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**ABSTRACT**

We survey over 1,000 institutional and corporate venture capitalists (VCs) at more than 900 different firms to learn how their decisions and investments have been affected by the COVID-19 pandemic. We compare their survey answers to those provided by a large sample of VCs in early 2016 and analyzed in Gompers, Gornall, Kaplan, and Strebulaev (2020). VCs have slowed their investment pace (71% of normal) and expect to invest at 81% of their normal pace over the coming year. Not surprisingly, they have devoted more time to guiding the portfolio companies through the pandemic. VCs report that 52% of their portfolio companies are positively affected or unaffected by the pandemic; 38% are negatively affected; and 10% are severely negatively affected. Overall, they expect the pandemic to have a small negative effect on their fund IRRs (-1.6%) and MOICs (-0.07). Surprisingly, we find little change in the allocation of their time to helping portfolio companies relative to looking for new investments. In general, we find only modest differences between institutional and corporate VCs.

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# 1 Introduction

Many of the most innovative young companies depend on a steady inflow of venture capital (VC) money. The sudden arrival of the COVID-19 pandemic has dramatically affected many facets of the global economy, and many commentators worry this shock will choke off venture capital flow. VCs have variously described COVID-19 as the “Black Swan of 2020”<sup>2</sup> and claimed the “global VC market has completely locked up.”<sup>3</sup> If such dire predictions are true, that would have important consequences for the innovation ecosystem. In this paper, we explore the impact of COVID-19 on the VC industry by surveying a large fraction of active VCs in the United States and abroad.

VC investing is normally subject to a great deal of uncertainty about the future. This uncertainty typically entails issues related to the quality of the management team, the development of nascent markets, or the potential of new technologies. VC practices have evolved to manage these sources of uncertainty. The shock of the COVID-19 pandemic introduced a massive amount of a new form of uncertainty into the economy and, potentially, into VC investing. The nature of this uncertainty is likely substantially different from the type of uncertainty that VCs have historically evaluated. A natural question to ask is whether the uncertainty introduced by the COVID-19 crisis has changed the nature of the way VCs operate or whether the industry is immune to the type of uncertainty that the pandemic has created.

In this paper, we explore that question and others using a survey of more than 1,000 VCs. We explore the extent of the shock on VC investments and how VCs have responded to the shock. We also gain insight into how VCs perceive the impact of the crisis and their views on the expected duration of the shock. Our survey allows us to explore differences across different types of investors (institutional VCs vs. corporate VCs), stage of investment (early-stage vs. late-stage VCs), as well

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<sup>2</sup> <https://medium.com/sequoia-capital/coronavirus-the-black-swan-of-2020-7c72bdeb9753>. Accessed July 30, 2020.

<sup>3</sup> <https://medium.com/angularventures/straight-talk-on-vc-fundraising-today-5d23166a4615>. Accessed July 30, 2020.

as information technology vs. healthcare VCs. We also consider differences in the severity of the pandemic.

Our survey builds on a prior survey of institutional VCs conducted in late 2015 and early 2016 by Gompers, Gornall, Kaplan, and Strebulaev (2020), henceforth GGKS (2020). GGKS (2020) provide detailed information on VCs' practices in pre-investment screening (sourcing, evaluating, and selecting investments), structuring investments, and post-investment monitoring and advising.<sup>4</sup> GGKS (2020) also examine internal VC firm management issues, e.g., how VCs allocate their time and manage their relationships with the limited partners (LPs) who provide them capital.

Like GGKS (2020), we survey many VCs who make up a significant fraction of the industry. We obtained responses from more than 1,000 VCs and complete responses from over 800. Unlike GGKS (2020), we include responses from corporate VCs in addition to institutional VCs. We do this because the numbers of corporate VCs have increased substantially over the last several years and they are not so heavily researched.

We received responses from over 900 institutional VCs at over 800 VC firms and over 100 corporate VCs representing over 100 corporations to learn how their decisions and investments have been affected by the COVID-19 pandemic. We compare their survey answers to those provided by a large sample of VCs in early 2016 and analyzed in GGKS (2020).

First, we consider how the pandemic is affecting new investments. VCs report that during the first half of 2020, their investment pace is 71% of their normal, expected activity. They expect that their investment pace will be 81% of their normal pace for the rest of the year. Roughly one-quarter report that they have struggled to evaluate new deals. This is consistent with the behavior of VC investment in past recessions, as shown by Howell et al. (2020). The extent of the decline, however, is expected to be more modest than in the dotcom bust of 2001 and 2002, when

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<sup>4</sup> See Kaplan and Stromberg (2001) for the framework behind VCs' practices.

investment declined by more than 50% and the financial crisis, when investment declined by 30% in 2009.

Next, we asked the VCs about their investment terms during the COVID-19 pandemic. Although the VCs expect investment terms to become more investor friendly, the terms they reported using were actually more founder friendly than the terms reported by GGKS (2020).

We also asked VCs about the status of their existing companies. They report that 52% of their portfolio companies are positively affected or unaffected by the pandemic; 38% are negatively affected, but not in critical condition; and 10% are severely negatively affected or in intensive care. Consistent with this, the VCs expect the pandemic to have only a small negative effect on their fund internal rates of return (IRRs), down 1.6%, and cash-on-cash returns (MOICs), down by 0.07. The VCs also remain optimistic about their own performance, with 91% believing they will outperform public markets, and overall VC performance, with 75% believing the VC industry as a whole will outperform.

Finally, despite nearly half of the VCs' portfolio companies being affected in some way by the COVID-19 pandemic, we find surprisingly little change in the allocation of their time to helping portfolio companies relative to looking for new investments. GGKS (2020) found that VCs tended to be active in their portfolio companies and the VCs in our current survey remain active in their companies, albeit not substantially more so. Throughout, we find modest differences between institutional and corporate VCs. This suggests the corporate VCs have incorporated many of the practices of institutional VC firms.

Overall, we conclude that the most dire predictions of the impact of COVID-19 on venture capital have not materialized. Although the pandemic has not yet run its course and a lot of uncertainty remains, our evidence suggests that the VC industry and its portfolio companies have reduced their activity less than in previous recessions and have been more resilient than many other sectors of the global economy. Our conclusions have important implications for the state and development of the innovation ecosystem and high-growth companies.

The paper proceeds as follows. In Section 2, we describe our research design and report summary statistics. In Section 3, we outline how VCs’ investing activities have changed due to COVID-19. In Section 4, we describe the impact on deal structure. In Section 5, we report VCs’ perspective on portfolio company performance and value-adding activities. In Section 6, we describe VCs’ responses on their own time management. In Section 7, we discuss VCs’ perspectives on the future. In Section 8, we conclude.

## **2 Methodology**

### **2.1 Design**

In this section, we describe the research design of our survey. We begin with the survey we used in GGKS (2020). We eliminated more technical questions and added questions regarding the COVID-19 pandemic. The final version of the survey is available as an Internet Appendix.

We administered the survey using Qualtrics and we solicited all the survey respondents via e-mail. We used several sources to compose our mailing list. First, we used alumni databases from the Chicago Booth School of Business, Harvard Business School, and Stanford Graduate School of Business. The MBA graduates of these schools constitute a disproportionate number of active VCs. A study by Pitchbook identified those schools as three of the top four MBA programs supplying VCs, with more than 40% of VCs holding an MBA from one of the three schools.<sup>5</sup> We identified alumni related to VC and manually matched them to VentureSource, a database of VC transactions that is maintained by Dow Jones, and PitchBook., a database of private capital markets maintained by Pitchbook. We ended up with 92, 801, and 1,005 individuals from Chicago, Harvard, and Stanford business schools, respectively.

Second, we partnered with the Kauffman Fellows Program, which trains VCs and maintains a vibrant network of past Fellows. The Kauffman Fellows Program emailed the survey to 680 alums

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<sup>5</sup> See <http://pitchbook.com/news/articles/harvard-4-other-schools-make-up-most-mbas-at-pe-vc-firms>. Accessed July 30, 2020.

on our behalf. Third, we used contact information on VCs from two large VC datasets, VentureSource and PitchBook. After excluding the people from the four samples identified above, we first arrived at a sample of 7,945 VCs identified in the PitchBook sample. Finally, after excluding the people from all the above samples, we identified further 7,028 individuals in the VentureSource sample. We believe our survey encompassed the overwhelming majority of individuals who are active VCs in the United States as well as many non-U.S. VCs.

Our sample construction raises several issues, and we attempted to address them in the survey design. One is that some of the people we emailed may not be VCs. Our first criteria for deciding whether individuals were VCs was their identification as such either by the organizations that provided us their information or by our analysis of VentureSource and PitchBook. We emailed only people we positively confirmed as VCs.

As a further filter, at the start of the survey, we asked respondents whether they worked at an institutional VC fund, a corporate VC vehicle, or neither. Supporting the notion that our initial screen worked well, 87% of our respondents identified as working at either a corporate VC vehicle or an institutional VC fund. The remainder were angel investors, private equity investors, or family office investors.

For our analyses, we exclude any respondent who did not identify as working at an institutional VC or corporate VC fund. While the identification is self-reported, in conjunction with other questions in the survey that are specific to the VC industry, we are confident that our final survey respondents are active in the VC industry. We also acknowledge that there may be a gray area that separates late-stage growth-equity VC funds and some private equity funds. We do not believe that this distinction in any way affects our analyses.

A second potential issue is that our population of VCs may not be representative of the broader industry. While this is possible, it is important to note that our sample, like the sample in GGKS (2020) represents a large fraction of all VCs. Based on Pitchbook data, our U.S. VC respondent have a total of \$340 billion in assets under management, about half the total for U.S. VCs. We

had respondents from 70% of the top fifty, 85% of the top twenty-five, and 90% of the top ten VC firms (ranked by number of investments in PitchBook). At worst, then, we can say that our results represent the practices of a large fraction of the industry.

Two factors may bias our sample toward more successful VCs. First, a disproportionate part of our sample comes from the graduates of top MBA programs and the Kauffman Fellows. Because of our connections, we explicitly targeted Chicago, Harvard, and Stanford MBAs and Kauffman Fellows. We received relatively high response rates from those groups. Given that both top MBA programs and the Kauffman Fellows program are extremely selective, these alumni are potentially more successful than average VCs.<sup>6</sup> Second, we include only the VCs who responded to the survey. It seems plausible that poorly performing or failed VCs would be less likely to fill out the survey. To the extent that we want to learn about best practices in the VC industry, a positive selection bias would strengthen our results.

We administered the survey between June 29 and July 15, 2020, a period in which the COVID-19 pandemic was controlled or slowing in Western Europe and most of Asia but was still active and growing in the United States. To encourage completion, we offered those who completed the survey an early look at the results—after the survey was closed but before the results were released to the public. The survey is fully confidential and all the reported results are based on the aggregation of many responses to exclude the possibility of inferring any specific respondent’s answers. However, the survey was not anonymous to us and we matched the survey respondents with VentureSource, Pitchbook, and other data sources.

Our final response rates are 42%, 14%, 15%, 6%, 6%, and 6%, respectively, from the Chicago, Harvard, Stanford, Kauffman, PitchBook, and VentureSource samples. Compared to the survey we administered in 2015 and 2016, the response rate is slightly lower in some of the samples. One of the reasons is that the time horizon of the present survey was compressed to just 17 days, less

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<sup>6</sup> Gompers, Mukharlyamov, and Xuan (2016) show that VCs who are graduates from top colleges and top MBA schools perform better.



than half the time allowed in GGKS (2020). At the same time, the response from the VC databases (VentureSource and Pitchbook) was higher than the VC lists we used previously (VentureSource and the list provided by the NVCA), likely because of our improved ability to filter VCs. Like last time, we received a much higher overall response rate from the schools with which we are connected.

Our survey has up to 30 questions and the median survey respondent took 11 minutes to complete it. The time per question is similar to the previous survey we administered. The 25% percentile of the time for completion was eight minutes, suggesting that, as five years ago, our respondents took the survey seriously. As last time, we also enjoyed a high completion rate of 78%.

## 2.2 Summary statistics

In this section, we provide summary statistics of the sample and introduce the subsamples that we use in our analyses. We received 1,181 individual responses overall. Table 1 describes how we filter the responses. We exclude the 148 respondents (13%) who did not self-report they were institutional or corporate VCs.<sup>7</sup> These investors are private equity investors, angel investors, or family office investors. The second part of Table 1 reports the composition of the final sample of 1,033 institutional and corporate VC respondents. We use all the answers from our 1,033 VC respondents, with 804 (78%) of those respondents finishing the survey in its entirety. This exceeds the 885 responses and 565 completions in GGKS (2020). Only 29 (3%) respondents in this sample indicated that they completed the survey on behalf of someone else.

In many cases, we received multiple responses from different individuals at the same VC firm and so we have 915 VC firms for our 1,033 respondents. For VC firms where we had more than one respondent, we averaged the responses of the individual VCs to get a firm-level response.

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<sup>7</sup> Institutional VC firms are independent partnerships that manage VC funds on behalf of investors. VCs who manage funds are traditionally called general partners (GPs) and their investors—limited partners (LPs).

We were able to match 97% of the firms to PitchBook. As mentioned above, our sample includes thirty-five of the top fifty and nine of the top ten VC firms (ranked by number of investments) in PitchBook. This is consistent with the possibility, noted earlier, that our sample is biased towards more successful firms.

Our first questions concerned the VC firm’s investment focus. We asked respondents whether their firms specialized in a specific stage of company, industry, or geography. For example, we asked participants on which stages they specialized (seed, early, mid, late). Firms can specialize along multiple dimensions at the same time. In our sample of VC firms, 59% specialize in seed- or early-stage; 9% in mid- or late-stage. Geographically, our sample of VC firms is evenly distributed among California, the rest of the United States, and foreign locations.

VC firms also often specialize by industry. Over 22% specialize in what can be broadly defined as the information technology (IT) industry, including software, IT, and consumer internet (“IT” subsample). Some 9% specialize in healthcare (“Health” subsample). These were also two most important subsamples in GGKS (2020).

We also consider separately institutional VC (“IVC” subsample) firms and corporate VC (“CVC” subsample) firms, as they have different structures and often pursue different strategies. In recent years, CVCs have been playing a more prominent role in the innovation ecosystem. About 10% of our sample is from corporate VC, the rest is from institutional VC.

We asked our respondents whether they anticipate that COVID-19 will ultimately increase or decrease the cash-on-cash multiple their existing funds return to LPs. 43% of the VCs who answered that question report that COVID-19 will decrease their cash-on-cash multiple (the “Hurt” subsample), while 24% report that COVID-19 will increase their cash-on-cash multiple (the “Help” subsample). The median VC reported that cash-on-cash returns would be unchanged while IRRs would fall. This was not an unusual view – one-quarter of the VCs who expected cash-on-cash returns to be unchanged expected IRRs to decline. This is consistent with a view that exits

will not be lower but simply delayed, due to either a reduced appetite for acquisitions or the closing of the IPO window.

### **3 Investment activities**

In this section, we report results on VC investment activity and decisions. As discussed in GGKS (2020), many VCs in our prior survey indicated that deal sourcing and deal selection were the most important determinants of their investment success. As such, understanding how lockdowns and other restrictions imposed in the wake of the COVID-19 pandemic affected these activities is important.

First, we asked VCs how the pandemic had affected and was likely to affect their investment pace. Had they made fewer investments so far and did they anticipate making fewer investments for the rest of the year? GGKS (2020) found that VCs spend a significant amount of time sourcing deals, reviewing more than 100 opportunities for each deal they close. While not reported in the paper, GGKS (2020) found that pre-COVID-19, VCs took an average of 83 days to close a deal, spent 118 hours on due diligence, and called ten references for each deal they close. This type of deep due diligence may be hindered by the restrictions COVID-19 has put on travel and in-person meetings.

Table 2 reports the VCs' responses on their investment rate so far in 2020 (roughly half of the year) and their expected rate for the remainder of the year relative to their expected rate of investment. Through the first half of 2020, VCs say they have invested at just over 70% of their normal investment pace. Late-stage and IT investors report a larger decrease in their investment pace. Two-thirds of our respondents are making fewer investments. Late-stage investors and investors in IT are more likely to have reduced the pace at which they make deals. Looking forward to the second half of the year, VCs anticipate that their investment pace will be roughly 80% of normal, with IT investors, again, showing the largest reduction.

For investors who are making fewer investments, the most common reason is the current difficulty of evaluating deals. This is particularly important for those who are most affected by COVID-19 and certainly makes sense given the results of GGKS (2020) and the amount of time and effort required to give due diligence to a deal. In our current survey, late-stage investors indicate that it is more difficult to evaluate deals. This is surprising because GGKS (2020) found that early-stage investors put more weight on the management team than late-stage investors. Given the difficulty of meeting teams in person, it would be reasonable to have expected early-stage investors to have more trouble evaluating deals. Investors, particularly corporate VCs, also are concerned with conserving capital and making sure they have dry powder available for follow-on investments. Finally, IT investors are concerned about meeting fewer quality entrepreneurs. This is likely driven by the fact that for IT investors, the management team is the most important factor and evaluating entrepreneurs during the COVID-19 restrictions is much more challenging than evaluating other components of the investment proposition, such as the business model or the market.

It is clear from Table 2 that the pandemic has depressed and likely will continue to depress VC investment activity. This is consistent with the behavior of VC investment in past recessions, as Howell et al. (2020) showed. The extent of the decline, however, is expected to be more modest than in the dotcom bust of 2001 and 2002 when investment declined by more than 50% and the financial crisis when investment declined by 30% in 2009. Our respondents also perceive the effect of the pandemic on their investment pace as relatively short-lived. One potential explanation is that the current crisis is not expected to depress earnings in technology-related sectors significantly or that certain technology areas may be boosted by the pandemic.

Geographic measures of COVID-19 impact were not associated with any of our impact measures. VCs in states or countries with relatively high COVID-19 case rates, death rates, lockdown periods, or year-over-year unemployment increases did not report a larger impact on using any of the measures in Table 2. This is consistent with the impact of COVID-19 coming through national and international economic disruption and uncertainty, rather than regional channels.

We also were interested in understanding how VCs adjusted their required financial metrics to different factors and whether their method of adjusting those metrics changed between GGKS (2020) and the current survey. The current survey repeated a question we asked in the prior survey, and it provides an indication of how the pandemic might be affecting decision making.

Table 3 reports that over 40% of the VCs use the same financial metric to evaluate all investment opportunities. This is greater than the 23% who reported this in GGKS (2020). It is a bit surprising from the perspective of an economist or financial economist that the percentage is so high and has grown over the last five years. Among those VCs for whom financial metrics vary, investment riskiness and time to liquidity are the primary considerations, although the adjustments based upon the investment's riskiness and the time to liquidity have fallen the most since the last survey. Industry and financial market conditions also matter, but less so. This result almost exactly matches the results in GGKS (2020). Healthcare investors, consistent with our prior results, are more likely to adjust the required financial metric for the investment's riskiness than are IT investors. Corporate VCs are reacting more to industry conditions. Overall, this might indicate that the increase in uncertainty has meant that VCs have decided to embed general uncertainty equally across all deals.

## **4 Deal structure**

The second stage of the VC process is deal structuring. As in GGKS (2020), we ask VCs how frequently they used different contractual terms. Specifically, we ask about terms related to cash flow rights (anti-dilution protection and cumulative dividends); control rights (other special investor rights); and liquidation rights (liquidation preferences, participation rights, and redemption rights).

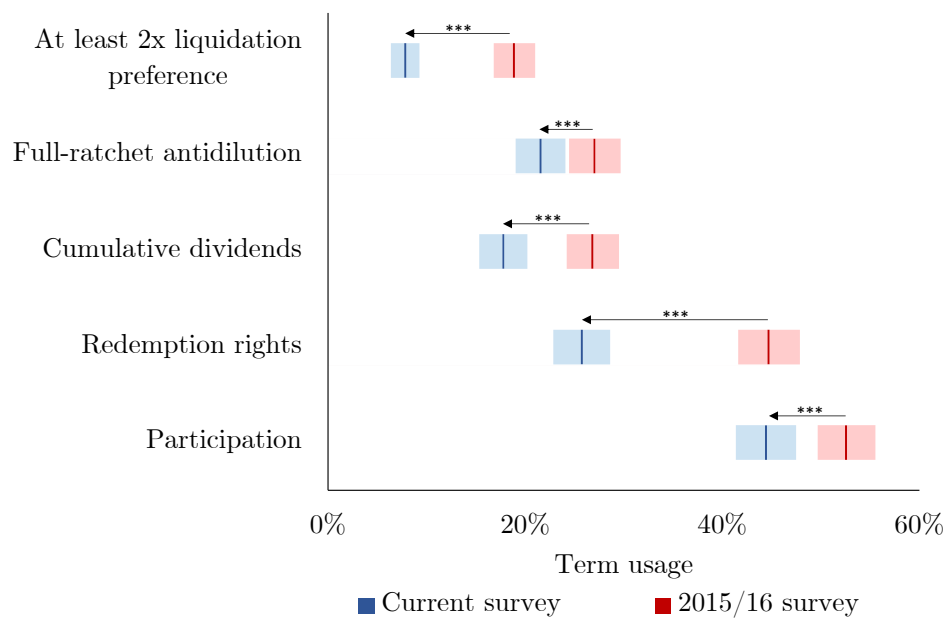
Anti-dilution protection gives the VC more shares if the company raises a future round at a lower price. Full ratchet anti-dilution is a particularly onerous form of this term. Cumulative dividends allow the annual dividend to accumulate, whereas non-cumulative dividends effectively amount to no dividend. The liquidation preference gives investors a senior position in a sale or liquidation.

Participation rights allow VC investors to combine upside and downside protection in a sale or liquidation (so that VC investors first receive their downside protection and then share in the upside). Redemption rights give investors the right to redeem their securities, or demand from the company the repayment of the original amount.

Given the increase in uncertainty due to the pandemic, one might expect these terms to be stronger, i.e., more VC friendly. Table 4 reports the results of our survey, with higher numbers corresponding to more use of VC friendly terms. As Figure 1 shows, respondents to the current survey actually indicate that the terms are more founder-friendly than respondents to our prior GGKS (2020) survey. Perhaps this reflects the past five years of VC activity and competition that has led to a general increase in founder-friendly terms. The current COVID-19 pandemic does not appear to have caused the terms to “revert” to the same investor-friendly level. Participation rights are used most frequently in our current survey, but in fewer than half of deals. In unreported results in GGKS (2020), participation was utilized 53% of the time. As in our prior survey, healthcare VCs were significantly more likely to include participation. Redemption rights and cumulative dividends are used, respectively, by 27% and 17% of the VCs, with late-stage VCs

Figure 1: Frequency with which contractual features are used in 2015/16 and present

This figure reports the average frequency with which institutional VC respondents to the current survey anticipate using each contractual feature over the coming year. Those frequencies are compared to the same statistics from the 2015/16 survey by GGKS (2020).



using both more frequently. Again, the prevalence of these terms was substantially lower than in GGKS (2020) in which 45% of respondents stated that they used redemption rights and 27% said they used cumulative dividends. Finally, VCs make some use of full ratchet anti-dilution and senior liquidation preferences, albeit again, these frequencies are lower than the frequencies we find in the earlier survey. In unreported analysis, we find that people who responded to both surveys show the same significant decreases in the frequency of participation, redemption, full-ratchet antidilution, and high liquidation preferences.

## 5 Portfolio company performance and activities

A great deal of research, including Lerner (1995), Hellmann and Puri (2002), Kaplan and Stromberg (2004), Amornsiripanitch et al. (2016), and GGKS (2020), indicates that VCs are actively involved in managing their portfolio companies, frequently meeting with their portfolio

companies' management and playing an important role in critical hiring and strategic decisions. In this section, we consider the effect of the pandemic on the VC portfolio companies and the actions that VCs have taken in response.

## 5.1 Effect of the pandemic on portfolio companies

We first asked the VCs about the impact of the pandemic on their existing portfolio companies and their existing funds. Table 5 indicates that VCs felt that 52% of their portfolio companies were not affected or positively affected by the pandemic. VCs felt that 38% of their companies were negatively affected, but okay. Finally, VCs felt that 10% of their companies had been very negatively affected. Unsurprisingly, VCs who reported being more hurt by COVID-19 also reported that more of their companies were doing poorly. Healthcare VCs indicated that their companies were less likely to be severely negatively affected (7%) than did IT VCs (11%). These percentages are substantially more positive than we had expected, particularly the small number of very negatively affected companies.

Overall, consistent with this evaluation of their portfolio company health, the institutional VCs expect the pandemic to have a median impact on their fund IRRs of -2% and a median impact on the fund cash-on-cash multiples of 0.0. This is consistent with the same exit values for investments, but a longer investment holding period. IT VCs expect a -2% effect on fund IRR at the median while Healthcare VCs expect no effect.

Although in aggregate VCs have not been much impacted, that aggregation hides significant heterogeneity. The median VC who expects COVID-19 to improved the cash-on-cash multiple expects it to increase the cash-on-cash multiple by 1 and IRR by 5%, while the median VC who expects COVID to decrease the cash-on-cash multiple expects it to decrease the multiple by 0.50 and IRR by 5%. This dispersion suggests that the turbulence produced by the pandemic has created winners and losers, with the winning companies offsetting the losing companies for the typical fund.



Going forward, the VCs do expect to see an effect of the pandemic on the financing market. They expect to see declines in follow-on round valuations of roughly 20%, and most expect to see more investor-friendly terms. Again, there are no meaningful differences between sub-groups, apart from the COVID-19 impact subgroups, where the “Hurt” sample was more pessimistic. VCs in regions hit harder by COVID-19 (as measured by case rates, death rates, lockdown periods, or year-over-year unemployment increases) did not report a larger impact on their companies.

Although VCs expect subsequent valuations to fall, as shown above, they do not expect a large long-term effect on returns. This is consistent with companies developing new technology today that have long-term prospects and are immune to short-term market movements. The time horizon and opportunity may be far enough in the future to insulate the expected payoff of current investments, regardless of interim market turbulence. Consistent with that view, one-quarter of the VCs who expected cash-on-cash multiples to be unchanged also expected IRRs to decline. This suggests that even investors who do not expect exits to be lower expect them to be delayed.

## 5.2 Involvement with portfolio companies

We also asked the VCs how they were interacting with their portfolio companies during the pandemic. Table 6 indicates that half the VCs meet with their portfolio companies once a week or more frequently while almost 30% meet multiple times per week. There are no significant differences across subgroups, although institutional VCs meet slightly more often. The high level of involvement is consistent with previous work and anecdotal evidence.

Table 7 examines VCs’ interaction with their portfolio companies at a more granular level by asking what the VCs actually do for the companies. The most common activity is providing strategic guidance, which VCs report doing for almost 68% of their companies. VCs provide operational guidance for 46% of their companies, connect customers with 43%, and connect investors with 41%. Table 7 also reports on pandemic-specific activities. Consistent with roughly half of their companies being sick or in intensive care, they help almost half of their companies to reduce their burn rate. They help roughly one-third of their companies connect with liquidity,

connect with COVID-19 relief, and connect with equity investors. We also paired questions around whether VCs were helping portfolio companies to hire or fire employees. Nearly 25% of VCs were involved with helping portfolio companies to hire new employees, which is higher than the 15% of portfolio companies in which VCs are helping to fire employees. We find that late-stage VCs are more likely to be helping their companies to fire employees (17%) than are early-stage VCs (11%).

There is some variation across sub-groups. Corporate VCs are more active in providing connections to customers, but less active in connecting new hires and providing operational guidance. Early-stage investors are more active in connecting to new investors. Interestingly, the responses of those most and least affected by the pandemic are very similar.

Overall, then, the results in this section are consistent with the VCs taking actions to help their portfolio companies and with those actions having changed somewhat in response to the pandemic.

## **6 Time management and management of the venture capital firms.**

As in GGKS (2020), we asked the survey respondents to describe the structure of their normal work-week.<sup>8</sup> Table 8 shows that VCs report working an average of 58 hours per week, with U.S. VCs reporting more than 60 hours. Healthcare VCs report spending more time working than IT VCs (61 hours vs. 56 hours). The 59 total hours compare to 55 total hours reported in GGKS (2020), suggesting that VCs are working somewhat harder in the pandemic than they did five years ago.

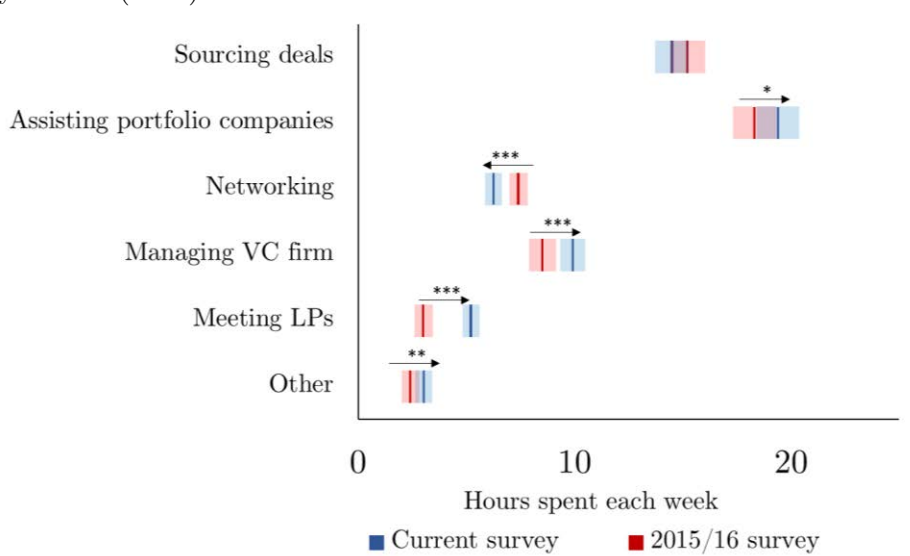
VCs of all types spend the single largest amount of time working with their portfolio companies – 19 hours a week. This is consistent with the typical respondent holding five board seats. Institutional VCs spend more time helping their companies and have more board seats than corporate VCs. Overall, the amount of time and involvement in portfolio companies is consistent with their reporting that they add value and help their companies. Surprisingly, the 19.4 hours

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<sup>8</sup> Hoyt, Gouw, and Strebulaev (2012) and Rust (2003) present some earlier evidence on VCs' time use.

Figure 2: Institutional VC time use in 2015/16 and the COVID-19-era

This figure reports the average hours per week institutional VC respondents spent on each activity in the current survey and compares that with respondents in the 2015/16 survey by GGKS (2020).



per week for institutional VCs is only one hour greater than the 18.3 hours reported in GGKS (2020).

VCs still spend an appreciable amount of time sourcing and selecting potential deals despite the difficulties of traveling and in-person meetings that the pandemic has caused. Sourcing and networking are the second and fourth most important activities, at 14.4 and 6.4 hours per week, respectively, for a total of 20.8 hours per week. This is consistent with the VCs' expectations that they will continue to invest in new deals this year. The combined 20.8 hours per week for institutional VCs is modestly lower than the 22.6 hours reported in GGKS (2020).

As Figure 2 shows, the additional hours spent by institutional VCs in this survey appear to have gone to managing the VC firm and meeting with LPs. These come in at 10.1 and 5.2 hours, respectively, compared to 8.5 and 3.0 hours in GGKS (2020). This indicates that there are real, non-investment activities within a VC firm that must be managed by partners and that the COVID-19 pandemic has increased the time devoted to those activities. Most firms have had to

spend time adapting to remote work and restriction imposed by the current pandemic, and VC firms are not immune to those challenges.

## **7 Looking to the future**

We conclude our survey with two questions about the future. First, we asked the VCs about their performance expectations for themselves and VC overall. Table 9 indicates that VCs remain extremely optimistic about their future performance. Some 91% of institutional VCs expect their investments to outperform the stock market. Almost 75% expect the VC industry overall to outperform the stock market. These expectations are largely unchanged from five years ago, when GGKS (2020) found that 93% of the VCs expected to outperform and 71% believed VC as a whole would outperform. These expectations are consistent with the relatively positive assessment of their portfolio companies. Interestingly, Healthcare VCs have slightly lower expectations for their own performance beating the stock market (85%) than do IT VCs (93%). Even the VCs most affected by the pandemic hold upbeat views.

Also, consistent with expected outperformance, Table 10 indicates that VCs still maintain a healthy required return of 32%. This is very similar to the 31% found in GGKS (2020). Corporate VCs have a significantly lower required IRR hurdle (23%) than do institutional VCs (34%). This is consistent with CVCs taking strategic (non-monetary) returns into consideration when making their investment decisions.

Finally, given the volatility in the financial markets, we asked the VCs about the potential concern that their LPs would want to conserve liquidity and would prefer the VCs not to call so much capital. Table 10 shows that this is a concern, but likely a minor one. Only 16% of VCs report that their LPs want fewer capital calls.

## 8 Conclusion

In this paper, we survey over 1,000 institutional and corporate VCs at over 900 VC firms to learn how their decisions and investments have been affected by the COVID-19 pandemic. We compare their survey answers to those provided by a large sample of VCs in early 2016 and analyzed in Gompers, Gornall, Kaplan, and Strebulaev (2020).

The pandemic has clearly had an impact. We find that VCs have slowed their investment pace and have spent time guiding portfolio companies through the pandemic. They also report that 10% of their portfolio companies have been very negatively affected.

At the same time, there is some evidence that the pandemic has had only a modest overall impact. VCs report that 52% of their portfolio companies are positively affected or unaffected by the pandemic; and 38% are negatively affected, but okay. Overall, they expect the pandemic to have a small negative effect on their fund IRRs (-1.6%) and MOICs (-0.07). We find surprisingly little change in the allocation of their time. As several VCs stated in their comments at the end of our survey, it may be too early for them to appreciate the full extent of the pandemic.

Our data suggest that the VC industry is less affected by COVID-19 than many other parts of the world economy. This is consistent with two possible stories. First, VC-backed companies may have been spared from the worst of COVID-19 due to the nature of their businesses. These companies may be immunized to the negative impact of lockdowns by being more able to pivot to remote work (Ding, Levine, Lin, and Xie, 2020) and by having large cash reserves and little debt (Papanikolaou and Schmidt, 2020). Second, VCs' portfolios may gain in value in disruptive and volatile environments. If portfolio companies are real options on innovative technologies and business models, an increase in volatility may increase the value of those options and thus the value of a VC's portfolio (Fluck, Garrison, and Myers, 2006; Peters, 2018). Regardless of the channel, VCs' relatively strong performance during the pandemic is consistent with much lower systematic risk than the VC industry exhibited in the dotcom crash and the global financial crisis earlier this century.

Given the importance of the VC in the global innovation ecosystem and economy, it will be interesting to see whether these impacts persist and important to follow subsequent industry developments.

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**Table 1:** Number of respondents

Count of survey respondents and the firms that they belong to. The first panel looks at all responses, the second panel looks at our main sample of surveys from respondents at institutional VC funds.

	Individuals		Firms	
	N	%	N	%
Total responses	1,181	100	1,049	100
Respondents at institutional VC firms	914	77	810	77
Respondents in corporate VC	119	10	112	11
Respondents at other investors	148	13	147	14
<hr/>				
Sample: Respondents at institutional and corporate VC firms				
Total responses	1,033	100	915	100
Completed surveys	804	78	738	81
Surveys completed on behalf of someone else	29	3	29	3
<hr/>				
Target seed- or early-stage	831	80	753	82
Only seed- or early-stage	611	59	561	61
Target mid- or late-stage	315	30	298	33
Only mid- or late-stage	97	9	91	10
<hr/>				
Target Software, IT, Consumer Internet	653	63	592	65
Only Software, IT, Consumer Internet	226	22	212	23
Target Healthcare	404	39	375	41
Only Healthcare	94	9	88	10
Target Financial	342	33	315	34
Target Energy	120	12	114	12
<hr/>				
MOIC helped by COVID	165	16	161	18
MOIC unchanged by COVID	226	22	218	24
MOIC hurt by COVID	291	28	279	30
<hr/>				
California	319	31	278	30
Other U.S.	253	24	238	26
Foreign	381	37	347	38

**Table 2:** Impact of COVID-19 on investment rate

The first panel reports how COVID-19 has impacted reported VC investment rates. The second panel reports the reason those VCs that have reduced their investment rate give for that decision.

	Type		Stage		Industry		COVID Impact		Location			
	All	IVC	CVC	Early	Late	IT	Health	Help	Hurt	CA	OthUS	Fgn
Investments made so far in 2020	5 (0)	5 (0)	4 (1)	5** (0)	3** (0)	4 (0)	4 (1)	5 (1)	6 (1)	5 (0)	5 (0)	6 (1)
Percent reduction in investment rate	29 (1)	29 (1)	34 (4)	29** (1)	39** (5)	38*** (2)	25*** (4)	21*** (3)	32*** (2)	31* (2)	26* (2)	30 (2)
Any reduction in investment rate	63 (2)	63 (2)	66 (5)	61** (2)	73** (5)	70*** (3)	44*** (6)	53*** (4)	70*** (3)	66 (3)	65 (3)	59** (3)
Percent reduction anticipated for remainder of year	19 (1)	18 (1)	22 (4)	19 (1)	21 (4)	25** (2)	16** (3)	11*** (2)	22*** (2)	21 (2)	21 (2)	16** (2)
Number of responses	916	814	114	567	92	217	94	160	277	296	238	358
Reason given by VCs who reduced their investment rate												
Struggling to evaluate deals	42 (2)	43 (2)	35 (6)	37*** (3)	58*** (6)	46 (4)	50 (8)	42 (5)	46 (4)	48 (4)	45 (4)	38** (3)
Meeting fewer quality entrepreneurs	14 (1)	14 (2)	9 (4)	16 (2)	12 (4)	16** (3)	3** (3)	13 (4)	10 (2)	13 (2)	14 (3)	12 (2)
Conserving dry powder / capital calls	25 (2)	24** (2)	38** (6)	28* (2)	17* (5)	20* (3)	33* (8)	25 (5)	25 (3)	20 (3)	27 (4)	29 (3)
Focusing on startups closer to profitability	19 (2)	19 (2)	18 (5)	19 (2)	13 (4)	19 (3)	14 (6)	20 (4)	20 (3)	19 (3)	14 (3)	21 (3)
Number of responses	547	487	65	325	58	145	36	85	193	183	147	200

**Table 3:** Adjustments to required IRR

The percentage of respondents who report that their required IRR varies with each factor.

	Type			Stage			Industry			COVID Impact			Location		
	All	IVC	CVC	Early	Late	IT	Health	Help	Hurt	CA	OthUS	Fgn			
Same for all investments	42 (2)	42 (2)	41 (6)	40 (3)	43 (6)	42 (4)	49 (6)	44 (4)	43 (3)	45 (4)	45 (4)	37* (3)			
Investment's riskiness	53 (2)	52 (2)	52 (6)	48 (3)	51 (6)	51** (4)	60** (6)	57 (4)	58 (3)	47* (4)	56* (4)	54 (3)			
Correlation with public market	8 (1)	8 (1)	11 (4)	7 (1)	6 (3)	7 (2)	6 (3)	8 (2)	8 (2)	9 (2)	5 (2)	9 (2)			
Financial market conditions	17 (1)	16 (2)	20 (5)	14 (2)	18 (4)	13 (3)	14 (4)	18 (3)	15 (2)	17 (3)	16 (3)	15 (2)			
Industry conditions	25 (2)	23** (2)	36** (6)	23 (2)	23 (5)	22 (3)	22 (5)	30 (4)	24 (3)	27 (3)	22 (3)	23 (3)			
Time to liquidity	42 (2)	42 (2)	41 (6)	40 (3)	43 (6)	42 (4)	49 (6)	44 (4)	43 (3)	45 (4)	45 (4)	37* (3)			
Other	8 (1)	8 (1)	6 (3)	8* (1)	3* (2)	7 (2)	6 (3)	5 (2)	6 (2)	8 (2)	11 (2)	6 (1)			
Number of responses	631	567	71	367	71	151	65	131	228	194	164	264			

**Table 4:** Frequency with which respondents anticipate using contractual features

The average frequency with which respondents anticipate using each contractual feature over the coming year.

	Type			Stage			Industry			COVID Impact			Location		
	All	IVC	CVC	Early	Late	IT	Health	Help	Hurt	CA	OthUS	Fgn			
Participation	45 (1)	44* (2)	52* (4)	47 (2)	41 (4)	37*** (3)	60*** (4)	42 (3)	44 (2)	41 (3)	40 (3)	53*** (2)			
Redemption rights	26 (1)	26 (1)	29 (4)	25** (2)	35** (5)	23 (3)	28 (4)	25 (3)	27 (2)	20*** (2)	33*** (3)	26 (2)			
Cumulative dividends	17 (1)	18 (1)	14 (3)	13*** (1)	27*** (4)	16*** (2)	29*** (4)	17 (3)	18 (2)	15** (2)	23** (3)	14** (2)			
Full-ratchet antidilution	22 (1)	22 (1)	25 (4)	22 (2)	22 (4)	20 (3)	17 (3)	23 (3)	22 (2)	19 (2)	16 (2)	29*** (2)			
>1x liquidation preference	26 (1)	25** (1)	34** (4)	25 (2)	30 (4)	23* (2)	30* (4)	25 (3)	24 (2)	24 (2)	21 (2)	30*** (2)			
≥2x liquidation preference	8 (1)	8* (1)	12* (2)	8 (1)	8 (2)	6 (1)	8 (2)	9 (2)	8 (1)	7 (1)	7 (1)	10* (1)			
Other special investor rights	21 (1)	20** (1)	27** (4)	20 (2)	25 (4)	16 (2)	21 (4)	21 (3)	19 (2)	15 (2)	19 (3)	26*** (2)			
Number of responses	675	596	85	403	71	152	77	143	245	202	182	283			

**Table 5:** Impact of COVID-19 on portfolio companies

The average reported impact of COVID-19 on each measure.

	Type			Stage			Industry			COVID Impact			Location	
	All	IVC	CVC	Early	Late	IT	Health	Help	Hurt	CA	OthUS	Fgn		
% companies not affected or positively affected	52 (1)	52 (1)	48 (3)	53 (1)	50 (3)	52 (2)	52 (4)	64*** (2)	42*** (1)	52 (2)	51 (2)	51 (1)		
% of companies negatively affected	38 (1)	38 (1)	40 (3)	37 (1)	40 (3)	37 (3)	42 (3)	29*** (2)	44*** (1)	38 (1)	39 (2)	38 (1)		
% of companies very negatively affected	10 (0)	10 (0)	11 (1)	11 (1)	10 (1)	11*** (1)	7*** (1)	7*** (1)	14*** (1)	11 (1)	10 (1)	11 (1)		
Number of responses	768	695	83	475	74	189	75	151	245	247	206	301		
Impact of COVID-19 on IRR	-1.6 (0.2)	-1.6 (0.2)	-1.5 (0.8)	-1.7 (0.3)	-1.5 (0.8)	-2.1* (0.5)	-0.5* (0.7)	5.2*** (0.4)	-5.8*** (0.2)	-1.4 (0.5)	-1.2 (0.4)	-1.9 (0.4)		
Median	-2.0 (0.7)	-2.0 (0.7)	-4.0 (1.4)	-2.0 (0.9)	-4.0 (1.4)	-2.0 (1.0)	0.0 (0.4)	5.0*** (0.4)	-5.0*** (0.1)	-2.0 (1.1)	-2.0 (0.8)	-2.0 (1.1)		
Impact of COVID-19 on cash-on-cash multiple	-0.07 (0.04)	-0.07 (0.04)	-0.04 (0.09)	-0.06 (0.05)	-0.04 (0.09)	-0.05 (0.08)	0.04 (0.10)	1.19*** (0.07)	-0.85*** (0.04)	0.02 (0.08)	-0.00 (0.07)	-0.19** (0.07)		
Median	0.00 (0.00)	0.00 (0.00)	0.00 (0.06)	0.00 (0.02)	0.00 (0.06)	0.00 (0.04)	0.00 (0.01)	1.00*** (0.02)	-0.50*** (0.05)	0.00 (0.01)	0.00 (0.05)	0.00 (0.02)		
Number of responses	627	627	67	395	67	154	71	163	280	205	177	257		
Expected % change in NAV over next year	10 (1)	10 (1)	12 (3)	10 (1)	12 (3)	10 (2)	10 (3)	18*** (2)	3*** (1)	10 (2)	11 (2)	9 (1)		
Median	2 (3)	2 (3)	10 (5)	1 (3)	10 (5)	10 (6)	1 (4)	20*** (3)	0*** (1)	0** (2)	10*** (3)	0 (3)		
Number of responses	620	620	67	392	67	156	70	159	273	199	179	254		
Expected change in follow-on round valuations	-22 (1)	-22 (1)	-21 (3)	-22* (1)	-17* (3)	-19 (1)	-20 (3)	-16*** (2)	-27*** (1)	-21 (1)	-22 (2)	-21 (1)		
Median	-20 (0)	-20 (0)	-20 (0)	-20 (0)	-20 (2)	-20 (0)	-20 (1)	-17* (2)	-20* (0)	-20 (0)	-20 (0)	-20 (0)		
Number of responses	848	758	102	523	82	204	87	158	278	279	226	331		
% expect follow-ons to be more investor friendly	53 (2)	52 (2)	56 (5)	55 (2)	48 (6)	46 (4)	53 (5)	64 (4)	71 (3)	55 (3)	52 (3)	57 (3)		
Number of responses	781	697	96	481	76	186	85	163	280	254	208	316		

**Table 6:** Involvement in portfolio companies

The percentage of respondents who answered that they interacted with their portfolio companies at each frequency over the past six weeks.

	Type		Stage		Industry		COVID Impact		Location		Fgn	
	All	IVC	CVC	Early	Late	IT	Health	Help	Hurt	CA		OthUS
Less than monthly	2 (0)	2 (0)	2 (2)	2 (1)	0 (0)	2 (1)	0 (0)	1 (1)	3 (1)	2 (1)	2 (1)	1 (1)
Once a month	10 (1)	10 (1)	11 (3)	12 (1)	7 (3)	12 (2)	7 (3)	11 (2)	10 (2)	10 (2)	11 (2)	9 (2)
2-3 times a month	34 (2)	33 (2)	38 (5)	33 (2)	36 (6)	33 (4)	27 (5)	33 (4)	34 (3)	38 (3)	33 (3)	29* (3)
Once a week	26 (2)	26 (2)	26 (5)	25 (2)	31 (5)	27 (3)	35 (5)	21 (3)	25 (3)	24 (3)	26 (3)	28 (3)
Multiple times a week	26 (2)	27 (2)	22 (4)	27 (2)	23 (5)	24 (3)	25 (5)	30 (4)	26 (3)	23 (3)	27 (3)	28 (3)
Every day	2 (0)	2 (1)	0 (0)	1 (0)	1 (1)	3 (1)	4 (2)	3 (1)	3 (1)	1 (1)	1 (1)	3* (1)
Number of responses	747	665	92	458	74	176	83	162	279	245	203	306

**Table 7:** Activities in portfolio companies

The average percentage of portfolio companies with which respondents undertake each activity over the past six weeks.

	Type			Stage			Industry			COVID Impact			Location		
	All	IVC	CVC	Early	Late	IT	Health	Help	Hurt	CA	OthUS	Fgn			
Hire board members	10 (1)	10 (1)	8 (2)	10 (1)	12 (2)	9** (1)	15** (3)	12 (2)	9 (1)	8*** (1)	12*** (1)	10 (1)			
Hire managers	23 (1)	24*** (1)	15*** (2)	23 (1)	24 (3)	26 (2)	23 (3)	26 (2)	23 (1)	23 (2)	23 (2)	23 (1)			
Hire employees	15 (1)	15** (1)	10** (2)	16 (1)	13 (2)	15 (2)	12 (2)	17 (2)	15 (1)	16 (1)	16 (2)	13* (1)			
Fire employees	12 (1)	12 (1)	10 (2)	11** (1)	17** (3)	13 (2)	9 (2)	14 (2)	14 (1)	11 (1)	14 (2)	12 (1)			
Connect customers	43 (1)	42* (1)	49* (3)	43 (1)	43 (4)	42 (2)	40 (3)	47** (2)	41** (2)	43 (2)	41 (2)	44 (2)			
Connect investors	41 (1)	41 (1)	41 (3)	42*** (1)	30*** (3)	37** (2)	44** (3)	44 (2)	40 (2)	40 (2)	38 (2)	42** (2)			
Connect with liquidity	30 (1)	30 (1)	31 (3)	29 (1)	30 (3)	26 (2)	30 (3)	30 (2)	29 (2)	26 (2)	27 (2)	35*** (2)			
Connect with COVID-19 relief	33 (1)	33 (1)	27 (4)	33 (2)	36 (4)	27 (2)	32 (4)	33 (3)	35 (2)	28*** (2)	40*** (3)	31 (2)			
Connect with equity investors	34 (1)	34 (1)	31 (3)	34 (1)	29 (3)	30*** (2)	40*** (3)	37 (2)	33 (2)	34* (2)	29* (2)	36** (2)			
Strategic guidance	68 (1)	68 (1)	63 (3)	68 (1)	72 (4)	68 (2)	73 (3)	69 (2)	68 (2)	68 (2)	69 (2)	67 (2)			
Operational guidance	46 (1)	46* (1)	39* (3)	45 (2)	46 (4)	48 (3)	47 (4)	46 (3)	46 (2)	48 (2)	47 (3)	43* (2)			
Help reduce burn rate	48 (1)	48 (1)	43 (4)	47 (2)	51 (4)	49 (3)	41 (4)	44* (4)	50* (2)	48 (2)	48 (3)	49 (2)			
Other	6 (1)	6 (1)	3 (2)	7 (1)	5 (3)	6 (2)	6 (2)	10* (2)	6* (1)	6 (1)	6 (1)	7 (1)			
Number of responses	700	627	81	431	68	164	75	154	269	225	184	294			

**Table 8:** Time use

The first panel reports the average hours per week spent by respondents on each activity since the beginning of the COVID-19 pandemic. The second panel reports the number of board seats they hold.

	Type			Stage			Industry			COVID Impact			Location		
	All	IVC	CVC	Early	Late	IT	Health	Hurt	Help	CA	OthUS	Fgn			
Sourcing deals	14.4 (0.4)	14.4 (0.4)	14.6 (1.4)	14.0 (0.4)	15.4 (1.4)	13.0* (0.6)	15.3* (1.4)	13.7 (0.6)	14.7 (0.7)	15.4 (0.7)	15.2 (0.7)	13.0*** (0.5)			
Assisting portfolio companies	18.9 (0.4)	19.4*** (0.4)	15.3*** (1.1)	18.8 (0.5)	17.9 (1.4)	19.5 (0.8)	20.9 (1.7)	19.3 (0.7)	20.2 (1.0)	19.1 (0.7)	19.8 (0.9)	18.6 (0.6)			
Networking	6.4 (0.2)	6.3* (0.2)	7.3* (0.5)	6.7* (0.2)	5.6* (0.6)	6.1 (0.3)	5.9 (0.6)	6.1 (0.3)	6.2 (0.4)	6.7 (0.4)	6.2 (0.4)	6.1 (0.3)			
Managing VC firm	10.1 (0.3)	9.9* (0.3)	11.4* (0.9)	10.2 (0.4)	10.8 (0.9)	8.9 (0.5)	10.4 (1.0)	10.2 (0.4)	9.7 (0.5)	9.8* (0.5)	11.2* (0.7)	9.7 (0.4)			
Meeting LPs	5.2 (0.2)	5.2 (0.2)	5.3 (0.6)	5.2* (0.3)	6.5* (0.9)	5.3 (0.4)	4.9 (0.6)	4.6** (0.3)	6.1** (0.6)	5.6 (0.4)	5.5 (0.5)	4.8 (0.3)			
Other	3.2 (0.2)	3.0** (0.2)	4.6** (0.8)	3.2 (0.3)	3.5 (0.8)	3.2 (0.4)	3.6 (0.4)	2.6 (0.3)	3.0 (0.4)	3.1 (0.4)	3.2 (0.4)	3.3 (0.3)			
Total hours	58.2 (0.7)	58.1 (0.8)	58.6 (2.1)	58.0 (1.0)	59.7 (2.4)	56.1* (1.5)	61.1* (2.4)	56.4* (1.2)	59.8* (1.5)	59.7 (1.3)	61.2 (1.5)	55.6*** (1.1)			
Number of responses	722	646	84	443	73	173	79	152	266	232	193	295			

**Table 9:** Performance expectations

This table reports VCs expectations for their performance and the performance of the VC industry, both relative to the market.

	Type			Stage			Industry			COVID Impact			Location		
	All	IVC	CVC	Early	Late	IT	Health	Hurt	Help	CA	OthUS	Fgn			
My investments will outperform the stock market	91 (1)	91 (1)	91 (1)	91 (1)	95 (3)	93** (2)	85** (4)	87*** (2)	96*** (2)	92 (2)	93 (2)	90 (2)			
Number of responses	645	645	407	68	68	160	73	163	280	210	183	260			
VC overall will outperform the stock market	75 (2)	75 (2)	78 (2)	78 (2)	73 (5)	78 (3)	74 (5)	79 (2)	75 (3)	72 (3)	72 (3)	79** (2)			
Number of responses	642	642	406	68	68	160	73	163	280	209	183	259			

**Table 10:** Capital supply

This table reports the percentage of VCs reporting their LPs have requested reduced capital draws and the average required IRR for new investments.

	Type		Stage		Industry		COVID Impact		Location		
	All	IVC	Early	Late	IT	Health	Help	Hurt	CA	OthUS	Fgn
Percentage reporting LPs want fewer capital calls	16 (1)	16 (1)	17 (2)	13 (4)	20 (3)	13 (4)	16 (3)	20 (2)	17 (3)	17 (3)	14 (2)
Number of responses	639	639	404	68	159	71	162	277	207	182	258
Current required IRR	32 (1)	34*** (1)	23*** (2)	29 (2)	32 (3)	31 (2)	34 (3)	35 (2)	34 (2)	32 (1)	32 (2)
Number of responses	445	398	49	240	111	45	95	163	131	111	189