Notre Dame
Investment Club

June 24, 2020

Dear Investment Club Members,

The performance of the Notre Dame Investment Club as of April 30, 2020 is set forth below.

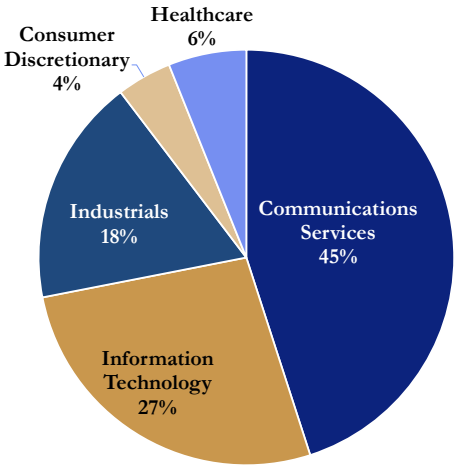
Index	Month (%)	3 Months (%)	1 Year (%)	3 Years (%)	5 Years (%)	ITD (%)	Inception Date
NDIC	13.33	-11.86	-3.31	5.41	6.56	7.70	7/1/1988
S&P 500	12.82	-9.26	0.86	9.04	9.12	10.09	7/1/1988*

*Modified to match club's inception

Updated Portfolio & Sector Breakdown (4/30/30)

	4/30/2020		
	Price	Position	%
Activision Blizzard	$63.73	$49,391	6.3%
Apple	293.95	60,553	7.7%
Alphabet	1,346.37	123,866	15.8%
Deere & Company	145.06	37,424	4.8%
Delta Air Lines	25.93	34,435	4.4%
DocuSign	104.75	38,443	4.9%
Landstar System	103.30	28,408	3.6%
Pet IQ	28.61	47,521	6.1%
MasterCard	275.19	111,452	14.2%
Match Group	77.00	64,449	8.2%
Verizon Communications	57.45	41,709	5.3%
VF Corp	58.10	33,466	4.3%
The Walt Disney Company	108.17	72,907	9.3%
Waste Management	100.03	38,512	4.9%
Cash	NA	201	0.0%
Total Portfolio Value	**NA**	**$782,735**	**100.0%**

Exact sizes and cash balance may vary given dividends



Position Sizing Commentary

Position sizing is one of the most difficult parts of investing, and just as every artist has their own style, every investor sizes their positions in a unique way. For example, Warren Buffett stated, "You should have the courage and the conviction to place at least 10% of your net worth in [any investment]" while Seth Klarman believes that "A concentrated position is a ~10% position." Personally, we seek to form a portfolio of 10-15 stocks with our lowest conviction, highest-risk positions at 5% and strongest conviction positions at up to 15% — we undertook such high conviction ideas for the first time this year with Alphabet and Mastercard. While smaller positions like PetIQ have higher potential for appreciation, we

believe the risk involved is much higher than the formerly mentioned 15% ideas. Through this allocation, we are remaining concentrated and aligning ourselves towards outperformance without risking a significant loss of capital.

Market Commentary & Lessons Learned

The volatile performance of the market YTD was driven by the outbreak of the novel coronavirus, with markets bottoming down 35% from their February highs on March 23rd. Despite the club's shift to high-quality businesses, our lack of diversification and risky holdings led us to trail the market. These risk factors were compounded by our trading actions which occurred at that exact market bottom, March 23rd — we will discuss these individual trades later in the letter (pgs. 4-8).

For most of the readers, this market downturn was the first cognizant one of their life, and it was a memorable one, serving as the fastest bear market in modern financial history. Young investors can spend countless hours reading accounts on previous downturns, investors' mistakes, and recessionary trades, but there is truly no substitute to experiencing a recession for oneself. While the quarantine period was a time of distress for our personal lives, it served as an opportune time of learning and will likely prove seminal to all our investment philosophies and careers. For us, the Investment Club's portfolio served as an invaluable teacher, and, accordingly, we want to share our largest takeaways below:

1. **"We can be blind to the obvious, and we are also blind to our blindness." – Daniel Kahneman, *Thinking Fast & Slow***

Between December and February, there was wide-spread coverage of the novel coronavirus and its impacts on the Chinese Economy. Yet, a majority of U.S. investors, ourselves included, ignored this information and thought the virus would never reach the states or have little impact on our domestic economy — ignorance was truly bliss. This crisis has taught us the importance of having a well-informed, global view and reminded us of the potential magnitude of exponential change.

2. **"When the facts change, I change my mind" – John Maynard Keynes**

Our first fault was a lack of information and our second was inaction. By early March, the facts were staring us in the face — Americans had died from the virus, the curve had turned exponential, and populous cities were entering lockdown. We left for spring break (March 6-15) aware of the virus' spread and potential impacts, but we failed to adjust our portfolio. One could argue we were ignorant college students eager to hit the beach, but we believe this issue was more reflective of our club's sub-optimal

portfolio management. This issue remains to be a top priority for the new leadership, and, in the future, we hope to make well-informed changes in a swift manner.

3. **"As an investor you are trained to almost never do what is obvious…[yet] at the beginning of almost any bear market, doing the most obvious things works" – Gavin Baker, Invest like the Best, Ep. 167**

Imagine one year ago today you asked an investor which industries would suffer from a global pandemic and which would benefit. The answer is obvious: she would argue travel and mass-gathering focused companies would experience hardship while e-commerce and internet enabled firms thrived. Why then, did we not sell our positions in an OTA (Booking Holdings) and theme park operator (Disney) at the first signs of a global pandemic? The answer: it is difficult to be contrarian and correct, as Howard Marks argues successful investors must be. An investor that sells at every sign of a potential black swan will never leave the sideline. The same goes for buying at the bottom — a stock down 99% still has 100% to fall. So, we panicked late and sold out of the beaten-up stocks at the bottom when we should have been buying. Hindsight is 20/20, but quickly taking the obvious actions could have created what Gavin Baker calls a "lifetime of alpha." This is not unique to spring 2020 alone — selling financials immediately following the collapse of Bear Stearns or even Lehman Brothers would have yielded a similar result. We hope this lesson will better prepare us to seize the next opportunity whenever it may arise.

4. **"There are no facts, only interpretations." – Friedrich Nietzsche**

America is unstable at this moment — COVID continues to linger, the real jobless rate is at all-time highs, small businesses are struggling to survive, and riots are unfolding across every major city. So, why are markets up almost 40% from their lows? Well, you have also seen quick, effective action from government and Federal Reserve; slowing COVID cases; and a massive pull-forward in e-commerce and other digital trends. Some may argue Wall Street and Main Street are disconnected, but we simply see it as there are two sides to a coin. Keynes said that he acts when the facts change, but he also stated, "markets can remain irrational longer than you can remain solvent." This dilemma is the reason long-term investors must always remain invested, and any changes must be well-thought out by examining both sides of the story.

Update on Club Initiatives

We've made great strides in many aspects of the club. Perhaps most importantly, we hosted our **1st Annual Stock Pitch Competition**! As mentioned in our previous letter, this competition was held in partnership with NDIGI's Women's Investing Summit (WIS '20). We had 21 initial applicants who completed

investment memos for consideration. After several rounds of iterations, three teams were selected to pitch their ideas to a phenomenal board of investors: Patty Brady (Notre Dame Investment Office), Wendy Cromwell (Wellington Asset Management), Katie Koch (Goldman Sachs), Jess Mattes (Goldman Sachs), and Molly Shannon (Wellington Asset Management). We'd like to congratulate the winners, Grant Worthington '21 and Colin Gutzmer '22 who pitched PetIQ (PETQ), in addition to finalists Dakai Long '21 and Patrick Witteman '22 who pitched VF Corporation (VFC) and Daniel Feldmeier '22 and Patrick Heffernan '22 who pitched CommScope (COMM). Later in the letter (pgs. 4-5), we've included a short case study of Grant and Colin's investment thesis and analysis of PetIQ. Though we still have a lot to learn about running a stock pitch competition, we thought the event was an overall success, and we look forward to hosting many more in the coming years.

Despite the outbreak of COVID-19, we thought continuing weekly club meetings was paramount given the once in a lifetime investing opportunity we were presented with. Thus, we transitioned our meetings to Zoom for the second half of the semester. We were amazed to find our attendance levels remained as strong, if not stronger, than they were pre-quarantine, with students joining from home and asking sharp questions. While there were certainly some cons about meeting virtually, Zoom offers a great opportunity to host exceptional speakers with ease, as seen by NDIGI's recent discussion with Michael Mauboussin.

We had many other initiatives planned for this spring, but they were unfortunately derailed due to the outbreak of the novel coronavirus. While this was unfortunate, it left us with more time to research the market and adjust our portfolio. It also presents a massive opportunity for the incoming leadership team, which we discuss in more detail later in the letter (pg. 10).

Portfolio Changes

Some may characterize this past semester as a buying spree for the Investment Club, with 7 new positions initiated. Our timing was less than ideal for most purchases, but we believe these were all high-quality purchases that can be held through this cycle and the next. Please find a long write-up on our NDIC Stock Pitch Competition winner, PetIQ, followed by brief write-ups of the other portfolio additions below.

Case Study: PetIQ (PETQ) — Bought at $26 (3/9/20)

Analysts: Colin Gutzmer & Grant Worthington

PetIQ (NASDAQ: PETQ), founded in 2010, provides veterinarian services, treats, health and wellness products for cats and dogs through its portfolio brands (VIP-Petcare, Sentry, Betsy Farms, etc.). The Company sells its products and medicines through mass retailers, pet specialty storefronts, eCommerce and company-operated community clinics and wellness centers. PetIQ plans to increase its service-based

offerings which provides an attractive growth opportunity. The veterinary services industry does not have a clear market leader as many veterinarians operate local practices. Similarly, the pet health products market is competitive with many brands having under 5% of the market share. PetIQ is well-positioned to gain market share in an industry with strong tailwinds due to its business model prioritizing the selection of underserved markets with minimal capital intensity.

The pet industry is attractive due to the trend of pet humanization with 90% of dog and cat owners viewing their pets as family members. Pets have become a financial priority; thus, the industry will perform well in an economic downturn. In a struggling economy, PetIQ will also benefit from exposure to the nation's strongest consumer staple companies in the world (Walmart, Meijer, etc.). Finally, PetIQ's unique business model is able to lure value-seeking consumers with their cheap healthcare offerings.

There is tremendous upside due to management's plans to expand their services segment. PetIQ targets underserved markets with limited access to veterinary services and pet products with Mobile Clinics. Mobile Clinics are vans that provide veterinary services, medications and other products; these clinics serve as incubators providing PetIQ with concrete TAM data for a market. If a location has positive financials, PetIQ will build Wellness Centers in leased spaces at centralized locations in communities that are underserved. This strategy leads to reduced capital intensity in the Company's efforts to grow from about 100 Wellness Centers to 1,000 by 2023, which will be added to their portfolio of ~75,000 Mobile Clinics. PetIQ is positioned to take market share with these veterinary oriented Wellness Centers and Mobile Clinics because their scale allows for equal quality at a lower price compared to local veterinarians. Additionally, their model targeting underserved areas with low prices will draw in the ~50% of Americans that never take their pet to a vet.

In the long-term, PetIQ has pricing power and a favorable position relative to traditional drug makers as the Wellness Centers and Mobile Clinics drive stickier customer relationships. This will allow for margin expansion which makes the Company more valuable to its lessor. The microcap structure and complex business model yields little public coverage, and, as a result, PetIQ is valued as if its services initiative is a failure. This yields an attractive margin of safety in a high-growth firm with a stable pet products backdrop.

Alphabet (GOOG) — Bought at $1,475 (1/21/20)

Analyst: Lauren Weetman

We initiated a position in Alphabet for a few main reasons. First, we believe that the market was overestimating the probability of negative antitrust ruling at the time of entry. Through Lauren's discussion with a former U.S. Department of Justice official, it became clear that Alphabet faces little near-term

regulation risk, as seen by its continued acquisition activity with little government pushback. Next, while other investors view Alphabet's "Other Bets" segment as a cash-flow incinerator, we favor the massive potential upside of these investments and view the entire segment as added option value. Finally, we believe the core business trades at roughly 10 times EBITDA after adding back these dilutive investments. This overstated regulatory risk and undervaluation of the core business provide us with a wide margin of safety while vast opportunities for organic growth and "Other Bets" offer significant long-term upside.

Match Group (MTCH) — Bought at $80 (2/3/20)

Analyst: James Campion

We initiated a position in Match Group due to the firm's growing monopoly on the online dating market, which is benefitting from changing social standards and increased connectivity. The Company has developed a diverse portfolio of brands, through both organic and inorganic methods, which enables them to serve customers of different ages and demographics. The firm has leveraging Tinder's success and cash flow generation to reinvest and grow these other brands. Finally, while some thought COVID would hinder dating app usage, it actually spurred user growth and innovative virtual dating methods that will add long-term value. The multiples paid were fairly expensive, at around 30x NTM EBITDA, but we think this price was justified given the expected long-term growth and cash generation potential of the investment.

Mastercard (MA) — Bought at $324 (2/3/20)

Analyst: Matt Herzog

We initiated a position in Mastercard due to its entrenched positioning with duopoly pricing in the payment system network. Chris Begg, President and CIO of East Coast Asset Management, said that the best companies in the world reduce entropy or disorder, and we believe Mastercard's ability to reduce friction in the payment system is a paramount example of this. The payments industry also offers incredible economics, with a $235 trillion TAM, excellent margins, and high free cash flow generation. The most prominent question that follows then is why Mastercard over Visa? The key reasons are that favored Mastercard's exceptional management team, capital allocation framework, and positioning in emerging economies. We paid a high price at around 28x NTM EBITDA, yet we think this is a bargain for this serial compounder offering an asymmetric risk and return profile over the long-term.

VF Corporation (VFC) — Bought at $62 (3/9/20)

Analysts: Dakai Long & Patrick Witteman

VF Corporation was one of the other finalists from our First Stock Pitch Competition, and we decided to add it to the portfolio given its attractive positioning in a stagnant retail industry. VFC has a high-quality

mix of brands garnered through both organic and inorganic methods, and, while it is hard to base a thesis around future brands or products, management's 15+ year track record of decision making and high returns on capital give us confidence. Additionally, we believe the market is undervaluing the brand and cultural value in the APAC region that will be a key driver of future growth. Finally, we believed the beginning of the year served as a good entry point due to an overreaction to poor Q3 Timberland sales and coronavirus fears. Now, obviously, we were mistaken in the latter assumption regarding COVID, but we believe the Company will still outperform in the long-term if the other key performance indicators (KPIs) are met.

DocuSign (DOCU) — Bought at $102 (4/20/20)

Analysts: Matt Jennings & Daniel Feldmeier

The software industry has been of interest to us for some time, but we were never been able to gain conviction in the lofty valuation multiples until DocuSign. DocuSign is the first mover and industry leader in the contract lifetime management (CLM) industry, which is believed to have a $40+ billion TAM for combined e-signature and CRM suites. The market currently views the product as a commoditized one, with little differentiation between DocuSign and similar products like Adobe Sign. However, diligence calls revealed that DocuSign's integration with CLM software adds massive value for the customer and can help drive continued growth in both customers and contract values. Finally, we saw that the retention rate amongst large enterprises with high switching costs provided truly recurring revenue and, thus, downside protection. The valuation was hard to justify, especially given a recent run up in price, but significant terminal value and a cheap relative valuation to other high-quality, fast-growing SaaS firms ultimately gave us conviction.

Delta Airlines (DAL) — Bought at $22 (4/28/20)

Analysts: Jackie Fletcher, Kelly Koons, & Mady Taylor

We initiated a position in Delta Airlines following the market rebound, but believed the airlines, and Delta specifically, still had potential for additional price appreciation. Delta was well-positioned in the industry due to its strong balance sheet, higher margin profile, and superior service to competitors. Following the outbreak of COVID, Delta acted quickly to cut expenses, create liquidity through capital raises, and reduce capex and payment terms with vendors. Additionally, Delta's older fleet and mix of new and used planes could enable the Company to easily shrink its fleet if needed — in fact, we believed Delta could possibly benefit from the disruption of COVID through industry consolidation. Finally, we saw a margin of safety

in two areas: (1) an estimated net asset value of $30 share and (2) assumed future government bailouts in the event of a prolonged pandemic due to Delta serving as an integral part of the U.S. economy.

Exited Positions

As discussed in the previous letter, our process for selling positions has been uncoordinated in the past, leading us to hold positions for extended periods of time or sell with little to no analysis. Hence, we developed a framework to better these decisions through the four key principles outlined below:

1. Does this Company fit the mandate of our long-term oriented equity portfolio?
2. Do we have a competitive advantage over the market in assessing this Company?
3. Has the core thesis changed significantly since the initial pitch; if so, do we have enough conviction in this new thesis to hold this Company moving forward?
4. Is the valuation in our price target range; if not, can we justify holding this Company at the current price?

Unfortunately, during the COVID pandemic, we acted irrationally and strayed from this structure we worked hard to establish. Without order, we fell into chaos and sold some of our holdings at deeply discounted prices. These decisions are discussed in great detail below, and we hope to use these as examples to learn and remain grounded to this disciplined process for future years.

Quest Diagnostics (DGX) — Sold at $112 (2/6/20)

Analysts: Tom Daly, Chase Kill, & Jim Keegan

Quest, like Cabot and many of the positions we sold last semester, was a historical position that the current board had little to no familiarity with. After some research, it became clear Quest is an industry leader in the diagnostics space that is benefitting from an aging population and increased health spend. Quest also has various initiatives to take market share and improve its product offerings. However, in the end we thought the long-term prospects of Quest were not well-suited for our portfolio. The Company will likely compound earnings and appreciate at low to mid-single digits, but this type of upside has little purpose in a sub-20 position portfolio. Thus, in the end we sold the position in favor of allocating this capital towards a higher-conviction position with a longer runway for growth and price appreciation.

XPO Logistics (XPO) — Sold at $55 (3/27/20)

There are many methods of valuation, but, during the pandemic, a new method was created: a liquidity test to assess days of solvency with zero revenue. This involved calculating how many days a company could remain in business with current liquidity levels, fixed costs, and debt payments given revenue going to

zero. Whether this test was useful or misleading is still hard to say, but when assessing XPO through this lens we saw many red flags. The company had ample liquidity, but the 3x Debt / EBITDA ratio and roll-up strategy did not seem well-suited for an economic downturn. Additionally, we were holding two logistics companies at the time, the other being Landstar System (LSTR), whose business model and financials were a better value proposition at the time.

Booking Holdings (BKNG) — Sold at $1,295 (3/27/20)

On our last in-person meeting prior to spring break, we heavily discussed selling Booking. Despite a strong business model and favorable travel tailwinds, we believed many of their verticals were seeing heightened competition and disruption from tech unicorns like Airbnb for hotels and Uber for car rentals. However, in an effort to uphold our outlined selling process, we decided to hold the position until we could have someone build a model and properly assess the company's value. This all changed with COVID. In the midst of quarantine, it was very unclear how long the pandemic would last, with discussions of up to 18 to 24 months. While Booking had ample liquidity, we did not feel comfortable taking this risk and sold at the fear of a prolonged pandemic that would cease short-term travel and permanently alter the hospitality industry. Clearly, we overestimated the time horizon of the pandemic with travel rebounding, but we remain confident in our decision and cannot have hindsight bias.

Cabot Oil & Gas (COG) — Sold at $17 (3/27/20)

Cabot was one of the easier decisions, as it fell under the selling tenet of "Do we have a competitive advantage over the market in assessing this Company?" In the case of Cabot, the clear answer was no. None of us had deep familiarity with the oil and gas industry and lacked any strong conviction over the future of commodity prices. A collapsing oil market also served as a catalyst to propel Cabot's stock. Thus, we acted quickly and sold to reposition our portfolio in names with higher conviction.

Other Pitch Decisions

Build A Bear Workshop (BBW) — Abstain (2/20/20)

Analysts: Zach Margovskiy, Alejandro Perez Elorza, & Chris Clinton

Price Target: $6

Stitch Fix (SFIX) — Abstain (2/20/20)

Analysts: Sue Kim, Bobby Beck, & Axel Raarup

Price Target: $45

PayPal (PYPL) — Abstain (3/5/20)

Analysts: Noah Cha & Scott Elliott

Price Target: $135

Extra Space Storage (EXR) — Abstain (4/2/20)

Analyst: Quinn Jacobs

Price Target: $106

Goldman Sachs (GS) — Abstain (4/30/20)

Analyst: Brian Kelley

Price Target: $201

Moving Forward

First and foremost, we were thrilled to have the largest application pool yet for our leadership team, with 37 highly qualified candidates. The decision process was difficult, and, in the end, we chose a team of 14 students which is outlined below. We were hesitant to select a team this large but found assurance in every member bringing a unique skillset to a critically important role.

President – Grant Worthington '21
Vice President – Matt Jennings '21
Board Members – Sean Baker '21, Drew Seketa '21, Dakai Long '21 & Connor Campbell '21
Portfolio Coordinator – Colin Gutzmer '22
Workshop Coordinators – Jackie Fletcher '22, Mady Taylor '22, & David Jarret '22
Meeting Coordinators – Kelly Koons '22 & Danny Feldmeier '22
Competition Coordinator – Sofia Cruzat '22
Website Coordinator – Patrick Witteman '22

We believe the club has shown vast strides of improvement over the past few years through a clear investment strategy, heightened portfolio maintenance, refined workshops, and various club initiatives to spur engagement. However, this is only the tip of the iceberg. In the coming years, we hope the club can continue to increase engagement across all classes and become a respected institution both at Notre Dame and nationwide. We are confident in our younger peers' abilities and have little doubt that they will compound our progress and achieve these lofty goals.

"The journey of a thousand miles begins with one step" – Lao Tzu

Thank you to all of our members for your continued involvement. While it is sad to say goodbye, we find contentment through all the astounding individuals we were able to meet and mentor as a result of this club. A special thanks as well to NDIGI, the Investment Office, our sponsors, and our faculty advisor, Prof. Colin Jones, for your continued support.

Please contact the new leadership team if you have any questions.

Sincerely,

James Campion & Lauren Weetman

2019-20 President & Vice President

Outgoing Senior Board Members

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