen engagement in corporate governance should be nurtured. It should be nurtured because a more inclusive corporate sector would help restrain the growing income, wealth, and influence inequality.[17] Moreover, only a form of investing that considers the effects of investing on corporations, society, and the planet is an aware form of investing.

II. NEW INVESTORS AND INFORMATION SOURCES

A. *New Investors, Social Media, and Finfluencers*

A FINRA-NORC study of households that opened non-retirement investment accounts during 2020 found that two-thirds of them were opened by investors who had never opened a taxable account previously.[18] Almost two-thirds of these new investors were below the age of 45.[19] In fact, Millennials and GenZ'ers make up for 67% of the new retail investors in 2020.[20] The diffusion of mobile-first investing apps, like Robinhood, has increased younger retail investors' participation in financial markets.[21]

Notoriously, Millennials are "extremely comfortable with mobile devices," and GenZ'ers, having grown up in a completely wired culture, prefer to communicate via their smartphones.[22] So, it is no surprise that young generations of investors rely on technology and online sources of information in their investing efforts. A 2021 survey of Millennial and GenZ investors

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(discussing how corporations and capitalism can serve all citizens if all citizens have an equity interest in the corporate sector and participate in corporate governance).

[16] *See infra* Part II.

[17] *See* Stout & Gramitto, *supra* note 9, at 559–69 (arguing that society-wide share ownership and citizen involvement in corporate governance can ameliorate several social and economic ills).

[18] FINRA INV. FOUND. & NORC AT THE UNIV. OF CHI., INVESTING 2020: NEW ACCOUNTS AND THE PEOPLE WHO OPENED THEM 2 (2021), https://www.finrafoundation.org/sites/finrafoundation/files/investing-2020-new-accounts-and-the-people-who-opened-them_1_0.pdf [https://perma.cc/M937-PMBV].

[19] *Id.* at 3.

[20] *The Rise of the Investor Generation*, CHARLES SCHWAB CORP., https://www.aboutschwab.com/generation-investor-study-2021 [https://perma.cc/38BG-C7NU].

[21] Fisch, *supra* note 7, at 1833–34.

[22] *Boomers, Gen X, Gen Y, Gen Z, and Gen A Explained*, KASASA: THE KASASA EXCHANGE (July 6, 2021), https://www.kasasa.com/exchange/articles/generations/gen-x-gen-y-gen-z [https://perma.cc/M9PS-WPUP]; Mary Ann Becker, *Understanding the Tethered Generation: Net Gens Come to Law School*, 53 DUQ. L. REV. 9, 12 (2015).

revealed that 77% of them relied most heavily on social media for investing information.[23]

Unlike older generations who grew up in a time when money was a "taboo" topic of conversation, only 6% of GenZ'ers and 14% of Millennials "say they *don't* openly discuss their finances and investment gains and losses."[24] Nearly 60% of Millennial and GenZ investors belong to an online investment community or forum.[25] Moreover, online investment communities often make new generations of investors develop a form of camaraderie and mutual trust that facilitate their collective actions.[26]

A 2018 study found that "only 30% of the general population demonstrates understanding of basic financial concepts such as the workings of interest rates, inflation, and risk diversification."[27] With technology and social media easing access to financial markets that percentage appears particularly low and alarming. Easier access to financial markets needs to be coupled with broad-based investing literacy. New investors are aware of the critical role of investing education and describe themselves as "hungry for access to investing education and advice," with 94% desiring to do their own research and 90% wanting "educational materials to improve their investing skills."[28]

Robust demand for investing education and advice has fostered the popularity of social media influencers who provide financial content, sometimes referred to as "finfluencers."[29] Finfluencers are able to reach significant numbers of investors and potential investors and their opinions carry substantial weight with their often hundreds of thousands of followers.[30] As a result,

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[23] Jack Caporal, *Gen Z and Millennial Investors: Ranking the Most Used, Trusted Investing Tools*, THE MOTLEY FOOL, https://www.fool.com/research/gen-z-millennial-investors-tools/ [https://perma.cc/655R-GJ5G] (Aug. 3, 2021).

[24] Mallika Mitra, *Is It Taboo to Talk About Money? Not According to Gen Z Investors*, MONEY (Dec. 15, 2021) (emphasis added), https://money.com/gen-z-investors-talk-about-money/ [https://perma.cc/D4X3-Q8U3]. This is compared to 31% of GenX and 42% of Baby Boomers. *Id.*

[25] Julie Ryan Evans, *Nearly 60% of Young Investors Are Collaborating Thanks to Technology, Often Turning to Social Media for Advice*, MAGNIFY MONEY, https://www.magnifymoney.com/blog/news/young-investors-survey/ [https://perma.cc/LVF3-X5KD] (Feb. 22, 2021).

[26] Gramitto Ricci & Sautter, *supra* note 9, at 52–53, 71–72, 87.

[27] JILL E. FISCH, ANDREA HASLER, ANNAMARIA LUSARDI & GARY MOTTOLA, NEW EVIDENCE ON THE FINANCIAL KNOWLEDGE AND CHARACTERISTICS OF INVESTORS 1 (2019), https://gflec.org/wp-content/uploads/2019/10/FINRA_GFLEC_Investor_FinancialIlliteracy_Report_FINAL.pdf [https://perma.cc/P7YD-D2KS].

[28] *The Rise of the Investor Generation*, *supra* note 20.

[29] *See* Vanessa Pombo Nartallo, *'Finfluencers': Financial Education and Regulator Surveillance*, BBVA (Oct. 8, 2021), https://www.bbva.com/en/finfluencers-financial-education-and-regulator-surveillance/ [https://perma.cc/8ZCN-N6Q8] (discussing the proliferation of finfluencers and related risks of relying on finfluencers for financial educational purposes).

[30] *See* Misyrlena Egkolfopoulou, *Wall Street Influencers are Making $500,000, Topping Even Bankers*, BLOOMBERG: WEALTH (Sept. 17, 2021), https://www.bloomberg.

myriads of retail investors who might lack investing education source information and advice from social media influencers.

B. *Risks Associated with Online Information Sourcing*

Social media and finfluencers are largely unregulated in the United States.[31] Anyone can dole out information and advice on social media platforms, unless they are hired by brokerages in which case they are regulated by FINRA.[32] One of the benefits of social media—that relationships are built easily and people feel close to, and trust, one another even if they have never interacted in real life—is also one of the risks of social media.[33] Misinformation on social media is common and gets perpetuated.[34] With the vastness of social media, it is

com/news/articles/2021-09-17/social-media-influencers-income-advertising-wall-street-products [https://perma.cc/NFJ3-CBL4] (providing examples of finfluencers and their numbers of followers).

[31] The regulation of finfluencers would be substantially more robust if finfluencers qualified as investment advisors under the Investment Advisors Act of 1940. The definition of "investment advisor" under the Investment Advisors Act includes:

> [A]ny person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities.

15 U.S.C. § 80b-2(a)(11). However, the definition of "investment advisor" excludes "the publisher of any bona fide newspaper, news magazine or business or financial publication of general and regular circulation." *Id.* § 80b-2(a)(11)(D).

[32] *See Social Media Influencers, Customer Acquisition, and Related Information Protection*, FINRA (Sept. 2021), https://www.finra.org/rules-guidance/guidance/targeted-examination-letters/social-media-influencers-customer-acquisition-related-information-protection [https://perma.cc/3S33-TY2P] (setting forth guidance on engagement with social media influencers).

[33] *See* Shane Hickey, *As 'Finfluencers' Spread Through Social Media, Beware the Pitfalls*, THE GUARDIAN (Aug. 22, 2021), https://www.theguardian.com/money/2021/aug/22/as-finfluencers-spread-through-social-media-beware-the-pitfalls [https://perma.cc/53AQ-V6M4] ("Social media is designed specifically to appeal to whoever is using it, so they see posts from people who are like them, and talk in a way they relate to, and they can join in the conversation, so they feel closer to the subject.").

[34] *See* Chris Meserole, *How Misinformation Spreads on Social Media—And What to Do About It*, LAWFARE (May 9, 2018), https://www.lawfareblog.com/how-misinformation-spreads-on-social-media-and-what-to-do-about-it [https://perma.cc/L6BQ-XQTN] (describing how misinformation on social media has spread more quickly than accurate information regarding the same events); *see also* Statement, European Sec. & Mkt. Auth., Episodes of Very High Volatility in Trading of Certain Stocks (Feb. 17, 2021), https://www.esma.europa.eu/sites/default/files/library/esma70-155-11809_episodes_of_very_high_volatility_in_trading_of_certain_stocks_0.pdf [https://perma.cc/JGR9-DJRP] (urging "retail investors to be careful when taking investment decisions based exclusively on information from social media and other unregulated online platforms, if they cannot verify the reliability and quality of that information"); Sue S. Guan, *Meme Investors and Retail*

difficult for companies to ensure that fact-checking occurs.[35] If companies rely on finfluencers to boost online engagement, they must carefully select these individuals.[36] Even if companies are not formally engaging finfluencers, they must contend with potential misinformation.

Generational affinities for online information sourcing cause investors, particularly young investors, to trust online information.[37] This form of trust can prove particularly strong when new generations of investors experience the sense of camaraderie that sometimes develops across members of online investment communities.[38] As a result, investors who source investing information and advice online can easily fall into the trap of believing all information they find online.[39] This can be exacerbated if they previously received good advice online: it is then "easy to keep trusting what [they] see online."[40]

Investing education provides retail investors with a toolbox to better navigate the information sources they find online. A 2016 study of retirement investing found that individuals with higher financial literacy made better investment decisions, including selecting higher performing portfolios, paying lower fees, and accessing more information in the decision-making process.[41] The diffusion of mobile-first investing apps makes an improvement of investing education even more compelling than in the past. Moreover, direct investing in company shares provides retail investors with the power to participate in

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Risk, 63 B.C. L. REV. 2051, 2086–87 (2022) (cautioning about retail investor misinformation sourced online).

[35] *See* Egkolfopoulou, *supra* note 30 (discussing how companies look for quality social media content creators on platforms where "misinformation run[s] rampant and unchecked").

[36] *See* Akshaya Kamalnath, *Social Movements, Diversity, and Corporate Short-Termism*, 23 GEO. J. GENDER & L. 449, 472 (2022) (cautioning that some influencers who "are responsible for starting trends . . . are not necessarily well-informed or objective when evaluating issues").

[37] *See* Caporal, *supra* note 23.

[38] *See* Gramitto Ricci & Sautter, *supra* note 9, at 71–73.

[39] GenZ'ers and Millennials also are more likely to rely on financial advice when they are obtaining advice from "someone like" them. Charlotte Principato, *Here's Where the Youngest Generation of Investors is Getting Their Financial Advice*, MORNING CONSULT (May 25, 2021, 12:01 am ET), https://morningconsult.com/2021/05/25/tiktok-is-flush-with-financial-advice-but-social-media-hasnt-replaced-professional-sources-for-guidance-yet/ [https://perma.cc/MJ5J-3DST].

[40] Sophie Kiderlin, *Social Media Has Hooked Young Investors on Finance, But a Growing Number Are Taking More and More Risks. 'Finfluencers' and Money Experts Say It's Time for Some Caution.*, BUS. INSIDER (Jul. 18, 2021), https://markets.businessinsider.com/news/stocks/gen-z-investing-social-media-finance-fintok-millennial-investors-2021-7 [https://perma.cc/YVA6-8U8J].

[41] Jill E. Fisch, Tess Wilkinson-Ryan & Kristin Firth, *The Knowledge Gap in Workplace Retirement Investing and the Role of Professional Advisors*, 66 DUKE L.J. 633, 657–58 (2016).

corporate governance.[42] A sound approach to investing education encompasses both finance and corporate governance. Investing education should mandatorily be included in, at least, high school curricula, and private ordering efforts can supplement scholastic education. In a just released World Economic Forum (WEF) report, the WEF advocates for financial literacy even earlier and recommends that public and private parties collaborate to provide "robust" financial literacy curriculum in early childhood education.[43]

III. INVESTING LITERACY IN THE UNITED STATES SCHOOL CURRICULA

Unfortunately, United States schools hardly incorporate personal finance education into the curriculum let alone education regarding financial markets and corporate governance.[44] During the 2021-2022 academic year, only 22.7% of United States public high school students were required to take "at least a single semester-long course solely dedicated to [p]ersonal [f]inance."[45] In addition, another 48.2% of U.S. public high school students had access to a stand-alone, at least one semester long personal finance course "either as an elective or as one option to fulfill a graduation requirement."[46] The rise to almost a quarter of U.S. public high students having taken a personal finance course as a graduation requirement is recent and comes amidst a push across the country for personal finance education.[47] In 2018, for example, only 16.4% of U.S.

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[42] *See generally* Gramitto Ricci & Sautter, *supra* note 9.

[43] WORLD ECON. F., THE FUTURE OF CAPITAL MARKETS: DEMOCRATIZATION OF RETAIL INVESTING 74 (2022), https://www3.weforum.org/docs/WEF_Future_of_Capital_Markets_2022.pdf [https://perma.cc/X6H8-DK2U].

[44] The Article focuses primarily on investing literacy education at the high school level as there has been a recent push to increase personal finance education in grades 9–12. Although some elementary and middle schools do provide personal finance education, most resources developed have focused on high school and college students. *See* Jeremiah Johnson, Donna Spraggon, Gaby Stevenson, Eliot Levine & Gregg Mancari, *Impact of the FutureSmart Online Financial Education Course on Financial Knowledge of Middle School Students*, 32 J. FIN. COUNSELING & PLAN. 368, 369 (2021). The Council for Economic Education and Jump$tart have published benchmark standards and learning outcomes to be achieved by the end of the 4th, 8th, and 12th grades. COUNCIL FOR ECON. EDUC. & JUMP$TART, NATIONAL STANDARDS FOR PERSONAL FINANCIAL EDUCATION 5 (2021), https://files.consumerfinance.gov/f/documents/2021_Natl_Standards_Downloadable_final.pdf [https://perma.cc/5YH5-EKNT]. These standards include investing in stocks as part of the learning outcomes to be achieved at first by the end of the 8th grade. *Id.* at 27.

[45] NEXT GEN PERS. FIN., NGPF'S 2022 STATE OF FINANCIAL EDUCATION REPORT 6 (2022) [hereinafter NGPF], https://d3f7q2msm2165u.cloudfront.net/aaa-content/user/files/Files/NGPFAnnualReport_2022.pdf [https://perma.cc/3VQJ-3K9K].

[46] *Id.* at 2.

[47] NGPF maintains a Google Doc spreadsheet tracking financial education bills being introduced in state legislatures. Next Gen Pers. Fin., *NGPS Financial Education Bill Tracker: 2022 State Legislative Sessions*, GOOGLE DOCS, https://docs.google.com/document/d/1tWjd8LCMl0AJT2AmE3leIDqQ-x46z5luvQ09wImV2eQ/edit [https://perma.cc/H6YM-WTD9]. As of July 26, 2022, 69 bills had been introduced in 27 states. *Id.*

public high school students graduated having been required to take a personal finance course.[48] However, as we write, eight states have "fully implemented legislation guaranteeing a standalone [p]ersonal [f]inance course for all students."[49] Another seven states are in the process of implementing similar guarantees.[50] Once those guarantees are fully implemented, 39.7% of public high school students in the United States will have taken a personal finance course prior to graduation.[51]

Although these statistics are promising, there are several issues. First, currently, over three-quarters of American public high school students are not required to take a personal finance course prior to graduating.[52] Even when the seven additional states have fully implemented their guarantees, approximately 60% of public high school students still will not have a personal finance course graduation requirement.[53] Moreover, these numbers focus on public high school students and do not reflect students who attend private high schools, which accounts for approximately 8.8% of the total U.S. high school population.[54]

In addition, access to personal finance education is inequitable. More specifically, "[i]n schools with >75% Black and Brown student population" only "1 in 20 students were guaranteed access" while "[i]n schools with <25% Black and Brown population 1 in 7 students were guaranteed access."[55] The numbers are similar for schools with greater than 75% of the student population eligible to receive free or reduced lunches, with only 1 in 20 students having

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[48] NGPF, *supra* note 45, at 2.

[49] *Id.* at 5. Those states are: Alabama, Missouri, Mississippi, Virginia, Tennessee, Utah, North Carolina, and Iowa. *Id.*

[50] *Id.* at 3. Those states are: Florida, Georgia, Michigan, Nebraska, Ohio, Rhode Island, and South Carolina. *Id.*

[51] *Id.* at 2.

[52] *Id.*

[53] *See id.*

[54] State regulation of private and home schools vary. *See State Regulation of Private and Home Schools*, U.S. DEP'T OF EDUC., https://www2.ed.gov/about/inits/ed/non-public-education/regulation-map/index.html [https://perma.cc/8U9A-KJWR] (Aug. 1, 2019) (setting forth summaries for all 50 states plus the District of Columbia and U.S. territories). Most states *do not* require that the curriculum for private schools be like that of public schools. *See* Comparison Charts: Operating Regulations, U.S. DEP'T OF EDUC., https://www2.ed.gov/about/inits/ed/non-public-education/files/operating-regs-comparison-chart.pdf [https://perma.cc/2DWY-L347]. For information on private high school enrollment, see *Table 205.10 Private Elementary and Secondary School Enrollment and Private Enrollment as a Percentage of Total Enrollment in Public and Private Schools, by Region and Grade Level: Selected Years, Fall 1995 Through Fall 2017*, INSTITUTE OF EDUCATION SCIENCES: NATIONAL CENTER FOR EDUCATION STATISTICS, https://nces.ed.gov/programs/digest/d20/tables/dt20_205.10.asp [https://perma.cc/5N66-4YPJ]. As of 2017, 1,468,000 students were enrolled in private high schools. *Id.*

[55] NGPF, *supra* note 45, at 5.

guaranteed access.[56] Thus, despite the increase in personal finance education in the United States, some key groups are still being left behind.[57]

Even when students do take personal finance courses in high school, the extent to which the complexities of investment strategies is covered is unclear, and most courses fail to cover the innerworkings of corporate governance literacy.[58] Another critique is that a one-time semester-long course is not sufficient to teach all of the basics of money management let alone investing and corporate governance literacy nor is such a course conducive to longer term retention of information.[59] Moreover, some studies have found that personal finance education does not increase financial literacy.[60] Critics argue that such education leads to overconfidence and overoptimism which, in turn, may cause individuals to make worse decisions than had they not taken a personal finance course.[61]

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[56] *Id.*

[57] White men have dominated investing and younger investors traditionally have been less likely to invest in stocks. *See* Fisch, *supra* note 7, at 1832. Relatedly, another study found that "financial literacy is associated with gender (males are more financially literate) and investment experience, and is somewhat correlated with education." Fisch, Wilkinson-Ryan & Firth, *supra* note 41, at 657–59. Financial literacy is particularly important because, as we detail in other work, more diverse and younger investors have come into the market since 2020. *See* Gramitto Ricci & Sautter, *supra* note 6 (manuscript at 4) (describing the diversity of individuals opening brokerage accounts since 2020).

[58] *See* Kelly Anne Smith, *These States Now Require Students to Learn about Personal Finance*, NASDAQ (Apr. 1, 2022), https://www.nasdaq.com/articles/these-states-now-require-students-to-learn-about-personal-finance. Various organizations have created standards and modules that teachers can adopt. Most of these do contain a section on investing but they do not cover corporate governance education. *See, e.g.*, FED. RSRV. BANK OF ST. LOUIS & FED. RSRV. BANK OF ATLANTA, A "STANDARD" PERSONAL FINANCE CURRICULUM, 6.1–6.6 (2020), https://www.stlouisfed.org/education/-/media/project/frbstl/stlouisfed/education/curriculum/pdf/a_standard_personal_finance_curriculum.pdf [https://perma.cc/H4JM-PUTF] (containing a unit on financial investing); *Investing Unit*, NGPF, https://www.ngpf.org/curriculum/investing/ [https://perma.cc/9C84-ZEPD] (containing an investing unit as part of a semester course, a nine-week course, and a full year course); *Program Overview*, FINEDGE, https://finedge.uchicago.edu/explore-the-program/overview [https://perma.cc/MUN7-CAPN] (containing an investing module).

[59] *See* Smith, *supra* note 58 ("[N]ot everyone agrees that the mandated standalone classes go far enough in being effective for students because personal finance and money management is complex and multi-faceted—it can't be absorbed overnight."); *see also* Lewis Mandell & Linda Schmid Klein, *The Impact of Financial Literacy Education on Subsequent Financial Behavior*, 20 J. FIN. COUNSELING & PLAN. 15, 21 (2009) (studying individuals who took a personal finance course in high school for the first five years after graduation and finding those individuals "were no more financially literate than those who did not take the course").

[60] *See, e.g.*, Mandell & Schmid Klein, *supra* note 59, at 21–23 (finding that personal finance education does not increase financial literacy and calling for additional research on how to structure courses to be more effective).

[61] *See, e.g.*, Lauren E. Willis, *Against Financial-Literacy Education*, 94 IOWA L. REV. 197, 236–37 (2008) (arguing personal finance education leads to overconfidence).

Other studies have found that if a financial education program focuses only on objective financial knowledge and is "too technical and/or complex" it may result in a decrease in subjective financial knowledge, which is an individual's perception of their financial knowledge.[62] Accordingly, experts recommend that financial education lessons be presented in a "straightforward and comprehensible manner" and that educators should "actively monitor" perceptions of how knowledgeable students believe themselves to be.[63] Along these lines, incorporating games into a lesson plan has been successful in presenting information in a comprehensive fashion, which has been found to increase financial literacy.[64]

For students who have had the opportunity to take personal finance courses in both high school and college, there is an increase in their investment knowledge and likelihood to increase their savings.[65] A study found that college personal finance courses are usually more effective at establishing long term financial literacy comprehension than high school courses.[66] Therefore, the more opportunities students acquire to build upon their financial literacy, the more likely they will be able to retain the information and implement it into their investing and finances.

A. *Other Initiatives—Academic and Private Ordering*

In many middle schools and high schools across the nation there are after-school programs and clubs available to teach students how to invest through stock market clubs and competitions.[67] About one million students in the United States play online stock market games, like *The Stock Market Game*, each year either as part of a course or in an after school-school program or club.[68] These games feature fake money that they invest in real companies students are

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[62] *See, e.g.*, Kenny K. Chan, Emily J. Huang & Reka A. Lassu, *Understanding Financially Stressed Millennials' Hesitancy to Seek Help: Implications for Organizations*, 43 J. FIN. EDUC. 141, 146, 156 (2017).

[63] *Id.* at 156.

[64] *See* Cynthia Harter & John F.R. Harter, *Is Financial Literacy Improved by Participating in a Stock Market Game?*, 10 J. FOR ECON. EDUCATORS 21, 28 (2010) (describing study finding that students who were taught about investing using the *Stock Market Game* along with the *Learning from the Market* curriculum performed better than students in the control group, this included on "assessment questions that were not related to the stock market").

[65] William Walstad et al., *Perspectives on Evaluation in Financial Education: Landscape, Issues, and Studies*, 48 J. ECON. EDUC. 93, 99 (2017).

[66] Tzu-Chin Martina Peng, Suzanne Bartholomae, Jonathan J. Fox & Garrett Cravener, *The Impact of Personal Finance Education Delivered in High School and College Courses*, 28 J. FAM. & ECON. ISSUES 265, 280 (2007).

[67] *See* The Journal, *Are Stock-Market Games Turning Teens into Risky Investors?*, WALL ST. J. (May 10, 2022) (downloaded using Apple Podcasts), podcasts.apple.com/us/podcast/the-journal/id1469394914 [https://perma.cc/HG5N-49GE].

[68] *Id.* at 01:50–01:57.

familiar with, such as Apple, Amazon, and Tesla.[69] Using *The Stock Market Game*, one program, Capitol Hill Challenge, grants approximately 600,000 middle school and high school students across the country a chance to compete using a $100,000 hypothetical portfolio.[70]

Proponents argue that these games are an effective and fun way to teach students about the stock market.[71] Conversely, some argue that due to the short time frame in which students use the game, these games can create a gambling behavior rather than instill prudent and slow investment strategies that are essential in the real world.[72] However, there is a potential solution: have students invest real money to help them understand the considerable risks. This alteration, when implemented, has proven effective.[73] However, concerns about an inherent short-term approach to investing persist. A sound approach to investing education should make learners deal with a much longer time horizon than the one they can experience in the time frame of classes or simulations. Moreover, a sound approach to investing education should tie investing to corporate governance and show the effects of decision-making on corporations as well as on society and the planet. Simulations that take into account the complexities of these layers could possibly be developed using artificial intelligence and gaming dynamics.

Another financial education opportunity stems from fintech itself outside of the formal educational context. For example, Robinhood provides educational tools not just to its customers but also to the general public via Robinhood Learn and Robinhood Snacks.[74] Robinhood also has in-app education for its customers, which includes access to free news and interactive lessons.[75] Although these tools are a step in the right direction, experts like Jill Fisch argue that even more can be done to encourage education as trading occurs.[76] For example, she advocates for "just-in-time education," or educational information that pops when an investor is making a decision such as executing a trade or seeking an option quote.[77] She further argues that such education can be

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[69] *Id.* at 01:40–02:07.

[70] *About the Capitol Hill Challenge Program*, THE STOCK MARKET GAME, www.stockmarketgame.org/capitol-hill-challenge.html [https://perma.cc/7X7S-VKQA].

[71] *See* Harter & Harter, *supra* note 64, at 30–31.

[72] The Journal, *supra* note 67, at 02:24–02:51.

[73] *Id.* at 12:40–17:47 (detailing how students invested a $100,000 donation given to a high school stock market club and describing how students spent more time researching and evaluating stocks resulting in the elimination of the initial gambling mentality).

[74] Letter from David Dusseault, President, Robinhood Fin. LLC, to Vanessa A. Countryman, Sec'y., Sec. & Exch. Comm'n 10 (Oct. 1, 2021), https://www.sec.gov/comments/s7-10-21/s71021-9316498-260092.pdf [https://perma.cc/B9B2-5BHA].

[75] *Id.* Similarly, tastyworks, a brokerage platform largely dedicated to options trading, has an affiliate, tastytrade, with comprehensive courses on options and futures trading. *Learn Courses*, TASTYTRADE, https://www.tastytrade.com/learn-courses [https://perma.cc/L2SU-4SUF].

[76] Fisch, *supra* note 7, at 1858–60.

[77] *Id.* at 1859–60.

gamified in nature to be more engaging and interactive.[78] Relatedly, GenZ'ers have been expressing an appetite for readily available investing educational materials which are presented in a palatable format including bite-sized information and nudges.[79]

In the future, Fisch's "just-in-time education" recommendation could also be extended to proxy materials and proxy voting to make materials and corporate governance more accessible and engaging for retail investors. Although many retail investors care about corporate governance engagement, they are not generally well versed in corporate governance legal terminology. There are examples on social media of retail shareholders showing a lack of knowledge regarding the meaning of a "record date," what happens on the record date, and when voting occurs.[80] Retail investors are not just unfamiliar with corporate law terminology but also the mechanics of corporate governance as well as the substantive issues at play in proxy items.[81] For example, some technicalities like a partially completed proxy card resulting in the remainder of votes being cast in accordance with management recommendations are not necessarily intuitive. Investing education courses should include instruction not just on investing but these intricacies of corporate governance to empower retail investors.

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[78] *See id.*

[79] Amy Ouellette, *What Gen Z Really Wants from the Workplace*, EBN (July 20, 2022), https://www.benefitnews.com/advisers/opinion/the-employee-benefits-gen-z-wants-and-expects [https://perma.cc/YB2R-58WY]. *See generally* Sergio Alberto Gramitto Ricci & Christina M. Sautter, Response, *The Corporate Forum*, 102 B.U. L. REV. 1861 (proposing a forum on corporate websites aimed at enhancing shareholder engagement and accessibility to information which may incorporate just-in-time investing education).

[80] *See, e.g.*, u/Late-but-trying, *June 2nd- What Does it Mean?*, REDDIT (May 18, 2021), https://www.reddit.com/r/amcstock/comments/nfsiim/june_2nd_what_does_it_mean/ [https://perma.cc/CX5Q-P7P7] (asking what the meaning of the June 2 record date was in relation to the 2021 AMC Entertainment shareholders meeting). Some shareholders believed that they needed to vote their shares by the record date while others believed that the record date indicated the date that voting began. *See, e.g.*, u/Orphenboy, *PLEASE DON'T BE CONFUSED ABOUT THE VOTE DATES, It STARTS June 2nd, not STOPS.*, REDDIT (May 18, 2021), https://www.reddit.com/r/amcstock/comments/nf7tgw/please_dont_be_confused_about_the_vote_dates_it/ [https://perma.cc/6HZ2-BAKK] (stating, correctly, that voting did not end on the June 2 record date for the 2021 AMC Entertainment shareholders meeting, but stating, incorrectly, that the vote began on June 2).

[81] *See, e.g.*, Lewis Braham, *Robinhood's New Proxy Platform Battles Investor Apathy*, BARRON'S (Oct. 22, 2021), http://www.shareholderforum.com/access/Library/20211022_Barrons.htm [https://perma.cc/H7D2-W6ZS] (stating that shareholder apathy "often stems from ignorance of proxy issues").

B. *The Importance of Including Corporate Governance in Education*

Civics education has been found to nurture political engagement with positive ramifications on equality and citizens' agency.[82] In a globalized world, with corporations rivaling nation states in power and influence, the benefits of widespread investing education cannot be overstated.[83] Corporate governance allows citizens to partake in decision making affecting virtually all aspects of their lives.[84] Share ownership is the key that provides access to corporate governance.[85] Including corporate governance in investing education curricula not only completes the set of knowledge necessary for investing in companies' shares, but also enhances the agency of investors as citizens. Investing education bridges the gap between citizens and Wall Street. It also provides citizens with the tools to engage with the companies in which they invest.

IV. CONCLUSION

Cable's article sheds light on salient issues with intertwined finance and social ramifications. Rather than constraining agency of retail investors, we go for the jugular and push forward an agenda to educate citizens about investing and engaging with corporations. Although this approach requires time to bear fruit, the transition costs appear reasonable in consideration of the values at stake as well as of the lasting positive effects investing education produces on society.

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[82] *See generally* MEIRA LEVINSON, *Benefits of Civic Education: Increased Equality and Narrowed Civic Empowerment Gap*, *in* GUARDIAN OF DEMOCRACY: THE CIVIC MISSION OF SCHOOLS (Jonathan Gould, ed., 2011), https://dash.harvard.edu/handle/1/10861135 [https://perma.cc/6G34-JSAN] (discussing how taking a civics course results in an increase in voting and promotes civic equality).

[83] *See* CHRISTOPHER M. BRUNER, THE CORPORATION AS TECHNOLOGY: RE-CALIBRATING CORPORATE GOVERNANCE FOR A SUSTAINABLE FUTURE 9–10 (2022) (detailing the size of Fortune 500 companies in comparison to nation states); *see also* STOUT, GRAMITTO & BELINFANTI, *supra* note 15, at 15–16 (discussing how the corporate sector can provide influence and income to all); *see also* Sergio Alberto Gramitto Ricci & Christina M. Sautter, *Wireless Investors & Apathy Obsolescence*, 100 WASH. U. L. REV. (forthcoming 2023) (discussing how new generations of investors overcome collective action problems to actively contribute to steer corporations).

[84] *See* Gramitto Ricci & Sautter, *supra* note 6 (manuscript at 6–7).

[85] *See id.*