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THE IPO OF NEOBROKER ROBINHOOD

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# Case Study – The IPO of Neobroker Robinhood

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## Keywords

Financial technology, financial democratization, platform capitalism, financial infrastructures, neobroker, corporate finance, brokerage, retail investors

## **Scope and Intro**

It's Wednesday evening, July 28, 2021, Ferdinand Franco is sitting on the couch, enjoying a glass of Barolo di Montalcino and trying to gather his strength for the busy week ahead. Franco works for "FINvest NYC" as a hedge fund manager. "FINvest" will have to evaluate whether to invest in neobroker Robinhood, which will officially take the plunge and go public the next day. To assess whether an investment in Robinhood is profitable and worthwhile, it is crucial not to disregard any aspect of the company. A broker app that rains confetti down your screen after executing your first trade? Robinhood is an online broker that features commission-free trading and investing, using gamification elements, and a very simplified mobile user interface. After undergoing several funding rounds in recent years and reporting all-time highs in revenues and user numbers for the last year, the company has now decided to go public in order to grow even further. The gamification of seamless investing, however, can have consequences. In the recent past, Robinhood has been in the headlines exceptionally often for various fines and lawsuits have even been levied on the company. Furthermore, online brokers are a dime a dozen these days: Therefore, the direct counterparts, the entire industry, and the associated business models must be scrutinized thoroughly. Future growth projections, potential profits, and the number and demographics of users can be used to evaluate this IPO. Having fun while investing in an easy and inviting app, was what attracted millennials to trading apps like Robinhood, especially during the Covid restrictions. Franco resumes, as much new excitement as there is around Robinhood right now, there is also massive uncertainty about the company's future. As the world begins to emerge from the pandemic, Robinhood's IPO is the trust test for the company that has set out to "democratize finance".

## **The minds behind**

Robinhood's story began at Stanford, which is where co-founders Baiju Bhatt and Vlad Tenev were roommates and classmates. After graduation, they packed their bags for New York City and started two financial companies, selling their proprietary trading software (high-frequency

trading platforms) to hedge funds. In doing so, they discovered that the big Wall Street firms paid practically nothing for stock trades, while most Americans had to pay a commission on every single trade. Determined to change that, they returned to California intending to develop a financial product that would give everyone, not just the wealthy, access to the financial markets, and thus founded their company, Robinhood, in April 2013. Vladimir Tenev was born in Bulgaria. Tenev got a degree in mathematics at Stanford University, when he met Baiju Bhatt. He then went to UCLA to earn a Ph.D. in mathematics but canceled to start a business with Bhatt. Baiju Bhat enrolled in the mathematics master's and graduated from Stanford in 2008<sup>1</sup>. Bhatt was, to Tenev's side, the co-CEO of Robinhood until November 2020, when he decided to step down from that position. He continued in his role as co-founder, supporting key business initiatives and serving on Robinhood's board of directors. In 2021, Robinhood employs 3400 employees, having its headquarters in Palo Alto.

### **Democratize finance for all – Company overview**

The corporate name is derived from the legendary hero Robin Hood, who fought for social justice, taking from the rich and giving to the poor. Hence the company's mission is to "democratize finance for all", to provide access to financial markets for everyone, not just the wealthy. First released on the AppStore in December 2014, Robinhood officially launched its app in March 2015. Three years later, Robinhood announced a waiting list for commission-free cryptocurrency trading which grew to more than 1,250,000 interested individuals on the first day. However, it's not simply commission-free trading that is intended to attract and retain users: Robinhood wants to keep its users engaged and achieves this specifically through applications for various devices such as smartphones, tablets, or smartwatches. Those captivate with a simple layout, ease of use, and many features that are intended to bring the user fun while using them. An example is amusing emojis in private messages to investors or even the in-app illustration of stock numbers that turn like slot machines. The platform is therefore designed for the younger audience, which could forget that real money is involved. In June 2021, Robinhood

can claim to have 21.3 million active users on its platform. The average age of users in 2021 is 31 years, an increase of five years since the launch in 2015<sup>2</sup>. In 2021, 68% of Robinhood's users are male, and the rest female<sup>3</sup>. Over 50% of the customers are first-time investors. Furthermore, 55% are white, 24% Hispanic, 15% of users are black and 6 % are of another race. In general, the Robinhood userbase has become less diverse, but wealthier since 2019<sup>4</sup>.

**App offering.** Robinhood offers the trading of stocks, with long-only, no short selling is possible. Thereby, more than 6900 symbols can be bought or sold as fractions of shares. The broker offers both stocks and ETFs. Both single and multi-leg options are provided. The add-on "Robinhood Crypto" later added support for commission-free trading of 7 cryptocurrency options such as Bitcoin Cash, Dogecoin, Ethereum Classic, and Litecoin. During the coronavirus pandemic and the 2020 stock market crash, Robinhood trading increased<sup>5</sup>.

**Revenue streams.** The positive development of Robinhood's financial and operating results over the past several years are concisely highlighted by **Exhibit 1**. As displayed in **Exhibit 2** and derived from **Exhibit 3** and **Exhibit 4**, Robinhood gets the vast majority (81%) of revenue from payment for order flow (PFOF) and Transaction Rebates. That means that Robinhood derives transaction-based revenue by referring its users' orders for options, stocks, and cryptocurrencies to particular market makers such as Citadel Securities or Two Sigma Securities. Hereby, Robinhood receives a fixed rate per spread from the market makers. As depicted in **Exhibit 5**, last year, the majority of Robinhood's PFOF revenues were generated from spreads based on options trading. Consequently, revenues are presently largely dependent on these fees. The compensation here is usually only a fraction of a penny per share, if a large number of orders are traded, like for Robinhood, it becomes a sizeable source of revenue. PFOF is an important contributor to Robinhood's ability to offer trading without commissions<sup>6</sup>.

Net interest revenues, received from securities lending transactions, are another important profitable contributor to Robinhood's business. This means revenues are derived from uninvested cash that does not flow into the program banks' cash management network,

principally through the placement of that cash into interest-bearing accounts. Interest income is also earned on margin loans to users. In this case, lending is used to help customers buy shares "on margin": This involves users borrowing money to buy shares, options, or other securities as they hope to maximize their investment returns. The remaining 8% of revenue is generated through multiple revenue streams such as the premium membership fees from Robinhood Gold, which grants users the right to see professional research, Level II market data, instant transfers up to your Portfolio Value, and margin trading if accepted. Further streams are share credits, interest on uninvested cash, interchange fees related to its debit card, and other smaller revenue streams.

In numbers, as can be seen in **Exhibit 3** and compiled in **Exhibit 6**, in 2020, Robinhood achieved *Total Revenue* of \$959 million and an adjusted EBITDA of \$155 million, and further, as of June 30, 2021, additional 3-month revenue growth of 131% over the prior year. As of June 2021, Robinhood achieved 21.3 million (109% year-over-year growth) *Monthly Active Users (MAU)*. Furthermore, the level of engagement was sustained at scale, with 22,5 million *Net Cumulative Funded Accounts* as of June 30, 2021. For those users, Robinhood is accounting for a staggering \$102,035 million in *Assets Under Custody (AUC)*, which translates into year-over-year growth of 205%. This translates into another key metric for those platforms, which shows the *Average Revenues Per User (ARPU)* being \$111.7 compared to an average of \$115.2 in 2020, which is a 3% year-over-year decline (**Exhibit 7**).<sup>7</sup>

**Funding.** As depicted in **Exhibit 8**, Robinhood advanced through 23 funding rounds. Since the seed funding of \$3 million in 2013 to Series G-2 funding in September 2020 (Total funding of \$5.6 b), in aggregate, an additional 3.4 billion we raised in January (\$1.02 billion emergency funding) and February of 2021. The financing round was guided by Ribbit Capital. Robinhood names 4 investors with more than 5% ownership, including *DST Global, Index, New Enterprise Associates*, and *Ribbit Capital*. With this latest financial boost, Robinhood has raised more capital in one week than at any time since its founding in 2013. Robinhood stated that

they would use the provided funding to invest in record customer growth: “*This round of funding will help us scale to meet the incredible growth we’ve seen and the demand for our platform*”, Chief Financial Officer Jason Warnick said<sup>8</sup>.

***Doubts about the app offering.*** Robinhood has faced its fair share of criticisms and difficulties over the years. Robinhood provides users with only five technical indicators (Volume, Moving Average (MA), Exponential Moving Average (EMA), Relative Strength Index (RSI), Moving Average Convergence Divergence (MACD))<sup>9</sup>, other competitors give users up to 400 tools. Although Robinhood is number one in “Ease of Use”, they are ranked last in the categories “Trading Platform and Tools” and “Research”. Thus, by providing only five of these tools to its users, Robinhood prevents its users from being able to develop a trading strategy that is vastly distinct from that of other Robinhood users, or even from developing strategies for less rudimentary trading approaches. This lack of quantitative data reinforces the culture of stock trading as entertainment, based on transient emotions or moods among other inexperienced retail traders. Further, regarding Robinhood’s product lineup in the app, there have been criticisms that Robinhood provides very few research or educational resources for customers. If clients want more than basic stock quotes, they must subscribe to Robinhood Gold, but even still, the offer lacks resources compared to competing offerings. In **Exhibit 9**, the app offerings compared to the biggest direct competitors *TD Ameritrade*, *Charles Schwab & E\*Trade* can be found. Robinhood doesn't offer mutual funds or fixed-income investment products, and you can't trade commodities, forex, or futures<sup>10</sup>. Further, PFOF statistics are usually published by brokers. It’s the best way for investors to compare and ensure accurate and timely executions. By not publicly disclosing this important information the company thus faces criticism for this lack of transparency.

***Manipulated customers?*** But even beyond the specific in-app offering, Robinhood has been the subject of serious complaints and lawsuits. In June 2020, 20-year-old Alex K. committed suicide because he was shown a \$750,000 shortfall by Robinhood after

experimenting with complex options. Robinhood had merely not yet fully executed the trade, which is why a false deficit amount was created. Against the complaint that many users gained access to advanced and risky options trading products, even with no or limited investment experience, Robinhood announced plans to hire hundreds of new customer service employees in August 2020. In the same year, Robinhood was also accused of aggressively luring inexperienced investors to its platform and using gamification techniques to manipulate customers (March 2021: Robinhood eliminated the famous “confetti rain” in their app for making first trades) which creates an environment that is more like a casino. Also in 2020, Robinhood was charged by the Securities and Exchange Commission (SEC) for misleading customers because “orders of Robinhood's customers were executed at prices above those of other brokers” which is not consistent with the “Best Execution” policy under which brokers must trade. Despite savings from the commission-free trading offer, customers were missing out on a total of \$34.1 million because of these inferior prices. As a result, Robinhood agreed to pay \$65 million to resolve the allegations. By noting when many users bought securities based on their popularity with other Robinhood users, it was also possible to identify certain "herding" effects among users. During the rush of new investors in 2020 and into 2021 - the largest one-day surge in the history of the Dow Jones - Robinhood, like other brokers, experienced system-wide, all-day outages and other technical issues that disrupted service<sup>11</sup>.

**01/2021: Meme stock crisis.** In January 2021, the app came under heavy fire for limiting trading during extreme market volatility surrounding GameStop and other heavily shorted stocks. The restrictions were put in place when retail investors, largely from Reddit subreddits (Reddit is a website, which provides users with news and a place where they can create communities), created a buzz in heavily shorted stocks<sup>12</sup>. Starting on January 22, the subreddit group decided to publish several posts on Reddit calling people to acquire GameStop shares. As a result, the price skyrocketed 600% in four days, forcing the major Wall Street firms that had shorted the stock to lose billions in their portfolios. Robinhood accessed a line of credit

from various banks (up to \$600 million revolvers from banks including *JPMorgan Chase & Co.*, *Goldman Sachs Group Inc.*, and *Morgan Stanley*) to meet the higher margin or lending requirements of the central clearing facility for stock trader. Still, Robinhood decided to draw in 18m funded accounts because the company couldn't afford to embed the \$3 billion of deposits that were asked from the NSCC. Later that night, Robinhood contacted several investors, which offered the mentioned emergency funding to assure stock trading for users. As a result, the company has faced a mountain of criticism from regulators and users and, as shown in **Exhibit 10**, the number of downloads of the Robinhood app in the subsequent months significantly dropped. Even the Senate Banking Committee began a public examination of the GameStop saga, aimed at addressing opposite positions on the value and dangers of a new retail trading landscape.

**Consequences.** As a result of all, FINRA reported on June 30, 2021, executing a \$57 million fine against Robinhood and ordering it to pay approximately \$12.6 million in compensation to thousands of its customers who suffered "significant harm" from the broker. Millions of customers would have received false or misleading information from Robinhood and were affected by system failures. Further, FINRA found that algorithmic bots enabled thousands of customers to trade options<sup>13</sup>. Even though these users were not authorized or had red flags in their accounts. These were meant to prevent them from participating in the advanced trading strategy. The total of \$70 million is the largest fine ever imposed by FINRA.

**Giant net loss of 2021.** Robinhood recorded a net loss of \$1.4 billion in 2021. It included a \$1.5 billion fair value adjustment to convertible notes and warrant liability. As noted above, during the meme stock peak, in late January, Robinhood encountered a liquidity shortage. In consequence, Robinhood issued two tranches of convertible notes (short-term debt that converts into equity) in February 2021, consisting of Tranche I and Tranche II (aggregate principal amounts of \$2.53 billion and \$1.02 billion, respectively). Such bonds will automatically be converted into ordinary shares in the IPO at a conversion price that is the lesser of 70% of the

cash price per share paid by investors in the IPO and \$38.29 (Tranche I) or \$42.12 (Tranche II). As illustrated in **Exhibit 3**, the total of the notes is recorded as a warrant liability using a fair market value and as such reflects a loss of \$1.5 billion in Q1 of 2021<sup>14</sup>. As shown in **Exhibit 11** this money is also significantly noticeable in the cash flows from operating activities and financing activities for the year 2021.

### **The rise of neobrokers**

Especially among the young generation of investors, neobrokers have gained tremendous popularity in the past years. Further, the distribution of online brokerage customers shows, that around 14% of online brokerage customers use established providers and neobrokers at the same time. As outlined in **Exhibit 12**, the revenue in the segment has been steadily increasing over the past few years and is expected to reach \$2,743 million in 2021. Moreover, it is expected that the revenue will show a compound annual growth rate of 5.00%. A global comparison shows that the highest revenue from neobrokers is generated in the US, followed by China and Germany, as illustrated in **Exhibit 13**, while at the same time the highest amount of assets under management is achieved in the US. The number of users is expected to reach 66.36 million by 2025. In **Exhibit 14** it can be observed that in the context of user penetration, the share of users of neobrokers in the market, the U.S. recorded the highest percentage value (4.9%) in 2021.

**Competition.** In recent years, the market has been flooded with neobrokers. Robinhood's biggest rivals include *E\*Trade*, an electronic platforms veteran founded back in 1982, which was acquired by Morgan Stanley in 2020 for \$13 billion. In addition, at the time of the IPO, brokers *Charles Schwab* and *TD Ameritrade* are another two of the largest competitors. *Schwab* acquired *TD Ameritrade* for \$22 b back in 2020 and expects the merger of their platforms and services to take place within three years from the close of the deal, which makes the conglomerate even more threatening for Robinhood<sup>15</sup>. A comparison of the offerings for customers can be reviewed in **Exhibit 9**, it shows that Robinhood has strong deficits when comparing the range of offerings. Contrasted to other online share trading services in the U.S.,

Robinhood had an exploding monthly number of active users, especially since the beginning of the pandemic in February 2020, as displayed in **Exhibit 15**. Robinhood's revenues in comparison with named competitors and other players worldwide are shown in **Exhibit 16**, where it can be witnessed that Robinhood, despite the largest number of users, does not generate the largest revenues. *Charles Schwab*, together with *TD Ameritrade*, generated by far the largest turnover. **Exhibit 17** showcases the quarterly PFOF received by security type, for Robinhood and the three important competitors in 2020. A comparison of key numbers for traditional brokers and important high-growth FinTechs is provided through **Exhibit 18**.

**Best Execution.** In the world of neobrokers, one important mechanism is the above-mentioned Best Execution. These are legal obligations that require brokers to serve their clients with the most advantageous order execution considering the underlying market conditions. Best Execution includes several key attributes that brokers must review, track and document. In doing so, they must decide how to route a stock, option, or bond order for execution. In Europe, Best Execution rules have been implemented in 2018 under the name MiFID II. With this, the original MiFID regulations from 2007 were strengthened. This new regulation states that brokers must take "*sufficient steps*" to ensure favorable execution for clients, as opposed to "*reasonable steps*". At one of Robinhood's largest European counterparts, "Trade Republic", there are serious differences in the execution of orders: Trade Republic accepts orders to buy or sell securities exclusively based on a client's authorization. The client bears the risk of selecting the appropriate execution venue. "Trade Republic" is subsequently not obliged to achieve the best possible result (Best Execution) according to these execution principles. As noted above in connection with FINRA's fines, there were many complications concerning the Best Execution regulations and Robinhood. FINRA determined that Robinhood's supervisory system was not sufficiently designed to assure compliance with Best Execution responsibilities. Specifically, the firm did not conduct systematic reviews of Best Execution for various types of orders and orders received outside of regular trading hours<sup>16</sup>. Consequently, thousands of

orders fell outside the Company's "regular and rigorous" review process each month.

### **Going Public**

Robinhood's IPO has investors worldwide on the edge of their seats: Hotly anticipated, and as controversial as the neobroker itself. Finally, Robinhood debuts on the stock exchange Nasdaq on Thursday, July 29, 2021 - claiming the issue price of \$38 per share. But Franco seems surprised: Didn't Robinhood want to aim for a higher price? Although the IPO had already been widely advertised for quite some time in advance, investors now seem to hesitate a bit. Robinhood hired *Goldman Sachs, J.P. Morgan, Barclays, and Wells Fargo Securities*, among others, to advise and guide them in the IPO process and underwrite the shares to be offered.

**Background.** Like any business, Robinhood's purpose behind the IPO is to offer shares to the public to raise money - and, significantly, to do so quickly and in large amounts. The company aimed initially to raise \$2.3 billion in its IPO. Robinhood intends to use this cash infusion to develop new products, increase its marketing spend, and grow its business. Thus, it is expected to raise more than a third of the amount raised in the 23 separate rounds of funding. An initial public offering, consequently, could likely benefit Robinhood's future shareholders as well. Before the IPO, only Robinhood employees, venture capitalists, and accredited secondary market investors have been able to acquire shares of the company. The IPO opens that opportunity to millions of retail investors. If investors' appetite for the stock is anything like their recent interest in trading shares through the Robinhood app, then one could think that a successful IPO appears to be on the horizon. That's because the IPO price implies a valuation of about \$1,350 per active and funded account, based on an estimated 22.5 million accounts in the second quarter of 2021. By comparison, *E\*Trade* is valued at \$2,500 per account.

**The offering.** Under the symbol HOOD, the FinTech set its issue price at \$38 shortly before the stock market launch - Robinhood had initially targeted up to \$42 (and consequently a company valuation of \$35 billion) and is thus at the very bottom end of the originally targeted price range. As a result, the company is now valued at \$32 billion. Of the registered amount,

on July 28, Robinhood itself will offer 52,375,000 Class A shares, and 2,625,000 Class A common stock shares will be offered by the selling stockholders (**Exhibit 19**). There further is a Underwriters' option to purchase additional shares of Class A common stock, solely to cover over-allotments, which will amount to 5,500,000 shares. The sum raised will thus add up to \$1.99 billion. After this offering, there will be outstanding 131,807,224 shares of Class B common stock, and 835,675,280 (plus 5,500,000 stocks if underwriters exercise in full their option to purchase shares) of common stock<sup>17</sup>. As of the date of the IPO, Tenev and Bhatt both hold a beneficial interest of 7.9% of the outstanding capital stock, and they hold approximately 26.2% and 39%, respectively, of the voting rights of the outstanding capital stock<sup>18</sup>. At the IPO, Robinhood reserves up to 35 % of its shares, reservable via the app, for its users in an uncommon measure: Instead of only selling stock through investment banks to their wealthy clients and institutions, shares are also allocated to its users, mostly retail investors<sup>19</sup>. In doing so, the FinTech company takes a risk - the debut thus is more unpredictable compared to ordinary IPOs, where investment banks try to ensure an orderly process and stable prices.

**Multi-class shares.** Robinhood offers three classes of authorized common stock, Class A common stock, Class B common stock, and Class C common stock. Big enterprises like the Tech giant Google and its parent entity, Alphabet, also use this structure of offering multi-class shares and as can be depicted in **Exhibit 20**, multi-class shares are becoming more and more common among tech companies in the US. In general, dual or multi-class structures are common at tech companies like Google, Facebook, and LinkedIn and are usually instituted to keep control of a venture with the founders and top executives. The holders' rights of Class A common shares, Class B common shares and Class C common shares are equal, except for voting rights and conversion. Each Class A common share traded is eligible for one vote per share. Each Class B common share carries 10 votes per share and is convertible into a Class A common share at any time. Shares of Class C common stock come with no voting rights<sup>20</sup>. The founders own 135 million shares and have voting control through holding Class B super-voting

shares, which give them 65% of the vote. Robinhood further announced “*to be required to issue additional shares of Class A common stock upon the exercise of outstanding warrants and options and settlement of our RSUs and future equity-based awards. These and other additional issuances of the capital stock, including issuances of Class B common stock and Class C common stock, could result in significant dilution*”: Shareholders own a smaller stake in the company than they did before the new shares were issued, because the existing shareholders’ equity in the company is reduced, but not the dollar value of their stake<sup>21</sup>.

**Market conditions.** As illustrated in **Exhibit 21**, until now, 2021 was quite a year for IPOs. After the number had already more than doubled from 2020 to 2021, until July 2021, there were 675 IPOs in the United States. This is 244 more IPOs for the first 7 months than the previous years, with supposedly many more to come. This high number was largely influenced by the significant rise in the number of special-purpose acquisition companies (SPACs) that went public. Thereby, the Nasdaq exchange, which is headquartered in New York City, was the world's leading exchange in terms of the number of IPOs filed in the first half of 2021<sup>22</sup>. Favorable for Robinhood, the Nasdaq asks for only half of listing fees compared to NYSE and has lower minimum revenue requirements for companies. As depicted in **Exhibit 22**, 161 IPOs were completed on Nasdaq in the first six months of 2021, nearly as many as in all of 2020. In the preceding year, the Shanghai Stock Exchange recorded the most IPOs. In fact, among all these IPOs, as can be seen in **Exhibit 23**, 33.6% of the 2021 IPOs closed below their placement price to date, which is relatively close to the longer-term average of around 31%. On the whole, despite variants of the COVID-19 virus, global equity markets are relatively stable and vibrant in 2021<sup>23</sup>. While the second half of 2020 saw a rebound in IPO activity from the low point of the pandemic, the IPO numbers for 2021 certainly reflect at least some catch-up activity. Companies that had originally hoped to go public in 2020 instead decided to make this step in 2021, when it appeared likely that the market environment would continue to be supportive.

**Investors risk.** Robinhood provides insight into the risks to potential investors in the

scope of its S1 File. Robinhood has a history of limited operating experience, which hinders valuations of the company and future projections, and fosters the risks linked with an investment in the common stock. Robinhood has enlarged quickly in recent years and therefore has limited experience at its current size. As a result, its financial performance, brand, and corporate culture could be harmed should it be unable to effectively manage its growth. As a large portion of revenues is transaction-based, reduced spreads in prices of securities, reduced trading activity in general, changes in business relationships with market makers, and new regulations or a ban on PFOF and similar methods could result in lower revenues<sup>24</sup>. Moreover, as a broker, Robinhood (RHS and RHF, **Exhibit 24**) is bound by "Best Execution" guidelines, so they may be fined for not meeting these requirements (as happened in the past), and these requirements could be changed in the future in ways that could harm their business. In the future, Robinhood may also need further capital to meet its liquidity requirements and boost company growth and its objectives, which could result in dilution for shareholders. A change in global economic, political, or business circumstances, or a market occurrence could also harm Robinhood's reputation. In addition, Robinhood has recently been subject to regulatory investigations, lawsuits, and payments, and at the same time anticipate that the company will continue to be subject to such proceedings in the future. This may result in significant costs and could require Robinhood to change practices<sup>25</sup>. In brief, the above and the universal troubles Robinhood has faced in the past, other foreseen difficulties may also affect the company's future. The threat of hacker attacks aimed at obtaining customer data is omnipresent for FinTechs. In addition, changing regulations, for example, concerning the business model based on PFOF, may bring drastic new developments for these rather new business models of neobrokers. For users and potential investors, all these factors matter.

### **Disrupting traditional Banks (?)**

To get a more holistic picture, Franco further looks at the interrelations of neobrokers and traditional banks. Who can learn from whom? Who needs whom?

***What connects.*** Like many other money apps, Robinhood relies on old-fashioned partner banks such as *Goldman Sachs Bank USA, HSBC Bank USA, Wells Fargo Bank, and Citibank*. Small and mid-sized commercial lenders offer start-ups so-called banking-as-a-service services to insure against losses through partnerships. Here, both the bank and the FinTech company make money by sharing the fees and offering Banks an opportunity to participate in the hype around FinTechs.

***What distinguishes.*** Neo-brokers are inferior to traditional banks mainly because they have fewer functions, tradable products, and order types. Also, the trading venue is usually not always freely selectable. But neobrokers are improving more and more in these areas and thus exert more price pressure on classic brokers. But there are also many advantages for the customer. First, they distinguish themselves by executing trades quickly. Secondly, they offer an advantage through their digital character by primarily focusing on a mobile offer. This creates an attractive and user-friendly app interface.

***Banks should react.*** FinTechs represent a challenge for traditional banks but can also be seen as an opportunity to meet the current demands. To face these, processes must be optimized and organized in a digital way, such as opening an account electronically, since the readiness of customers for purely online services increases. This makes the new customer process faster and less complicated, and more processes may be digitalized or eliminated to save costs. Especially the user experience should be improved through simplification and the use of gamification elements. For example, different front ends can be created for customer groups with different experiences with investment products<sup>26</sup>. A survey conducted in 2020 found that nearly two-thirds of Americans would prefer buying or using financial products through a technology company's platform over a traditional financial services provider. In fact, that figure increases to 81% amongst Americans between 18 and 34 years<sup>27</sup>. In addition, about 60% of all Americans have not invested outside of their retirement accounts and an even larger percentage (68%) of young adults aged 18-29 have no money invested in the stock market at

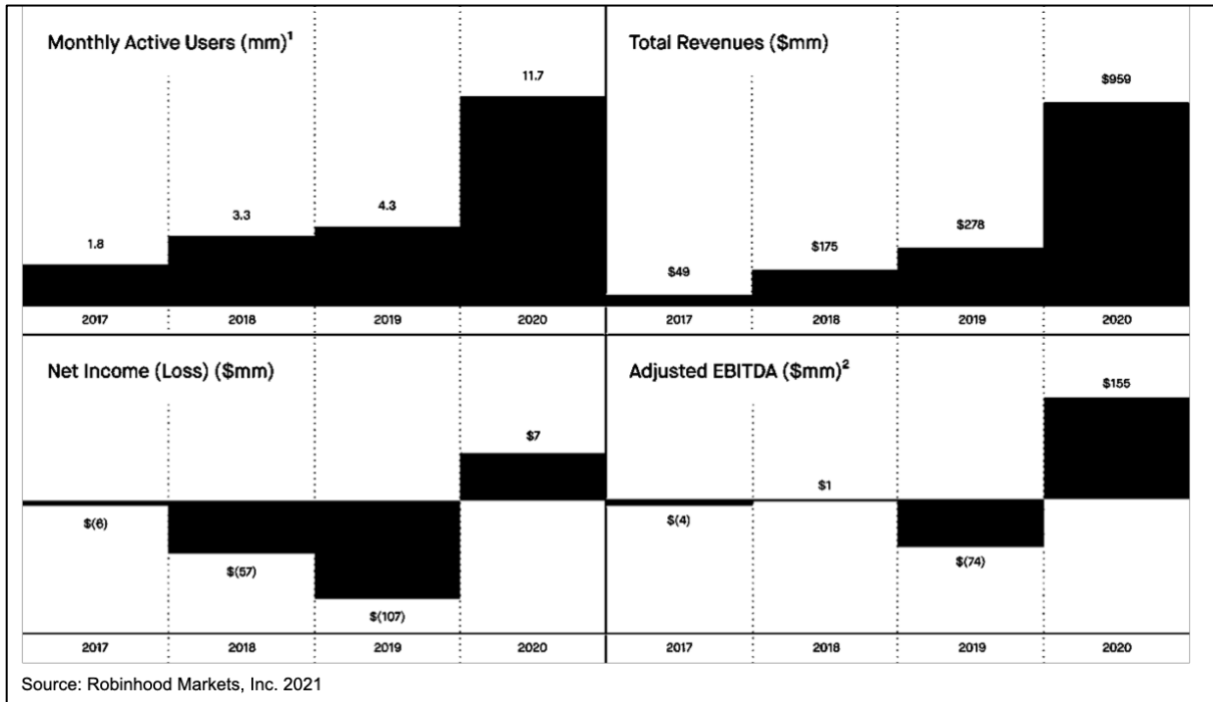
all.<sup>28</sup>

### **Looking ahead**

Can Robinhood find its place among the 66.4% that close at a higher price than the IPO price on the day of its debut? Do investors get as hooked on the stock as they have in the past with the app itself? How will planned regulations affect neo brokers and banks? Millennials and Generation Z's growing awareness of the need for stable financial security, along with increasing digitalization drove the growth of the neobroker-market. For Robinhood, the current product offerings represent “only the beginning”: By the end of the fiscal year, Robinhood plans to double the number of its programmers and announced it is eyeing expansion into Europe and Asia. Founder Tenev also announced Robinhood's plans to become a "single money app" with payment services, a digital currency wallet, and retirement savings plans. Nevertheless, Robinhood must keep pace with changes in the industry and technology and continue to offer new innovative products, and there is a possibility that Robinhood's platform may be subject to instabilities in the future. Franco is aware that the retail industry is very cyclical and at the time of the IPO, Robinhood was at a high point in their corporate performance as the retail stock market was booming. With the end of the pandemic and the initial hype fading away, it would be reasonable to assume that the retail stock market will slow down, which would hit Robinhood directly, as most of their revenues are directly linked to the amount of trades executed. Franco is concerned that with all of these signals, yet such a high valuation for the shares, there is a possibility that the value of the stock may be affected by over-hyped retailers, like Robinhood's users. Given potential further implementation of PFOF regulations in the US and Europe, which may knock Robinhood off its feet, and even more lawsuits coming Robinhood's way, some things are causing Franco a headache, thinking about approving an investment. For a company with the self-stated “future vision to become the most trusted and most culturally relevant money app worldwide” there is still a long way to go.

## Appendix

**Exhibit 1: Financial and operating results of Robinhood for the periods presented<sup>29</sup>**



**Exhibit 2: Robinhood Revenue Streams Breakdown<sup>30</sup>**

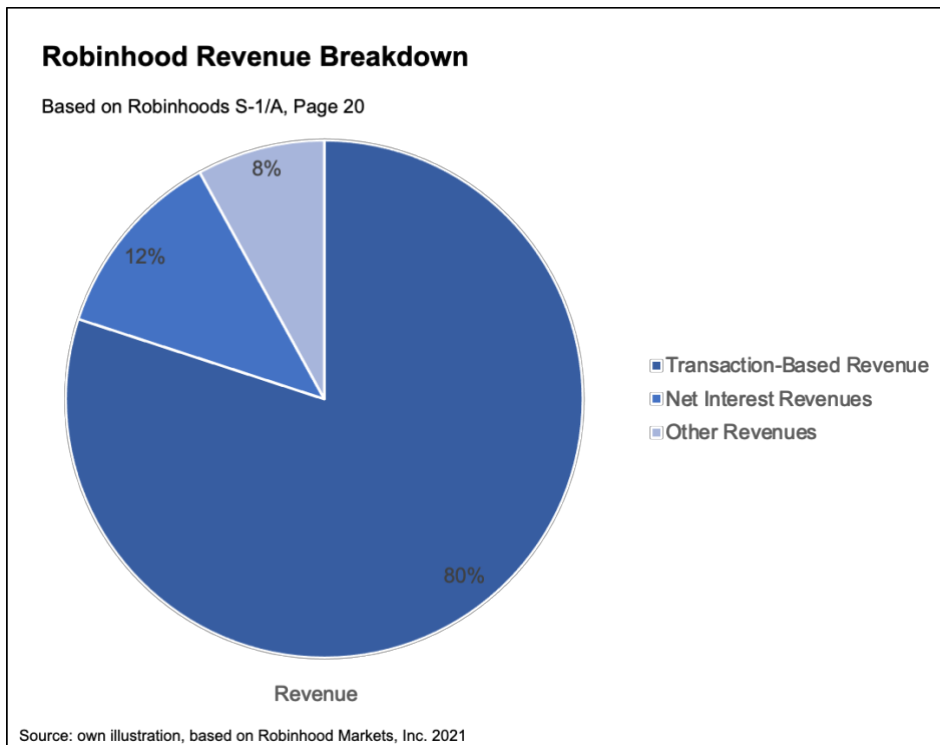
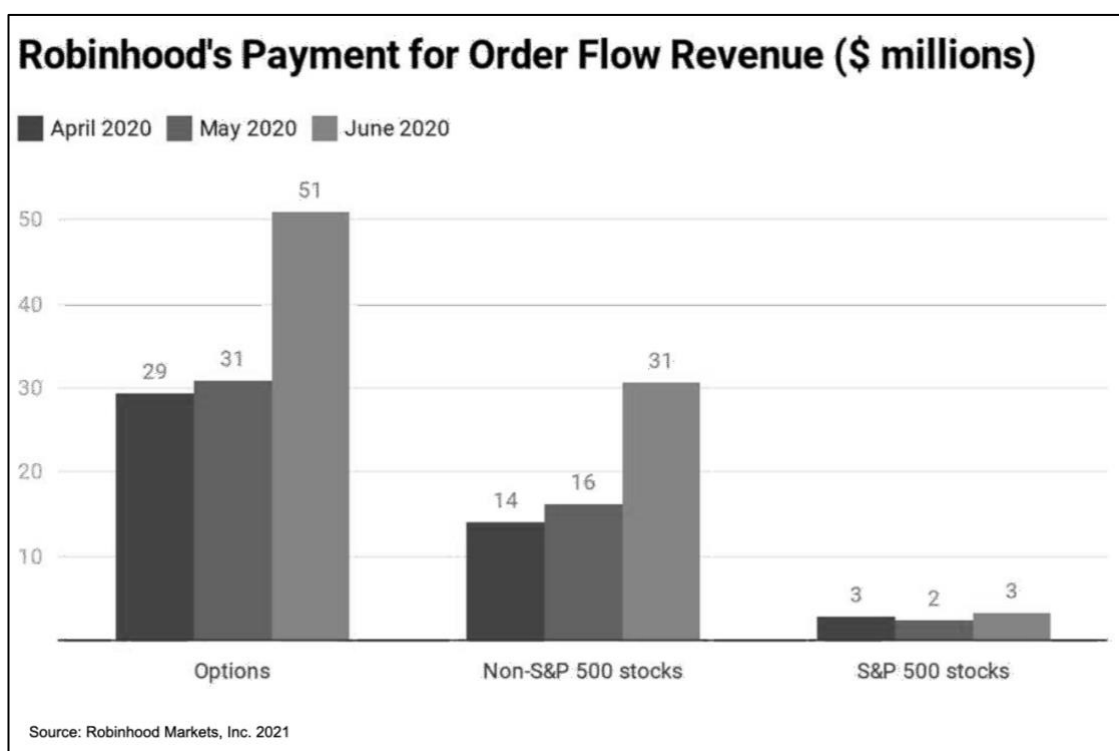


Exhibit 3: Consolidated Statements of Operations Data Robinhood<sup>31</sup>

(in thousands, except share and per share data)	Year Ended December 31,		Three Months Ended March 31,	
	2019	2020	2020	2021
<b>Consolidated Statements of Operations Data:</b>				
<b>Revenues:</b>				
Transaction-based revenues	\$ 170,831	\$ 720,133	\$ 95,631	\$ 420,439
Net interest revenues	70,639	177,437	24,016	62,497
Other revenues	36,063	61,263	7,903	39,238
Total net revenues	277,533	958,833	127,550	522,174
<b>Operating Expenses:</b>				
Brokerage and transaction	45,459	111,083	20,404	41,004
Technology and development	94,932	215,630	33,205	116,858
Operations	33,869	137,905	21,813	66,564
Marketing	124,699	185,741	69,922	102,248
General and administrative	85,504	294,694	34,651	137,114
Total operating expenses	384,463	945,053	179,995	463,788
<b>Change in fair value of convertible notes and warrant liability</b>	—	—	—	1,492,269
<b>Other expense (income), net</b>	657	(50)	143	(859)
<b>Income (loss) before income tax</b>	(107,587)	13,830	(52,588)	(1,433,024)
<b>Provision for (benefit from) income taxes</b>	(1,018)	6,381	(86)	11,779
<b>Net income (loss)</b>	\$ (106,569)	\$ 7,449	\$ (52,502)	\$ (1,444,803)
<b>Net income (loss) per share attributable to common stockholders:</b>				
Basic	\$ (0.48)	\$ 0.01	\$ (0.23)	\$ (6.26)
Diluted	\$ (0.48)	\$ 0.01	\$ (0.23)	\$ (6.26)
<b>Weighted-average shares used to compute net income (loss) per share attributable to common stockholders:</b>				
Basic	221,664,610	225,748,355	224,780,085	230,685,464
Diluted	221,664,610	244,997,388	224,780,085	230,685,464
<b>Unaudited pro forma net loss per share attributable to common stockholders<sup>(1)</sup>:</b>				
Basic and diluted		\$ (0.34)		\$ (0.12)
<b>Unaudited pro forma weighted-average shares used to compute net loss per share attributable to common stockholders<sup>(2)</sup>:</b>				
Basic and diluted		596,057,347		720,663,088
(1) Net loss in computing unaudited pro forma basic net loss per share has been adjusted (i) to remove losses resulting from the remeasurement of our convertible notes and warrant liability of nil for the year ended December 31, 2020 and \$1.5 billion for the three months ended March 31, 2021 and (ii) for share-based compensation expense related to IPO-Vesting Time-Based RSUs for which the time-based vesting condition was satisfied or partially satisfied as of December 31, 2020 or March 31, 2021, as applicable, and IPO-Vesting Market-Based RSUs, assuming, for purposes of determining the satisfaction of the market-based vesting condition, an initial public offering price of our Class A common stock of \$40.00 per share, which is the				
Source: Robinhood Markets, Inc. 2021				

Exhibit 4: Quarterly Consolidated Statements of Operations Data Robinhood<sup>32</sup>

	FY 2019				FY 2020				FY 2021
	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21
<b>Total Revenue</b>	\$56,156	\$71,732	\$77,480	\$72,165	\$127,550	\$244,211	\$269,530	\$317,542	\$522,174
% QoQ growth		28 %	8 %	(7)%	77 %	91 %	10 %	18 %	64 %
% YoY growth					127 %	240 %	248 %	340 %	309 %
Brokerage and Transaction	\$8,225	\$11,142	\$12,713	\$13,379	\$20,404	\$28,612	\$31,444	\$30,623	\$41,004
% QoQ growth	14.6 %	15.5 %	16.4 %	18.5 %	16.0 %	11.7 %	11.7 %	9.6 %	7.9 %
% of revenue	15 %	16 %	16 %	19 %	16 %	12 %	12 %	10 %	8 %
Technology & Development	\$16,304	\$18,239	\$29,580	\$30,809	\$33,205	\$44,971	\$55,491	\$81,963	\$116,858
% QoQ growth	12 %	62 %	(17)%	4 %	8 %	35 %	23 %	48 %	43 %
% of revenue	29 %	25 %	38 %	43 %	26 %	18 %	21 %	26 %	22 %
Operations	\$6,058	\$8,984	\$7,436	\$11,391	\$21,813	\$30,464	\$40,962	\$44,666	\$66,564
% QoQ growth	48 %	(17)%	53 %	91 %	40 %	34 %	34 %	9 %	49 %
% of revenue	11 %	13 %	10 %	16 %	17 %	12 %	15 %	14 %	13 %
Marketing	\$27,672	\$28,211	\$27,825	\$40,991	\$69,922	\$43,510	\$39,088	\$33,221	\$102,248
% QoQ growth	2 %	(1)%	47 %	71 %	(38)%	(10)%	(15)%	(15)%	208 %
% of revenue	49 %	39 %	36 %	57 %	55 %	18 %	15 %	10 %	20 %
General and Administrative	\$9,944	\$16,498	\$38,127	\$20,935	\$34,651	\$38,636	\$113,494	\$107,913	\$137,114
% QoQ growth	66 %	131 %	(45)%	66 %	12 %	194 %	(5)%	(5)%	27 %
% of revenue	18 %	23 %	49 %	29 %	27 %	16 %	42 %	34 %	26 %
<b>Total OpEx</b>	\$68,203	\$83,074	\$115,681	\$117,505	\$179,995	\$186,193	\$280,479	\$298,386	\$463,788
<b>Operating Income / (Loss)</b>	(\$12,047)	(\$11,342)	(\$38,201)	(\$45,340)	(\$52,445)	\$58,018	(\$10,949)	\$19,156	\$58,386
% margin	(21.5)%	(15.8)%	(49.3)%	(62.8)%	(41.1)%	23.8 %	(4.1)%	6.0 %	11.2 %
<b>Non-GAAP Operating Income / (Loss)</b>	(\$10,597)	(\$9,865)	(\$18,034)	(\$41,767)	(\$50,033)	\$59,383	(\$9,378)	\$38,138	\$67,382
% margin	(18.9)%	(13.8)%	(23.3)%	(57.9)%	(39.2)%	24.3 %	(3.5)%	12.0 %	12.9 %
<b>Net Income / (Loss)</b>	(\$12,099)	(\$11,402)	(\$38,426)	(\$44,642)	(\$52,502)	\$57,584	(\$10,661)	\$13,028	(\$1,444,803)
% Margin	(22)%	(16)%	(50)%	(62)%	(41)%	24 %	(4)%	4 %	(277)%
Source: Robinhood Markets, Inc. 2021									

**Exhibit 5: Robinhood's PFOF Revenue distribution<sup>33</sup>****Exhibit 6: Estimated Preliminary Results June 30, 2021<sup>34</sup>**

	Three Months or Month Ended		
	June 30, 2020	June 30, 2021	
	Actual	Low (estimated)	High (estimated)
(unaudited, in millions)			
<b>Selected Financial Data</b>			
Revenue	\$ 244	\$ 546	\$ 574
Operating expenses	\$ 186	\$ 536	\$ 486
Net income (loss)	\$ 58	\$ (537)	\$ (487)
<b>Other Data</b>			
Adjusted EBITDA (non-GAAP) <sup>(1)</sup>	\$ 63	\$ 59	\$ 103
		Three Months or Month Ended	
	June 30, 2020	June 30, 2021	
	Actual	Estimate	
<b>Key Performance Metrics</b>			
Net Cumulative Funded Accounts <sup>(2)</sup>		9.8	22.5
Monthly Active Users (MAU) <sup>(3)</sup>		10.2	21.3
Assets Under Custody (AUC) <sup>(4)</sup>	\$ 33,422	\$	102,035

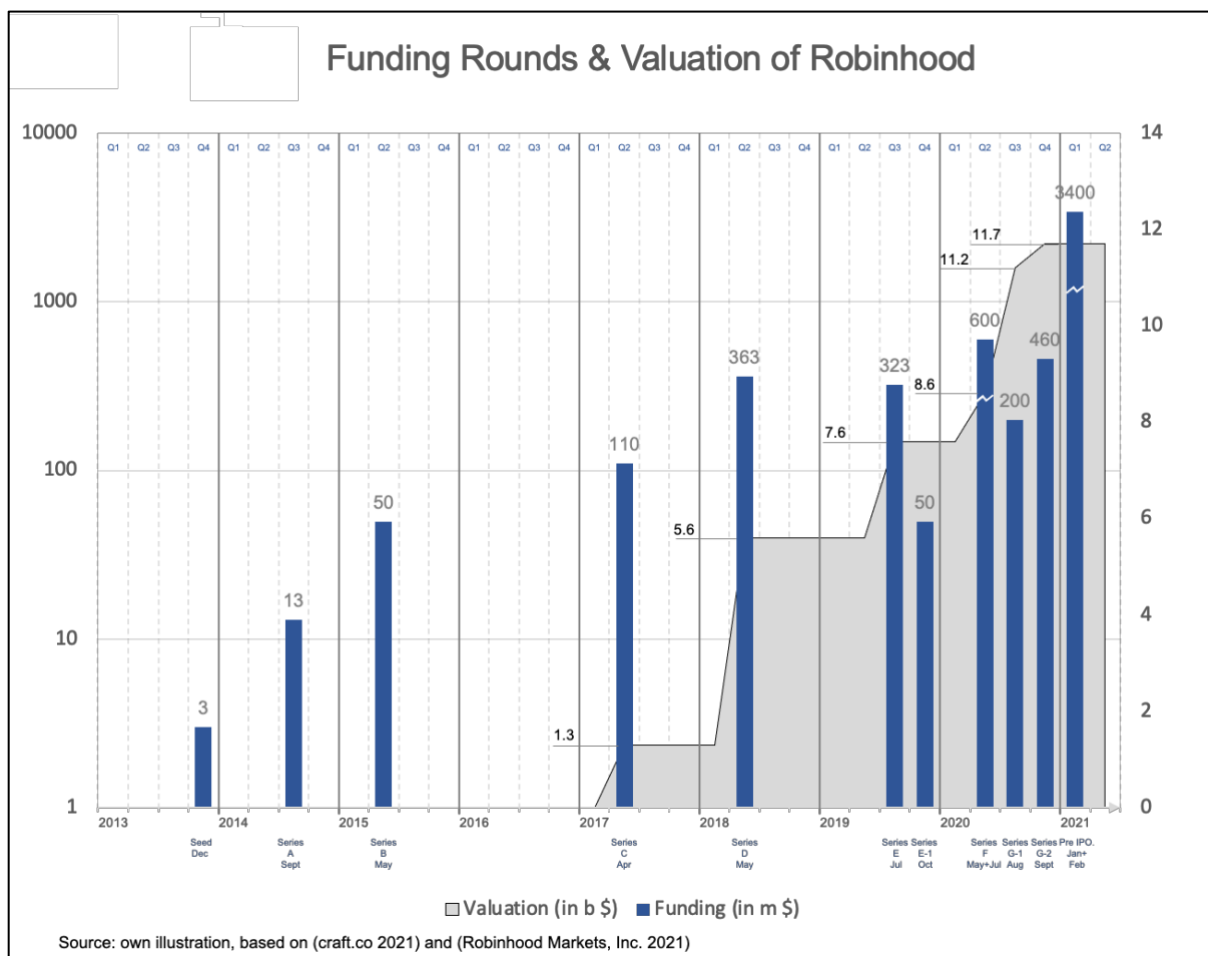
Source: Robinhood Markets, Inc. 2021

**Exhibit 7: Key Performance Metrics Robinhood<sup>35</sup>**

(in millions except for ARPU)	Year or Month Ended December 31,		Three Months or Month Ended March 31,	
	2019	2020	2020	2021
Net Cumulative Funded Accounts <sup>(1)</sup>	5.1	12.5	7.2	18.0
Monthly Active Users (MAU) <sup>(2)</sup>	4.3	11.7	8.6	17.7
Assets Under Custody (AUC) <sup>(3)</sup>	\$ 14,135.6	\$ 62,978.5	\$ 19,220.1	\$ 80,932.4
Average Revenues Per User (ARPU) <sup>(4)</sup>	\$ 65.7	\$ 108.9	\$ 82.9	\$ 137.0

Source: Robinhood Markets, Inc. 2021

**Exhibit 8: Timeline Fundings & Valuation Robinhood 2013- Q2 2021<sup>36</sup>**

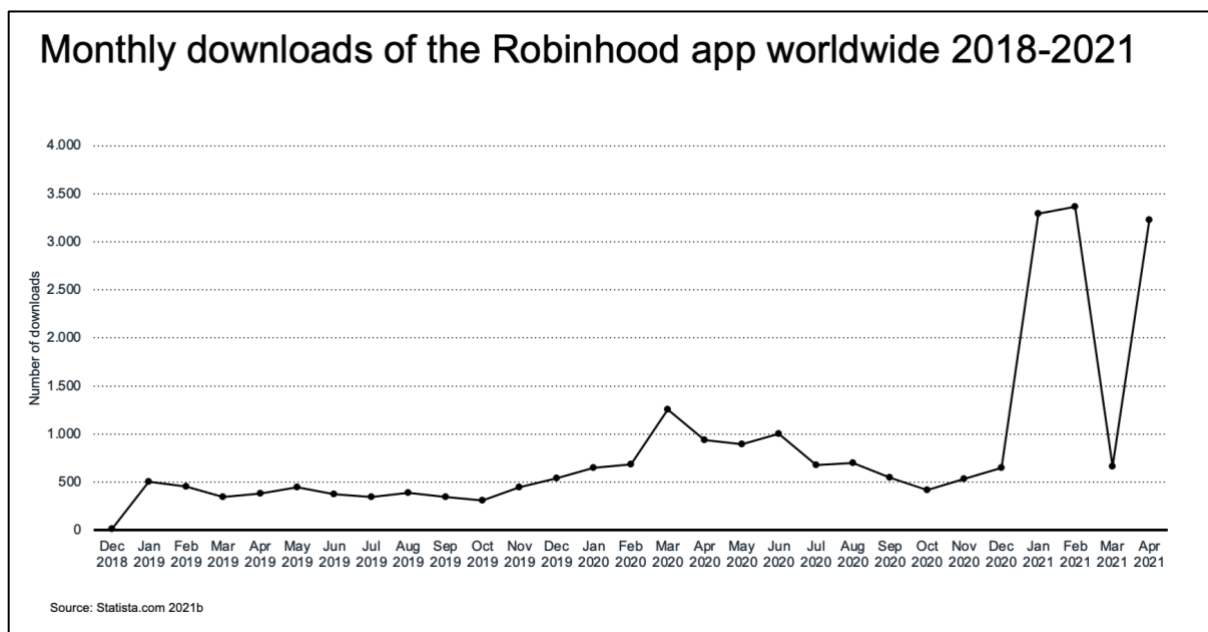


**Exhibit 9: Comparison of range of offerings Robinhood vs TD Ameritrade vs Charles Schwab vs E\*Trade<sup>37</sup>**

Robinhood vs TD Ameritrade vs Charles Schwab vs E*Trade Range of Offerings				
Asset	Robinhood	TD Ameritrade	Charles Schwab	E*Trade
Short Sales	No	Yes	Y	Y
No-Load, No-Fee Mutual Funds	0	Nearly 4,000	7,600+	4,400+
Bonds	No	Yes	60,000+	50,000+
Futures/Commodities	No	Yes (futures only)	Y	Y
Futures Options	No	Yes	Y	Y
Complex Options	4 legs	4 legs	Y	Y
Robo Advisory	No	Yes	Y	Y
Cryptocurrency	Yes	Bitcoin futures only	Bitcoin Futures Only	Bitcoin Futures Only
International Exchanges	0	1 (Canada)	Y	N
Forex	No	Yes	N	Y
Fractional Shares	Yes	No	Y	Only through dividend reinvestment program
OTCBB and Penny Stocks	No	Yes	Y	Y

Source: own illustration, based on (Investopedia.com 2021)

**Exhibit 10: Number of global downloads Robinhood App Dec 2018- Apr 2021<sup>38</sup>**



**Exhibit 11: Cash Flow Activities 2019-2021<sup>39</sup>**

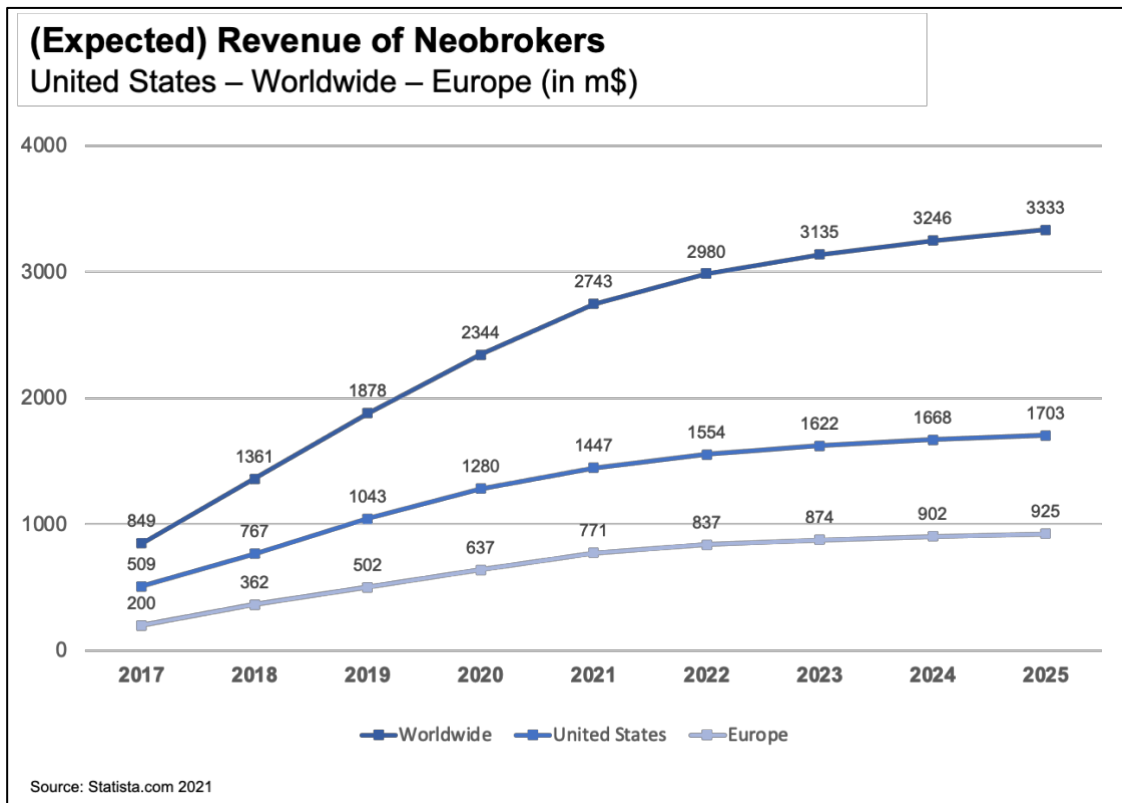
**Cash Flows**

The following table summarizes our cash flow activities:

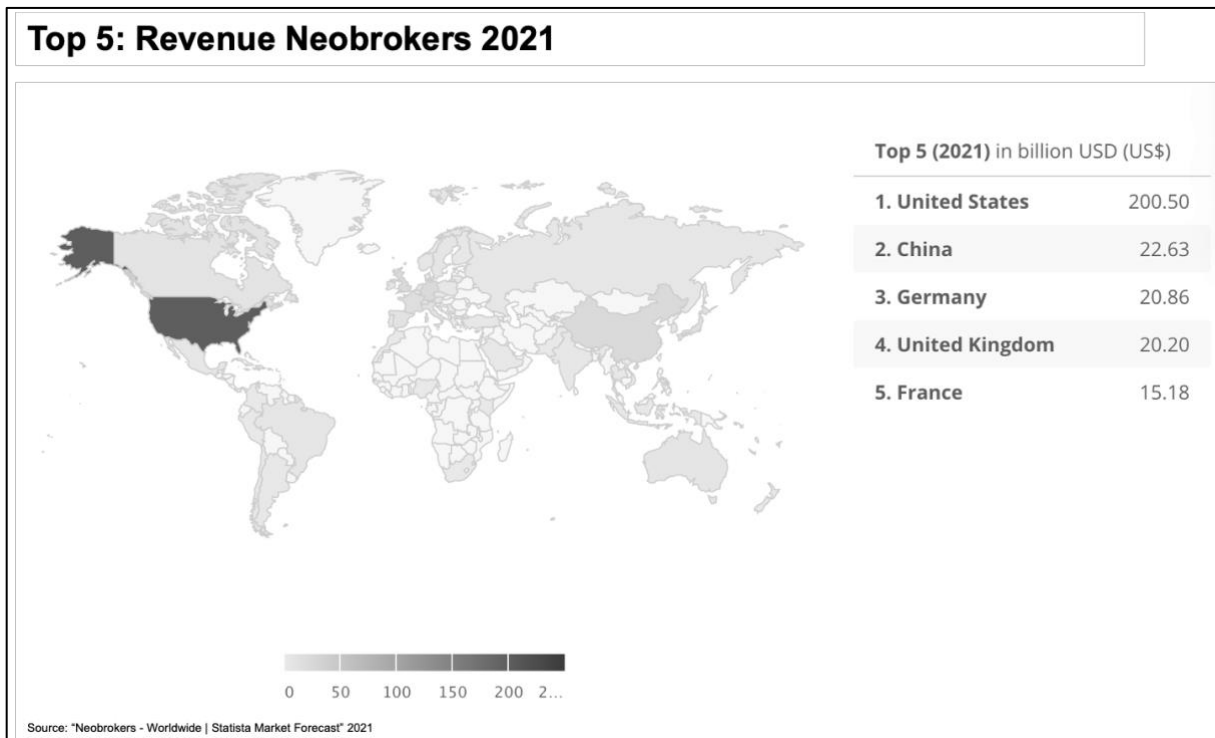
(in thousands)	Year Ended December 31,		Three Months Ended March 31,	
	2019	2020	2020	2021
Cash provided by (used in):				
Operating activities	\$ 1,260,085	\$ 1,876,254	\$ 2,144,695	\$ (1,882,196)
Investing activities	(12,312)	(32,330)	(8,438)	(11,362)
Financing activities	375,350	1,275,883	190,056	3,557,772

Source: Robinhood Markets, Inc. 2021

**Exhibit 12: Neobrokers Revenue US, Europe, Worldwide 2017-2025<sup>40</sup>**



**Exhibit 13:** Top 5 countries with the biggest revenue in 2021 in million USD gained by Neobrokers<sup>41</sup>



**Exhibit 14:** Top 5 countries with the biggest user penetration rate by Neobrokers<sup>42</sup>

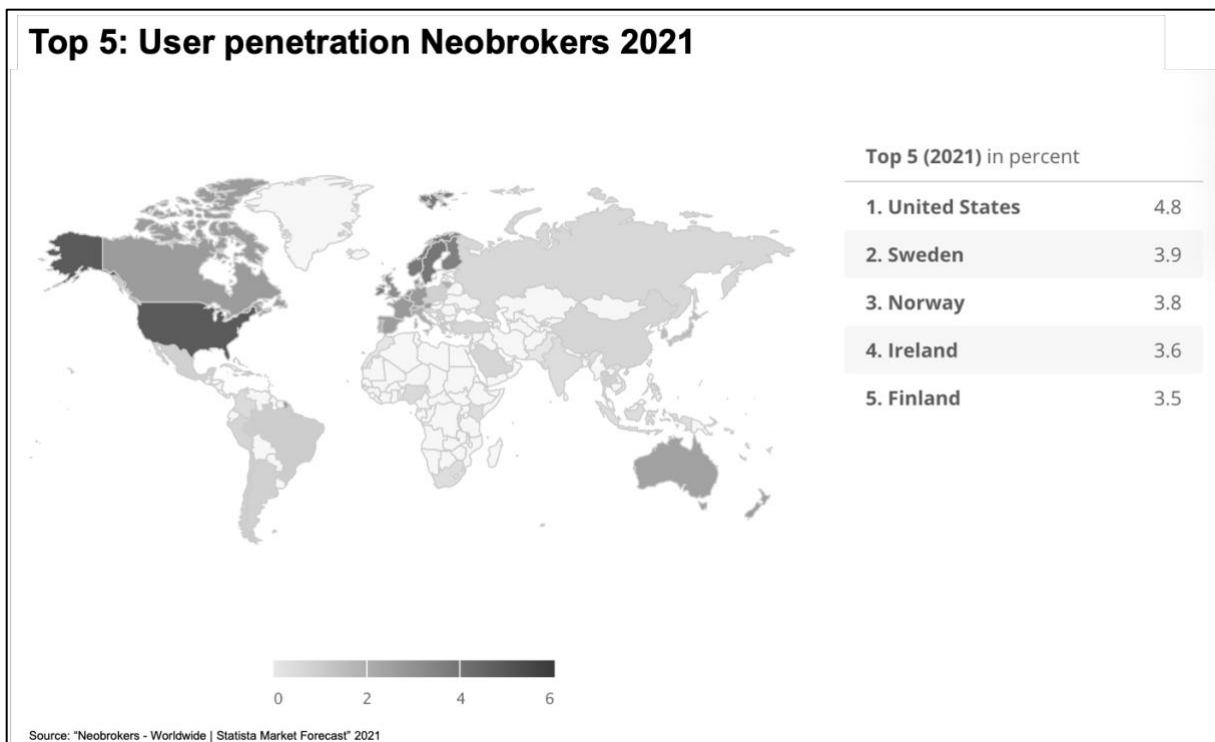


Exhibit 15: Monthly active users comparison leading neobrokers US 2017-Jul 2021<sup>43</sup>

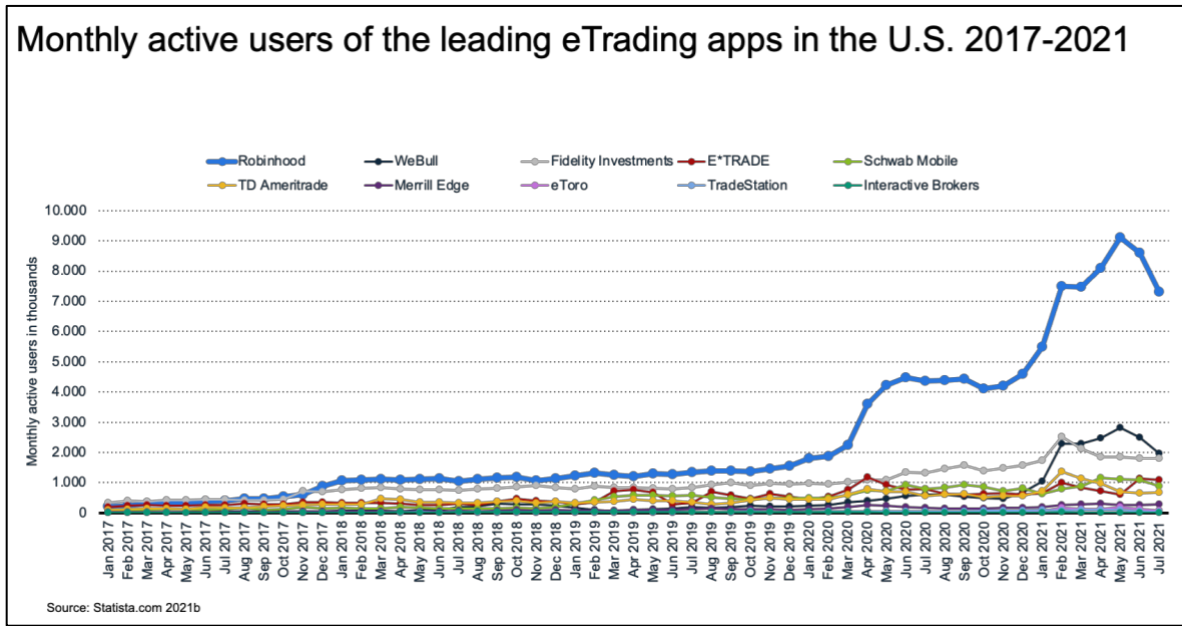
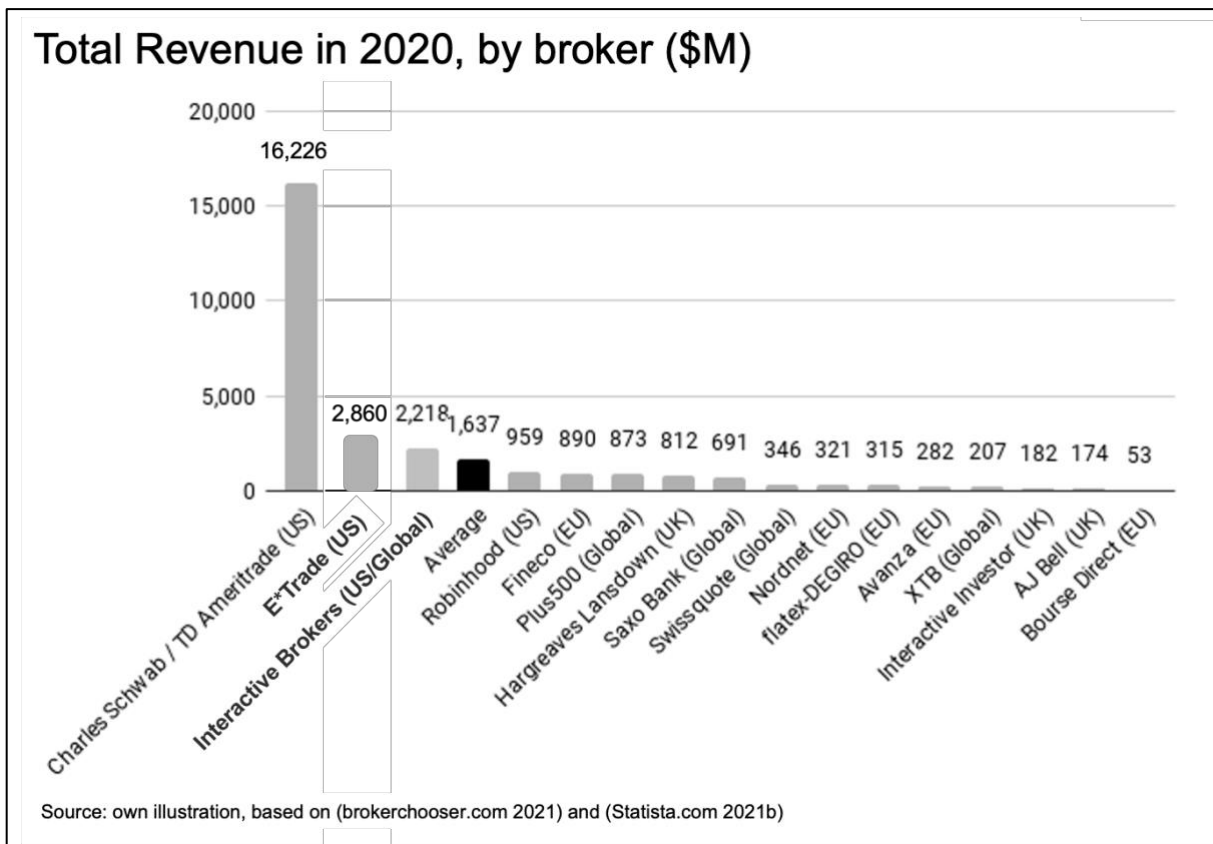


Exhibit 16: Total revenue comparison of brokers, worldwide, 2020<sup>44</sup>



**Exhibit 17: Quarterly Payment for order flow (PFOF) received by security type, Robinhood and competitors, 2020<sup>45</sup>**

Quarterly Payment for Order Flow Received by Security Type, 2020				
Broker	Security Type	PFOF Q1 2020	PFOF Q2 2020	Percent Change
TD Ameritrade	Equity	\$72,782,936	\$144,219,349	98%
	Options	\$129,597,189	\$179,991,996	39%
	Total	\$202,380,125	\$324,211,345	60%
E*TRADE	Equity	\$29,822,204	\$50,210,044	68%
	Options	\$49,829,545	\$60,117,332	21%
	Total	\$79,651,749	\$110,327,376	39%
Schwab	Equity	\$25,447,153	\$32,396,842	27%
	Options	\$28,517,592	\$33,745,172	18%
	Total	\$53,964,745	\$66,142,014	23%
Robinhood	Equity	\$31,116,950	\$69,116,307	122%
	Options	\$59,802,125	\$111,148,089	86%
	Total	\$90,919,076	\$180,264,395	98%

Source: Piper Sandler 2021

**Exhibit 18: Robinhood's Competition: Traditional Brokers and High Growth FinTechs Key Numbers<sup>46</sup>**

(\$ in millions, except per share)	Price	% Price Px.		Equity Value	Enterprise Value	Revenue		% YoY Rev. Growth		% 2021E Margins		
	(07/06/21)	3-Mo	12-Mo			2021E	NTM	'19A-'21E	NTM	GM	EBITDA	FCF
<b>Traditional Brokerage</b>												
Charles Schwab	\$70.77	5%	107%	\$134,387	NM	\$18,073	\$18,128	55%	197%	-	51%	34%
Interactive Brokers	\$64.51	(14%)	43%	\$5,859	NM	\$2,757	\$2,574	24%	105%	-	71%	-
<b>Average</b>		(4%)	75%	\$70,123	NM	\$10,415	\$10,351	39%	151%	NA	61%	34%
<b>Median</b>		(4%)	75%	\$70,123	NM	\$10,415	\$10,351	39%	151%	NA	61%	34%
<b>Fintech</b>												
PayPal	\$292.64	16%	66%	\$343,937	\$333,799	\$25,791	\$27,001	20%	18%	55%	30%	25%
Square	\$246.70	4%	107%	\$114,852	\$113,828	\$20,308	\$20,460	114%	55%	22%	4%	2%
Coinbase	\$235.41	NA	NA	\$61,205	\$59,729	\$6,424	\$6,085	403%	138%	-	49%	50%
AfterPay	\$86.09	(1%)	69%	\$25,394	\$25,116	\$928	\$939	73%	94%	73%	16%	(51%)
Affirm	\$67.99	(7%)	NA	\$20,188	\$18,564	\$983	\$1,069	46%	40%	15%	(35%)	(43%)
SoFi	\$17.35	NA	NA	\$13,788	\$14,831	\$982	\$1,092	NM	194%	27%	5%	(37%)
Lemonade	\$105.01	10%	29%	\$6,786	\$5,605	\$119	\$135	26%	103%	33%	(140%)	(146%)
<b>Average</b>		4%	68%	\$83,736	\$81,639	\$7,934	\$8,112	114%	92%	38%	(10%)	(29%)
<b>Median</b>		4%	67%	\$25,394	\$25,116	\$983	\$1,092	60%	94%	30%	5%	(37%)

Source: own illustration, based on Motschwiller 2021

**Exhibit 19: Robinhood S1/A Form<sup>47</sup>**

The information in this preliminary prospectus is not complete and may be changed. We and the selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated July 27, 2021

**Preliminary Prospectus**

**55,000,000 Shares**



**Robinhood Markets, Inc.  
Class A Common Stock**

This is an initial public offering of Class A common stock by Robinhood Markets, Inc. We are offering 52,375,000 shares of our Class A common stock to be sold in the offering. The selling stockholders identified in this prospectus, who are our founders and our Chief Financial Officer, are offering an additional 2,625,000 shares of our Class A common stock. We will not receive any of the proceeds from the sale of the shares being sold by the selling stockholders.

Prior to this offering, there has been no public market for our Class A common stock. We currently anticipate that the initial public offering price per share of our Class A common stock will be between \$38.00 and \$42.00.

Our Class A common stock will be listed on the Nasdaq Global Select Market (the "Nasdaq") under the symbol "HOOD".

We have three classes of authorized common stock, Class A common stock, Class B common stock and Class C common stock (collectively, our "common stock"). The rights of the holders of Class A common stock, Class B common stock and Class C common stock are identical, except with respect to voting and conversion. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to 10 votes per share and is convertible at any time into one share of Class A common stock. Shares of Class C common stock have no voting rights, except as otherwise required by law, and will convert into shares of our Class A common stock, on a share-for-share basis, on the date or time determined by our board of directors following the conversion or exchange of all outstanding shares of our Class B common stock into shares of our Class A common stock. Upon the completion of this offering, no shares of Class C common stock will be issued and outstanding. For more information about our capital stock, see the section titled "Description of Capital Stock."

Upon completion of this offering, all outstanding shares of our Class B common stock will be held by our founders, Baiju Bhatt and Vladimir Tenev, and their related entities. Upon the completion of this offering, (i) Mr. Tenev, who is also our CEO, President and a director, and his related entities will hold an economic interest in approximately 7.9% of our outstanding capital stock and Mr. Tenev will hold approximately 26.2% of the voting power of our outstanding capital stock and (ii) Mr. Bhatt, who is also our Chief Creative Officer and a director, and his related entities will hold an economic interest in approximately 7.9% of our outstanding capital stock and Mr. Bhatt will hold approximately 39.0% of the voting power of our outstanding capital stock, in each case, assuming such founder exercises his Equity Exchange Rights (as defined herein) to exchange for Class B common stock the Class A common stock received by him in settlement of equity awards that vest and settle in connection with this IPO, and which economic interest and voting power may increase over time upon the vesting and settlement of other equity awards held by such founder that are outstanding immediately prior to the effectiveness of this offering.

We are an "emerging growth company," as that term is used in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act") and, under applicable Securities and Exchange Commission ("SEC") rules, we have elected to take advantage of certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our Class A common stock involves risks. See "Risk Factors" beginning on page 35.

Neither the SEC nor any state securities commission or other regulatory body has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial public offering price	\$	\$
Underwriting discounts and commissions <sup>(1)</sup>	\$	\$
Proceeds to us, before expenses	\$	\$
Proceeds to selling stockholders, before expenses	\$	\$

(1) See the section titled "Underwriting (Conflicts of Interest)" for a description of the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days from the date of this prospectus to purchase up to an additional 5,500,000 shares of our Class A common stock, solely to cover over-allotments.

We expect to offer approximately \$440 million to \$770 million worth of shares of our Class A common stock offered by this prospectus for sale to Robinhood customers through our IPO Access feature on our platform (assuming an initial public offering price of \$40.00 per share, which is the midpoint of the estimated offering price range set forth above). See "Underwriting (Conflicts of Interest)—Participation by Robinhood Customers in the Offering."

Saleforce Ventures LLC (the "Prospective Investor") has indicated an interest in purchasing up to an aggregate of \$150 million in shares of our Class A common stock offered in this offering at the initial public offering price. In addition, the Prospective Investor, to the extent it elects to purchase any shares of our Class A common stock in this offering, will enter into a lock-up agreement on substantially the same terms as the lock-up agreements entered into by the holders of our preferred stock and certain non-employee holders of our common stock, which would prohibit the sale of any shares of Class A common stock purchased in this offering by the Prospective Investor for a period of 125 days from the date of this prospectus, subject to a potential partial early release and certain other exceptions as set forth under "Underwriting (Conflicts of Interest)—Lock-Up Agreements." Because this indication of interest is not a binding agreement or commitment to purchase, the Prospective Investor may decide to purchase more, less or no shares of our Class A common stock in this offering, or the underwriters may decide to sell more, less or no shares of our Class A common stock in this offering to the Prospective Investor. The underwriters will receive the same discount from any shares of Class A common stock sold to the Prospective Investor as they will from any other shares of Class A common stock sold to the public in this offering.

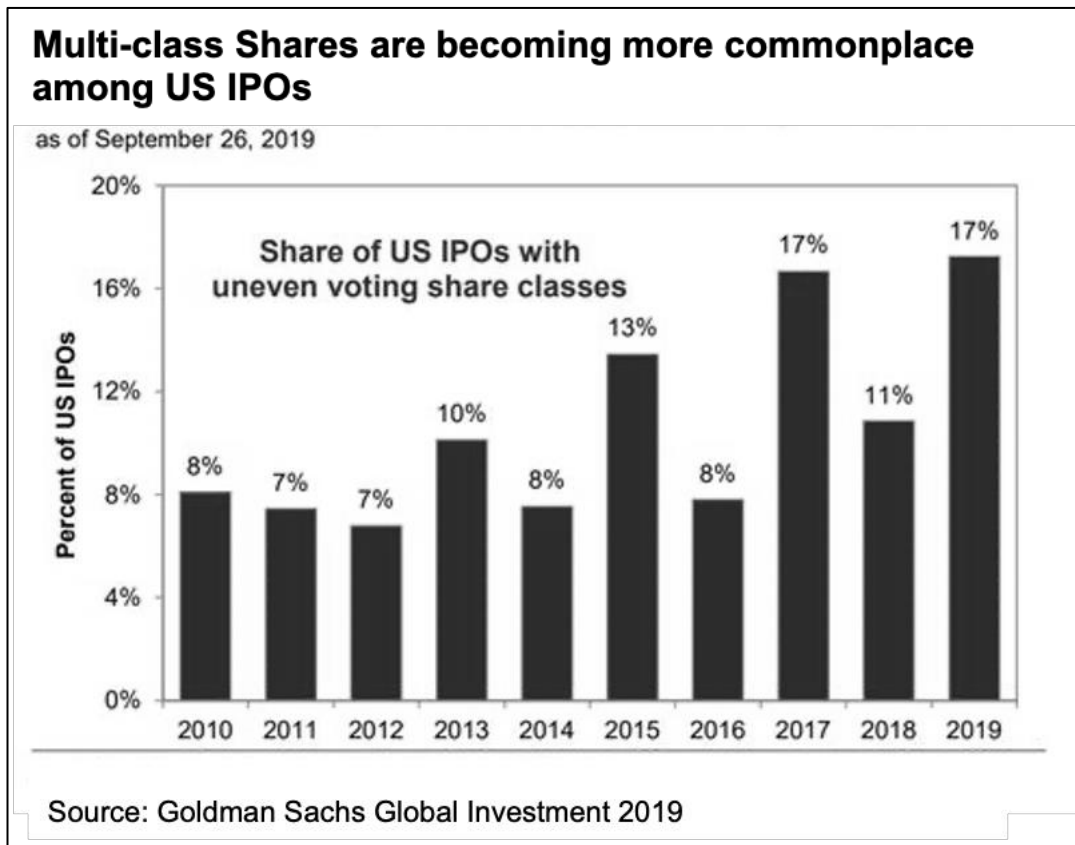
The underwriters expect to deliver the shares against payment in New York, New York on \_\_\_\_\_, 2021.

<b>Goldman Sachs &amp; Co. LLC</b>		<b>J.P. Morgan</b>
<b>Barclays</b>	<b>Citigroup</b>	<b>Wells Fargo Securities</b>
	<b>Mizuho Securities</b>	
<b>JMP Securities</b>	<b>KeyBanc Capital Markets</b>	<b>Piper Sandler</b>
<b>BMO Capital Markets</b>	<b>BTIG</b>	<b>Rosenblatt Securities</b>
<b>Academy Securities</b>	<b>Loop Capital Markets</b>	<b>Santander</b>
	<b>Ramirez &amp; Co., Inc.</b>	<b>Siebert Williams Shank</b>

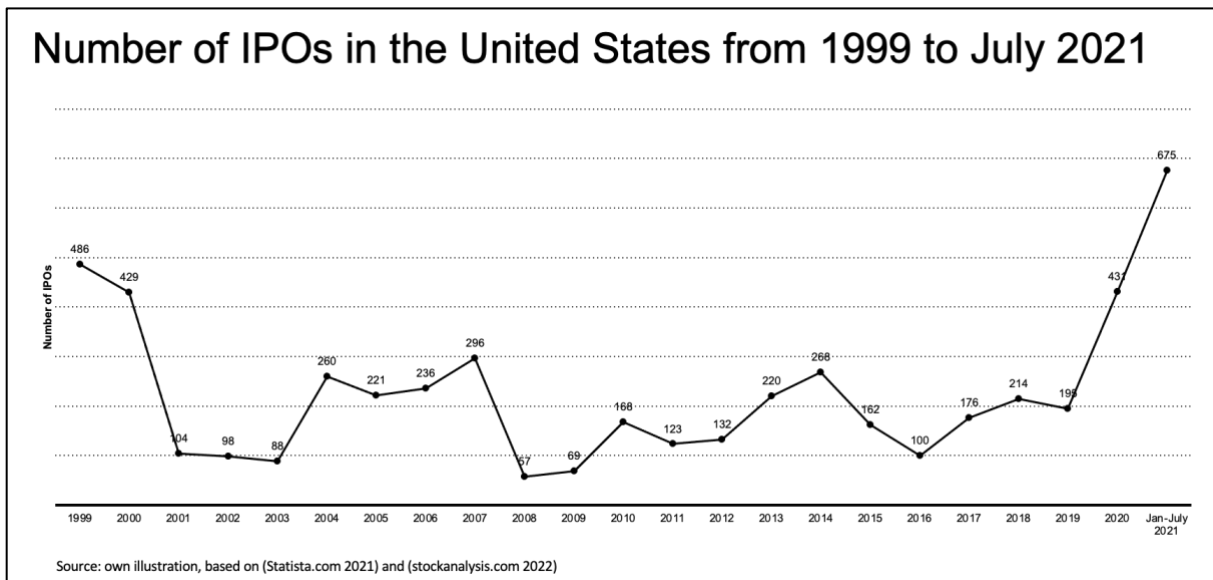
Prospectus dated \_\_\_\_\_, 2021

Source: Robinhood Markets, Inc. 2021

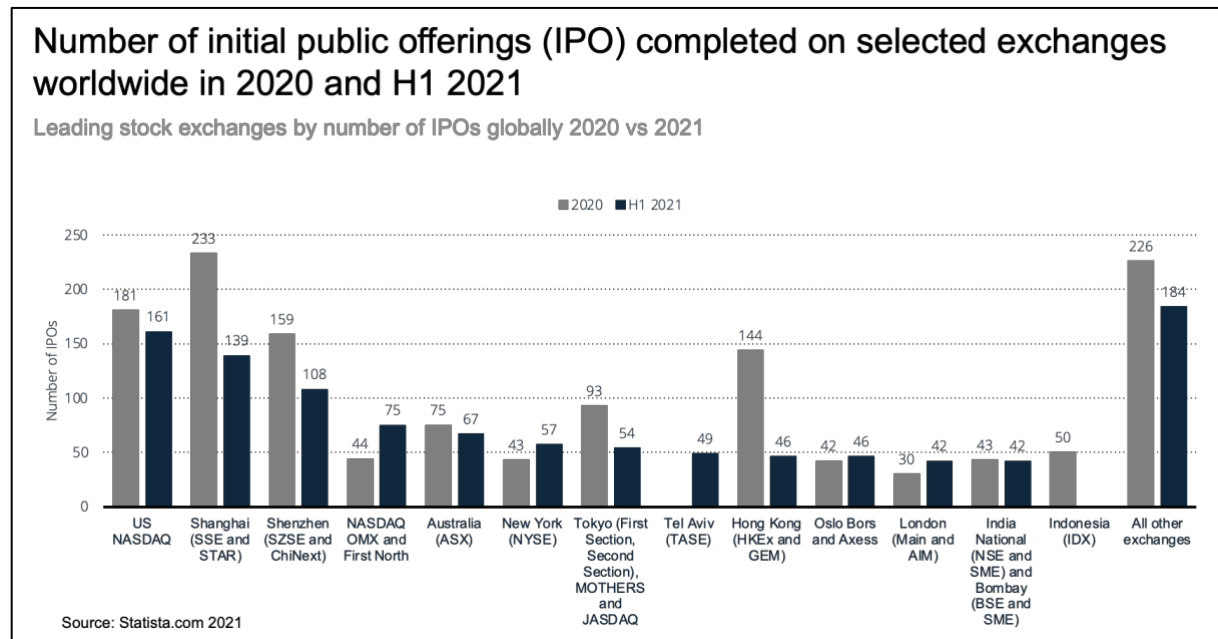
**Exhibit 20:** Multi-class Shares are becoming more commonplace among US IPOs<sup>48</sup>



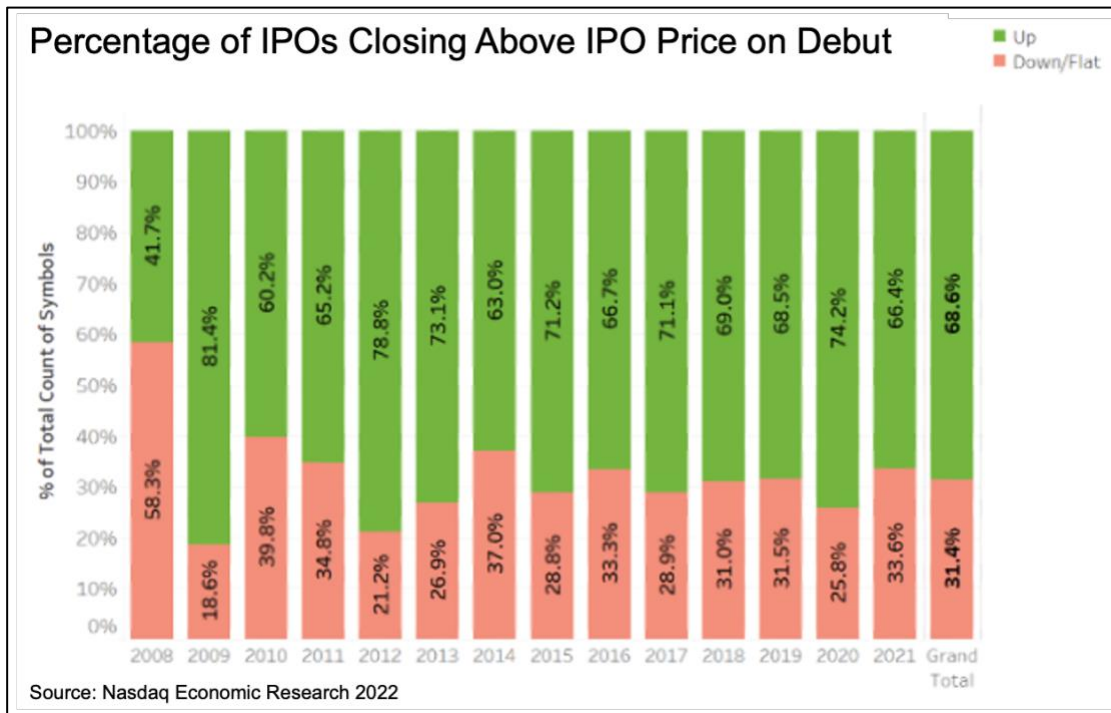
**Exhibit 21:** Number of IPOs in the U.S. 1999-July 2021<sup>49</sup>



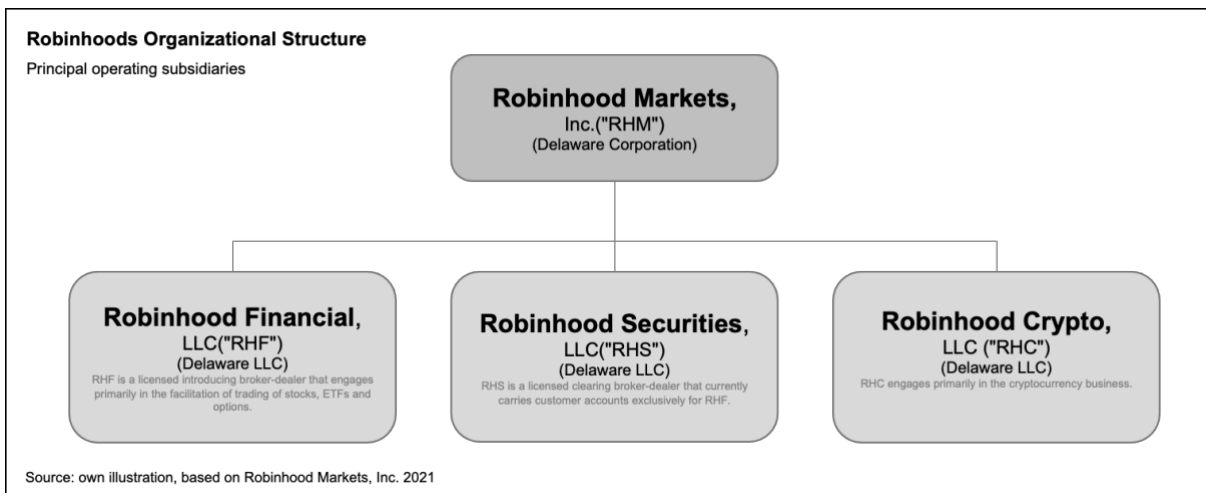
**Exhibit 22:** Number of IPOs completed on selected exchanges worldwide in 2020 and H1 2021<sup>50</sup>



**Exhibit 23:** Percentage of IPOs closing above IPO price on debut<sup>51</sup>



**Exhibit 24:** Robinhood's Organizational Chart<sup>52</sup>



## Endnotes references

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<sup>1</sup> Robinhood. “Our Story.” Robinhood, 2021.

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<sup>5</sup> Robinhood. “About Us.” Robinhood, 2022. <https://robinhood.com/us/en/about/legal/>.

<sup>6</sup> Robinhood Markets, Inc. “IPO Investment Prospectus S-1/A,” August 31, 2021.

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<sup>8</sup> craft.co. “Robinhood Funding Rounds, Valuation and Investors | Craft.Co.” craft.co, 2021.

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<sup>9</sup> Robinhood.

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<sup>13</sup> Ibid.

<sup>14</sup> Robinhood Markets, Inc.

<sup>15</sup> Investopedia.com. 2021. “Charles Schwab vs. E\*TRADE.” Investopedia. 2021.

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