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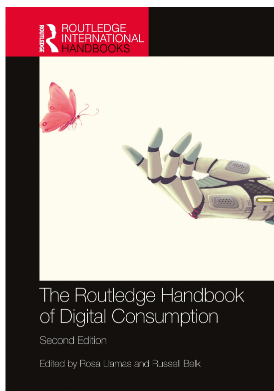

The Routledge Handbook of Digital Consumption

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Stock Investing in the Digital Age

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STOCK INVESTING IN THE DIGITAL AGE

Jonathan Schroeder and Detlev Zwick

In March 2021, a digital image, produced by the artist Mike Winkelmann, who goes by the name Beeple, was sold by Christies for $69.3 million. The item, "Everydays: The First 5000 Days," consists of a collage of digital images in the form of a jpeg. Thus, the image can be replicated, as any digital image can. Christies sold a unique digital token in the form of a cryptocurrency account, which transfers ownership from the artist to the buyer (Crow and Ostroff 2021).

Such *nonfungible tokens* – NTFs – have emerged as a spectacular, yet enigmatic new investment object, in which investors acquire a relatively obscure sense of ownership: "The buyers are usually not acquiring copyrights, trademarks or even the sole ownership of whatever it is they purchase. They're buying bragging rights and the knowledge that their copy is the "authentic" one" (Griffith 2021, p. B1). Part of a larger trend for cryptocurrency investment, Beeple's record-setting sale marked the emergence of NTFs within the wider world of cryptocurrency investment.

And what is "nonfungible"? At the risk of confounding Walter Benjamin, who famously theorized value in light of mechanical reproduction (1969 [1936]):

> In economics, a fungible asset is something with units that can be readily interchanged - like money. With money, you can swap a £10 note for two £5 notes and it will have the same value. However, if something is non-fungible, this is impossible - it means it has unique properties so it cannot be interchanged with something else. It could be a house, or a painting such as the Mona Lisa, which is one of a kind. You can take a photo of the painting or buy a print but there will only ever be the one original painting.
>
> *(BBC 2021)*

Likewise, for the buyer of the GIF "Nyan Cat" who spent almost $600,000 to "own" the popular (and cute) cryptokitty, "[d]espite the sale, the existing Nyan Cat GIF and video will still be available for distribution online. The crypto art sale simply allows the buyer to operate as a collector of sorts — as the owner of a digital piece of art based on a popular meme" (Kay 2021). And, of course, they're buying an investment that they believe will rise in value. What are cryptokitties? "Each cryptokitty is registered to a bitcoin-style database, and can be traded – and bred…The end result is a game, or art piece, that is somewhere between a

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real-world game of Pokémon, an automated replacement for the authenticity department at Sotheby's and digital trading cards" (Hern 2021).

Although out of reach for most investors, such high priced NFTs, along with transforming financial markets, offer significant insights into digital investing:

> People have long attached emotional and aesthetic value to physical goods, like fine art or baseball cards, and have been willing to pay a lot of money for them. But digital media has not had the same value because it can be easily copied, shared and stolen. Blockchain technology, which is most often associated with Bitcoin, is changing that. NFTs rely on the technology to designate an official copy of a piece of digital media, allowing artists, musicians, influencers and sports franchises to make money selling digital goods that would otherwise be cheap or free.
>
> *(Griffith 2021, p. B1)*

A month after Beeple's record sale, the cryptocurrency exchange Coinbase went public on the Nasdaq stock exchange.

Coinbase, which held over 11% of global crypto assets when it went public, offers a relatively convenient way for individual investors to buy and hold *bitcoin*. As described by Coinbase, bitcoin relies on blockchain technology to provide secure (in theory) financial transactions:

> Bitcoin is digital money that allows for secure peer-to-peer transactions on the internet. Unlike services like Venmo and PayPal, which rely on the traditional financial system for permission to transfer money and on existing debit/credit accounts, bitcoin is decentralized: any two people, anywhere in the world, can send bitcoin to each other without the involvement of a bank, government, or other institution. Every transaction involving Bitcoin is tracked on the blockchain, which is similar to a bank's ledger, or log of customers' funds going in and out of the bank. In simple terms, it's a record of every transaction ever made using bitcoin. Unlike a bank's ledger, the Bitcoin blockchain is distributed across the entire network. No company, country, or third party is in control of it; and anyone can become part of that network.
>
> *(Coinbase 2021)*

Of course, such lack of control raises questions and opens bitcoin and other cryptocurrencies up to critical scrutiny:

> Though each bitcoin transaction is recorded in a public log, names of buyers and sellers are never revealed – only their wallet IDs. While that keeps bitcoin users' transactions private, it also lets them buy or sell anything without easily tracing it back to them. That's why it has become the currency of choice for people online buying drugs or other illicit activities.
>
> *(Yellin et al. 2018)*

Along with the growing popularity of cryptocurrency, the past decade saw a relatively steady rise in stock prices, along with huge investments into the market, much of it driven by first-time investors. As one young trader described his experience of online investing:

> Daniel Uribe, 21, a college senior in San Diego, said that he discovered WallStreetBets [a Reddit subreddit] five months ago after a YouTuber he follows, named Big Boss, made

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> a video about the group. "I wanted to be part of the excitement," Mr. Uribe said. He figured he might be able to make some cash, too. "There's a lot of stuff that the older generation doesn't realize even exists. We have different ways of making money that they don't understand.
>
> *(Lorenz and Isaac 2021, p. B7)*

Reduction of trading fees by large brokerage firms and the growth of discount trading firms such as Ally Invest, E*Trade, and TD Ameritrade have made trading online easier and cheaper for individual investors. Local banks and credit unions provide individual investment accounts. Many pension plans and retirement accounts offer online brokerage services, allowing a myriad of investment options to employees. Apps such as Betterment, Robinhood, and Wealthfront offer *roboadvising* – online portfolio management by algorithm, which often results in lower management fees and, according to Betterment, "the tools, inspiration, and support you need to become a better investor" (Betterment 2021). The Acorns app caters specifically to college students, while Twine offers couples the ability to invest together without sharing all of their finances (Catmull 2019). Retirees, or those close to or thinking about retirement, can avail themselves to an alphabet soup of investment advisors specializing in retirement advice; aside from traditional advisors such as CPAs (Certified Public Accountants), and CFPs (Certified Financial Planners) – Certified Senior Consultants, Chartered Retirement Planning Counselors, and Retirement Income Certified Professionals are available (Hayes 2021).

These digital innovations represent a leading edge of the investment market and represent key consumer aspects of *fintech*, as the industry that has grown up around digital advances in financial activities is called. This chapter provides an overview of the transformation of the market for individual investments over the past 25 years, drawing upon interviews, media discourse, and social theory and offers conceptual insights about individual investors and their perceptions of and motivations for online trading.

The growth of individual digital investing

Over the past 25 years, individual investing has evolved from a niche activity to a mass phenomenon, largely due to the virtualization of the stock market and the computerization of buying and selling (e.g., Lorenz and Isaac 2021; Zwick and Dholakia 2006). During the 1990s, the United States and many European countries experienced a growing interest in stocks and the stock market in general, spawning something like a gold rush mentality, especially among younger, more digitally savvy investors. At the same time, retirement portfolios began to appear online, allowing employees with benefit plans to manage their accounts in ways not possible before.

By the mid-1990s, armed with a personal computer, an Internet connection, and an online brokerage account from companies such as e-Trade and Ameritrade, individuals began to take matters into their own hands. As one commentator remarked:

> This [online investing and day trading] is not about money-grubbing; it's a new democratic revolution. Day trading, like the right to own dirty magazines, the privilege of serving in our armed forces, is a fail-safe against the loss of individual freedom – which for Americans is the same thing as collective freedom – and for that matter is the only sure way to keep your soul intact. Now an investor controls his own life so he can make the final call, so no one can delude him into thinking that the buying and selling of

> stocks is more complicated than a couple of mouse clicks, so nothing can obstruct his inherent right to unload his losers on the next bigger dope to come along.
>
> *(Klam 1999, p. 70)*

A crop of new online brokerage firms was quick to pick up on this new *zeitgeist* of, as the *Wall Street Journal* slogan puts it, "adventures in capitalism." In one TV ad, a goateed Gen-Xer with an unconcerned, satisfied air, calculated to look cutting-edge yet sophisticated, proclaims "we're pioneers" and a professional thirty-something female pronounces with cool determination "we're renegade capitalists."

In the 2020s, a new generation of online investors made their appearance known – by talking about their investments on social media, encouraging other investors, and aggressively promoting stock purchases aimed, at times, at damaging established brokerage firms and large investors who held "short" positions and would lose money if the stock went up in value. These "misfits," as the *New York Times* called them:

> are part of a legion of young people — primarily male — pouring into digital trading floors in recent years, raised on social media and eager to teach themselves about stocks and trade quickly using an array of apps catered to Generation Z. In just a few short weeks, this new cohort of retail investors has completely upended some of the most professional traders by coordinating over social media, forums and chat rooms to trade shares of GameStop, sending the stock price for the video game company skyrocketing while leaving a number of sophisticated short-sellers holding the bag. Their motivations run the gamut…What many of them have in common, though, is that they buy and sell equities regularly, right from their smartphones, while posting their gains, or "tendies," to online forums, all out in the open for their peers to see.
>
> *(Lorenz and Isaac 2021, p. B1)*

This burgeoning group of social media influencers – many in their late teens and early twenties – offer investment advice via podcasts, Reddit threads, YouTube videos, and online investment channels.

The rise of the online investor

Having tracked online investors since the late 1990s, with extensive interview data spanning from the height of the dot-com bubble and the lows of the 2000 crash to the heights of the real estate bubble and the lows of the financial crisis, we find rather unsurprisingly a change in the attitudes towards, motivations for, and approaches to investing generally and online trading in particular. Specifically, the years running up to the bursting of the dot-com bubble saw the emergence of what we call the *kinematic investor*, who was mesmerized by the experience of dynamism, action, and speed of being in the market.

In the years after the dot-com crash, investors came to realize that their actions have consequences and that the market ought to be considered as a place for achieving fiscal self-realization and economic security rather than for having fun (see Best 2005). We call this investor type the *entrepreneurial investor*. Of course, the kinematic investor and the entrepreneurial investor have much in common and should not be considered ideal types of individual investors. In particular, a strong narrative of individual agency characterizes both investor types, albeit not in exactly the same sense. For the kinematic investor, a sense of agency comes from the experience of acting directly on the market, while for

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the entrepreneurial investor agency represents a broader concept of having to adopt – not necessarily voluntarily – a mentality of personal fiscal responsibility vis-à-vis a diminishing dependability of collectively managed forms of financial securitization. In the past decade, with the rise of roboadvising, micro-investing, bitcoin and other blockchain investment vehicles, and the emergence of digital assets such as "nonfungible tokens," (NFTs), the *digital investor* has come into full force. Today, ads for smartphone apps proliferate, promoting easy investing (as well as gambling) in the palm of the hand.

In this chapter, we use the distinction between the kinematic and the entrepreneurial investor largely as an analytical tool to emphasize the most salient features of the online investing experience as it evolved through the emergence of the Internet as a primary vehicle for investing, trading, and researching financial markets. In the next section we will first discuss the kinematic investor, with a focus on the speed of money, and the aesthetics of investing. Then we describe the entrepreneurial investor, with some thoughts on how the notion of the entrepreneurial investor can be seen as part of a more general emergence of the entrepreneurial consumer. We then discuss aspects of the fintech revolution that is rapidly transforming the market. We draw on a longitudinal set of interviews with online investors and recent news articles to illustrate key points.

1998–2001: speed and the kinematic investor

Speed represents the ultimate experience of modernity because it embodies the progress of the technological revolution (Virilio 1977). In the corporate realm, speed has become a central element for success. The abundant use of terms like "time to market," "just in time," "product development cycle acceleration," and "real-time" – to name but a few – highlights the importance of speed in a business context increasingly characterized by electronically networked organizations, globally linked markets and just-in-time production practices. Banks, in particular, eagerly embraced electronic banking as a speedy solution for consumers (Schroeder 2008). One of the Internet's greatest apparent benefits for consumers lies in its acceleration of transactions, mainly by reducing search costs (e.g., Hoffman and Novak 1997; Melumad et al. 2020) the case of online stock trading, however, utilitarian benefits such as time savings and convenience are often supplemented – if not supplanted – by experiential benefits of speed and agency.

The speed of money

In the case of online investing, speed is experienced by the investor in two distinct yet related ways, in what can be called the *speed of money* and the *speed of action* (see Figure 25.1). In short, the speed of money refers to the investor's perception of the movement and volatility of the stock market in general and his or her investment portfolio in particular. Investors believe that the stock market accelerates money – especially if the stock market is mediated by the Internet – and by doing so increases the possibility of gains and losses. Speed of action refers to the perception of the investor to quickly "act on" the moving market. As the instantaneous experiential effects of such "acting on" are witnessed, the individual investor gains a sense of agency in the market. With this newly felt sense of agency, of individual mastery of speed and action, the individual investor is in turn able to experience the speed of money as an exhilarating and thrilling event, not least because of the possibility of accidents (i.e., losing money fast).

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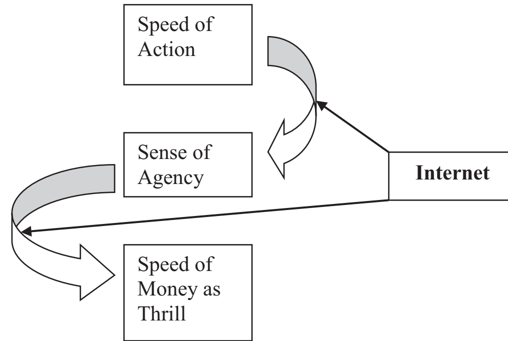

Figure 25.1 Model of the phenomenology of speed in online investing
Source: Own elaboration.

Personal accounts of individual investors suggest that they are drawn to this (for most) new world of investing by the allure of *fast money*, or more precisely the potential to *accelerate money.* The mystique of cryptocurrencies adds to the possibilities of getting rich quick. The speed of money in the stock market is thus perceived as the antithesis of the inertia of money found in traditional forms of investing. Even mutual funds appear "slow" against the speed of stocks. As two of our informants put it:

> I don't have any money that is not invested. It would just be lying around and that is wasting it in my eyes.
>
> *(Manfred, 37, IT developer)*

> It started when I was getting some money as a refund from the school. So I had this money just sitting around, so I am, like, what do I do with it? I really didn't think putting it in the bank does any good because like with the other money, it kind of just lies around there, you know, which is fine because you might need it and then it's right there. But if you want to do something with it, you have to invest it. So I was talking to my parents again, and they said, well, why don't you put it in the market.
>
> *(Brad, 21, student)*

So, instead of money just *sitting, hanging*, or *lying around* in a savings account, putting it in the market carries the promise of movement and acceleration – action.

At least at this stage, the financial rationale seems to dominate the investor's disposition towards the market. Early successes reinforce the belief in the market as a moneymaking machine and lead to the build-up of overconfidence in one's own ability to invest (Barber and Odean 1999). But investors realize quickly that money can be *lost* as well as won and over time, the initial swagger and unfettered exuberance make way for a more nuanced and realistic assessment of the logic of accelerated money. The market downturns of 2000, 2008, and 2020 brought home to the kinematic investor that stocks are a risky investment choice after all, clearly revealing that the speed of money works in both directions.

Interestingly, instead of being discouraged or shocked by the market's volatility, some investors actually seemed to be attracted by risk. Once the logic of the market was embraced, it is no longer just the lure of fast gains but the speed of money itself, with the potential to move

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up *and* down that becomes intriguing for the investor. Markus, for example, sounds like an at-risk casino gambler when describing his experiences in the stock market:

> So you think more risk is more fun?
>
> Increased excitement. It is this particular edginess. The volatility of these things, 20% is nothing sometimes, that eats you up. Once you've done it and it's all over you think to yourself "never again," and a few weeks later, you get back in. Right now, I have one from RWE that was already cut in half and currently is in positive territory. I mean, it goes up and down there. You know that is suspense.
>
> *(Markus, 25, student)*

Thus, the sensation of rapidly moving money, its volatility and speed, enters the investors' field of perception through the computer screen (see also Knorr Cetina and Bruegger 2002) and gives rise to a new form of investor subjectivity, what we call the kinematic investor.

Unlike other types of investors, the kinematic investor perceives a *dual experience* of speed. First, the rapid up-and-down movement of stock prices is clearly recognized and feared as a threat to personal wealth. Many investors are tempted to keep daily track of their portfolios, and online platforms encourage round the clock monitoring, as one Hong Kong investor reports:

> Some people follow the market twenty-four hours a day but I feel like, wow, I cannot do that. It's too tiring. If I hold my phone and check it again and again, this kind of mental condition could affect my job…Actually you have to be very healthy mentally and keep adjusting every day. I know some insane people who check their phones every five seconds. I think it's too crazy.
>
> *(Charles, quoted in Tang and Lee 2020, 544)*

The movement of invested money now becomes a form of stimulus that is important in and of itself.

Technologies such as sell stop orders and limit orders extend the investor's actions and essentially offer a 24-hour presence in the stock market. Other financial market innovations include *fractional share* investing – in which consumers are able to buy less than one share in companies, allowing investment in high priced equities, such as Amazon (which trades at over $3400 a share at the time of this writing), exchange-traded funds (ETFs) – investment products that are similar to mutual funds, but often are passively managed, and market manipulation events, such as aggressive buying of stocks such as GameStop and commodities like silver encouraged by Reddit and other online forums (Carlson 2021).

The digital investor

Denegri-Knott and Molesworth (2010) developed a typology of online consumption behaviour, what they term *digital virtual consumption*. Whereas their work focused largely on consumption in virtual environments, such as Second Life and World of Warcraft, their insights into how these worlds inhabit user's imaginations are useful for understanding online investors. They consider online environments "liminal – somewhere between the imagination and the material" (Denegri-Knott and Molesworth 2010, p. 110). We believe that this liminal condition maps onto investing, in which material money is represented by electronic numbers, graphs, and charts (see Zwick and Dholakia 2006). Furthermore, online investing

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dwells largely in the imaginative world; in particular, our kinematic investors embody this distinction particularly well.

Put differently, kinematic investing – via computer screen and digital networks – opens up new types of motivation and rationality of investing. Thus, and contrary to media discourse around investing, many consumers report interest in wider activities of companies, and may become sensitized to ethical issues, such as social responsibility, supply chain management, and corporate citizenship via online information sources (Zwick et al. 2007). The digital investing environment serves to democratize individual investing, making experiences of speed and movement of money available to the masses and broadening the range of motivations and dispositions of investors.

The new investor subject

The Internet provided individualized and fast access to a stock market that has been rendered transparent through its visualization. The Internet became the fundamental condition for the experience of speed, both of money and of one's own actions (agency), in addition to expanding the context in which investment occurred (e.g., Zwick et al. 2007). It is, hence, too simple to reduce the Internet to a better and more efficient tool for online trading. Rather, the Internet profoundly changed the nature and experience of investing, especially during the early years of online trading and therefore is better regarded as an integral part of the production of a new investor subject, the kinematic investor, equipped with a set of perceptions that allow for new kinds of aesthetics, emotions, and sensations of investing.

2001–2011: the entrepreneurial investor

As the glow of the dot-com era wore off in the aftermath of the 2000 crash, we can see a period of adjustment in the individual online investor's approach – away from the exhilaration of fast money towards a more responsible understanding of investing. Investing came to be seen as an opportunity for and even duty to secure a financial future for oneself; an approach to investing suitably for a time when neoliberal social policy continues to reconstruct society by encouraging individualized forms of security and responsibility, fostering entrepreneurial competitiveness, and relying on the market to provide previously collective goods and services, particularly pension and retirement accounts.

A recent study on young investors in Hong Kong reports:

> Many young people tied the need to engage in investment to the precariousness they face in life. Many participants emphasized that they did not aim at getting rich. What they were looking for was not well-being in terms of material abundance. Instead, they were striving for a level of basic security that would allow them – or their next generation – to pursue other more meaningful goals in life.
>
> *(Tang and Lee 2020, pp. 548-549)*

We need to consider socio-political transformations, such as the financialization and individualization of risk as well as the general economic insecuritization of the individual, in order to understand more fully the transformation in investor attitudes towards the stock market and stock trading as well as the central role online investing continues to play in the lives of our informants. In particular, we argue that, by being linked in quite direct ways to the production of *oneself* as human capital, online investing represents perhaps more than any

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other mode of consumption the strategic formation of a new type of individual, “the subject who is an ‘entrepreneur of him/herself’ who is meant to fit into the frame of society remade as an ‘enterprise society’” (Lazzarato 2009, p. 110). The entrepreneurial consumer emerges.

Individualization, insecuritization, financialization

The financialization of risk refers to policies and institutional structures designed to assert “the redistribution of risk and protection, leaving the individual increasingly at the mercy of the market” (Lazzarato 2009, p. 111). As previously collective forms of risk management and financial securitization become individualized and turned over to market mechanism, the individual is left to his/her own devices, compelled to develop the mental hardwiring practical skills required to ensure a secure and prosperous financial future. As one informant put it in an interview conducted almost four years after the first interview [then still enjoying the last months of the dotcom boom times]:

> Yes, absolutely, the recent years have been frustrating for me but also sometimes OK. If you do your research and don’t just listen to what the guys from the media say, you can still find a good stock here and there … and think about it, what options do we, my generation, have in the matter? That pension plan that my father got when he joined the workforce back in the 70s, well, that won’t be there for my generation. These days, you have to secure yourself and if you don’t, it’s your own fault. I wouldn’t trust the government, or my employers, to do it for me.
>
> *(Oliver, 35, teacher)*

This lack of trust assisted the rise of individual investing and spurred the development of roboadvising accounts, in which consumers enjoy the perception of being “in control” of their investment choices or, if they wish, can outsource those choices to an algorithm (see Lourenço et al. 2020).

The individualization of risk, opportunities, costs, and benefits and the infusion of every aspect of social life with market values also may produce a sense of emancipation from the collective and from a moral duty towards others beyond the letter of the law. The individual is instead exhorted to adopt a mode of self-regulation centred on autonomy, flexibility, and instrumentality in professional and institutional life (Binkley 2006). As Bauman (2000, p. 31) summarizes, “‘individualization’” consists of transforming human ‘identity’ from a given into a ‘task’ and charging the actors with the responsibility for performing that task and for the consequences (also the side-effects) of their performance.” Many of the investors we interviewed expressed this sense of “self-made-ness” often related to making things happen in the market. As one informant put it:

> I’ll be honest with you, buying and selling stock really excites me, doing the investing myself really excites me, and taking care of our financial future myself really excites me. And it scares me at times but so far, it’s been really good. I think it’s a control thing with me. I like to be in charge and even when I used a broker, I never liked it. Now, I am completely independent of others and that part feels really good.
>
> *(Eric, 46, ad designer)*

This comment may embody Adam Smith’s economic theory, but it neglects his sense of moral sentiments that hold markets and societies together.

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Neoliberalism emphasizes individual liberty and freedom, in particular as expressed through the market, where open and competitive supply responds to consumer desires through the individual liberties of market choice. The freedom of the market becomes the model of freedom *per se* (Brown 2006). From this perspective, neoliberalism is a technique of government, or governmentality (which for Foucault means both governing and a mode of thought) that provides, through specific programs and initiatives, a climate that aims at bringing about the entrepreneurial self (Binkley 2006; Bröckling 2016; Rose 1992).

Thus, the freedom postulated by neoliberalism is not just individual but individual*istic* because "rather than fostering social bonds, the target of neoliberal governmentality is to eliminate precisely those collectivist tendencies, which threaten to stifle self-interested, competitive economic behavior" (Binkley 2009). The stock market, delivered via the computer, tablet or smartphone, fast electronic networks, and near-ubiquitous broadband access, became a valid and "natural" site for the performance of the virtues of entrepreneurship and self-realization as the personal ethic for the generation of individual online investors socialized into DIY investing during the heydays of the dot-com era.

2011–2021: issues in fintech

A key aspect for investors is trust – trust that the algorithms that govern their investment strategies are successful, trust in the programmers and financial advisors that run advisement firms, and trust in the wider market. One worry for online advisors is privacy, given the "unprecedented concentration of sensitive personal data that robo-advisers and their developers obtain" (D'Acunto and Rossi 2020, p. 24).

Cryptocurrency, too, entails a complex calculation of trust. For example, Bitcoin was promoted as both a secure online payment system and an investment vehicle: "Bitcoin was commonly referred to as a decentralized cryptographic currency, a rhetorically flexible term that included its multiple and sometimes competing uses as a payment system and speculative commodity (Nelms et al. 2018, p. 21). Although the founders of Bitcoin like to emphasize that users need *not* trust banks, governments, or each other, Bitcoin is "invested in a certain *political* vision that goes under the name of 'the social' and its avatars of relationality, especially trust" (Nelms et al. 2018, p. 27). In other words, as in most of the market, cryptocurrency relies on trust – in systems designed by humans.

Another key concern for consumers – and regulators – is how their investment data is collected, stored, and used (see Couldry and Mejias 2019; Darmody and Zwick 2020; Zuboff 2019). Online investors provide an enormous amount of information to financial firms – including basic demographic information, financial figures, and income, as well as behavioural data about investment choices, trading patterns, and risk tolerance. A broader issue is the tremendous amount of energy required for blockchain technology: "The databases work by burning untold gigajoules of power (bitcoin's energy usage is more than twice that of Apple, Google, Amazon, Microsoft and Facebook combined)" (Hern 2021).

Of course, the promise of online trading remains focused on accessibility – including the ability to research investments, make decisions, track prices, and manage portfolios. In essence, the new digital marketplace offers unparalleled access to financial markets to online investors. Louis, the 20-year-old Robinhood trader, stated about the benefits of easy to use online trading apps: "It should be an even playing field. Anyone can do their own research, it's all fair game, so why should the system be so favorable to people who have more money?" (quoted in Lorenz and Isaac 2021, p. B7). As the Acorns site enthuses about its entry-level "Acorns Invest" option: "The only micro-investing account that allows you to invest spare

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change. Set up in under 5 minutes and automatically add money to your diversified portfolio, originally designed with help from Nobel laureate, Dr. Harry Markowitz. More than $1 billion invested already!" (Acorns, 2021). Clearly, the landscape of individual investing has been profoundly transformed by the digital innovations of the past decade.

The new, young investors who have embraced online investing epitomize the entrepreneurial investor that emerged earlier. A recent newspaper article describes how trader Blanca Lopez thinks about investing:

> 'I need to hustle. I'm so young, I need to make this money.' The 23-year-old South L.A. native, a case manager for a senior home, reaches for her iPhone and opens up Webull, an investing app that has surged in popularity since January [2021]. The app enables her to buy and sell stocks 5½ hours before the market opens for regular trading. Sometimes she makes a trade this early in the day, but usually she just does research: Which stocks should she focus on today? How are their prices trending? Has any news broken that would make a company's shares leap or plunge?
>
> *(Luna and Masunaga 2021)*

Rather than call up her broker, read an investment magazine or newsletter, or consult with a financial planner, Lopez relies on herself – and her favourite investing app.

Conclusion

The history of online investing, at least in its guise as a mass phenomenon, is only about 25 years old. Yet, a lot has happened in those years with several market crashes, exponential technical innovation, and new generations of investors, one lured to the market by the irrational exuberance of the late 1990s and the simultaneous emergence of the Internet and another attracted to easy to use apps and online platforms of the 2020s. In this chapter we identified two distinct investor types that have been characteristic for the various phases of this brief history of online investing.

We call the first investor type the kinematic investor, one who was looking to the stock market as a place for chasing aesthetic experiences of thrill, speed, and agency. Acting like the super-ego, the 2000 dot-com crash forced investors to come to terms with their own overconfidence and limitations and face a reality of tough financial losses and the need to rethink the role of investing in their lives. Many investors came to realize that their actions have consequences and that the market ought to be considered a place for achieving financial self-realization and economic security rather than for primarily having fun. We call this investor type the entrepreneurial investor.

We suggest that we can only understand the inner life of investors and the emerging subjectivities when looking at the socio-economic as well as the technological context in which the practice of investing takes place. It would therefore be inaccurate to reduce the popular rise of individual online investing to the emergence of the Internet. Rather, the emergence and *especially* the sustained success of individual investing can only be understood when linked to the broader philosophy, discourse, and practical rationality of neoliberalism centred on the maximization of profit and financial security as a form of self-government (cf. Binkley 2009). Neoliberal governmentality, hence, is a political project that focuses on the practical activity of self-producing and self-fashioning oneself as a *homo economicus.* Put differently, the individual must become an entrepreneur of himself, configuring himself as human capital. The fintech revolution of the past few years will only speed up this process.

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