



STUDENT  
INVESTMENT FUND  
CLAREMONT MCKENNA COLLEGE

# Annual Report

For the Year Ended December 31, 2015

Claremont McKenna College Student Investment Fund





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## Letter from the CEO

Friends of the CMC Student Investment Fund,

Thank you for taking the time to review our latest annual report. In 2015, The Claremont McKenna College Student Investment Fund (the “SIF” or the “Fund”) experienced another defining year as we expanded outreach into the CMC and 5C communities, improved our organizational structure, and developed new resources to support best practices with our investing. The year also marked success in our long-running campaign to reach \$1 million in assets under management. In this letter, you will find a brief summary of the exciting progress the Fund has made over the past year.

### **Outreach Programs**

In the fall of 2015, the Financial Economics Institute (FEI) and the Student Investment Fund co-hosted a series of financial literacy seminars for students from the five Claremont Colleges. The seminars were designed to educate students across all academic disciplines about personal finance, money management, investing, and basic accounting. The first seminar introduced personal finance and investing, with SIF members spending an afternoon with students discussing concepts such as saving and compound interest, building good credit, types of insurance, and investing through exchange-traded and mutual funds. A month later, the SIF led a second seminar to present the fundamentals of accounting and valuation, specifically the three main financial statements, valuation multiples, and discounted cash flow analyses. Both seminars were a success and reached capacity levels with student reservations. Amid high student demand, the FEI and SIF plan to host the program again next fall.

### **Capital Growth and Advisory Board**

In June of 2015, the SIF received a \$1 million donation from George Roberts ('66 P'93). The Fund now manages \$1.65 million of the College's endowment, a significant step up from the \$500 portfolio that served as its founding. The increase in portfolio size is accompanied by an increase in responsibility, so this year the Fund has worked to refine its structure. In collaboration with the College development office and the FEI, the SIF has created a new advisory board, chaired by David Brown ('00). The board includes several alumni from CMC and SIF, and will be an additional resource for the Fund on top of the invaluable guidance currently provided by Professor Eric Hughson, Jim Floyd, and Michael Denny.

### **Best Practices in Portfolio Management**

After receiving George Roberts's summer donation, the SIF recognized the need to improve its portfolio management procedures. To formalize the process, industry groups now review all SIF holdings each semester and present their findings in an abbreviated pitch format to the general Fund. Over the fall semester, the Fund reviewed all of its holdings and sold several old positions, including SFX Entertainment, Naspers, Carriage Services, Monster, and Goldman Sachs. Still, the dollar value of some existing investments does not conform to the Fund's new, higher AUM. The Fund is targeting a



portfolio of ten investments, with each investment accounting for approximately \$150,000, so in the coming months it plans to either sell off or add to its smaller legacy existing positions.

This year, the SIF also substantially expanded its membership in order to better manage the larger portfolio. The fall pool of SIF applicants was especially strong, so the Fund admitted a record number of students in early October. Ten freshmen and five sophomores entered the Fund, bringing the total membership to 53 students. The new members have proven to be invaluable contributors to our team as we work to monitor existing investments and deploy capital into new investments.

To provide continuity to the SIF, in the spring of 2015 the Fund created a new database to archive all previous SIF pitches, valuation models and general educational resources. This database will be perpetually updated so that future members have access to the compendium of SIF work. Similarly, the Fund rewrote its student constitution in order to bring its current operating structure in line with its governing document. Lastly, to standardize pitch content, the Fund implemented a rubric for material to be included in every investment presentation. These improvements have aided our portfolio management and security selection efforts, but much more remains to be done and the SIF looks forward to working through these challenges with its advisory board.

### **Claremont Finance Conference**

The Claremont Finance Conference is an annual event hosted by the SIF that brings together some of the Claremont Colleges' most successful alumni in the finance industry to speak with students about current events. This year's theme was Investing Diversity, and students heard from industry professionals about value, growth, and hybrid investing. The keynote speaker was John Shrewsberry ('87), Executive Vice President and Chief Financial Officer of Wells Fargo. After a steak dinner in the Athenaeum, Mr. Shrewsberry led the audience through a presentation about innovation on Wall Street and the rise of financial technology.

### **Concluding Thoughts**

Participating in the Student Investment Fund has been one of the highlights of my time at CMC. The Fund helped to develop my critical thinking, research, and technical skills, and also served as the initial foundation for many friendships and internships. The incredible mentorship I have received through the Fund, both from members with whom my years at CMC overlapped and from members who attended CMC long ago, cannot be understated. Thank you to Professor Eric Hughson, Jim Floyd, Michael Denny, Professor Josh Rosett, and Ernie Iseminger for supporting the Fund and its students. It has been a privilege to be a part of this association, and I wish the Fund continued success.

Sincerely,

*Brian A Eckhardt*

Brian Eckhardt  
Chief Executive Officer



## Fund Overview

### History

The SIF was founded in 1974 by an anonymous alumnus who donated approximately \$500 in securities. His intention was to give qualified students an opportunity to learn the basics of investment management through a “trial by fire” approach while also creating value for the College’s endowment. The Fund has grown substantially since inception and as of 12/31/2015 manages \$1.65 million of the Claremont McKenna College endowment.

### Mission

The SIF aims to teach students about business, investing, and portfolio management while also earning risk-adjusted excess returns above the benchmark. The Fund is designed to help prepare students for future careers in investment-related fields including finance, consulting, tech, nonprofit, and entrepreneurship, and our senior management bears the responsibility of actively promoting the career development of our junior members.

### Structure

The SIF holds a formal general Fund meeting each week where members present investment ideas in front of the Fund and, occasionally, alumni professionals. These investment ideas are the result of roughly two weeks of equity research, culminating in a presentation inclusive of industry and company-specific due diligence, as well as multiple valuation techniques. Investment pitches are voted upon by members and, if approved, are executed immediately.

The Fund is further composed of five actively-managed industry groups: Technology; Media and Telecom; Consumer, Food, and Retail; Healthcare and Biotechnology; and Industrials and Financials. These industry groups monitor the Fund’s existing holdings while also researching markets and industries to identify attractive new investments. Due to their more intimate setting as compared to general Fund meetings, industry groups provide mentorship, internship support and technical training.

Participation in the Fund counts for one academic credit during a participant’s senior year. The Fund’s advisor, Professor Eric Hughson, incorporates investment-related curriculum into weekly meetings.

### Governance

The Fund is managed by three students who form the executive committee. Executive designations include Chief Executive Officer, Chief Investment Officer, and Chief Operating Officer.

Portfolio groups are managed by Managing Directors and Vice Presidents. There is also a technology officer and finance conference director. The executive committee appoints these positions.



Professor Eric Hughson, CMC Chief Investment Officer Jim Floyd, and the FEI/SIF advisory board provide oversight of the Fund. The CMC investment office provides custody over the Fund's accounts and executes trades on behalf of the Fund.

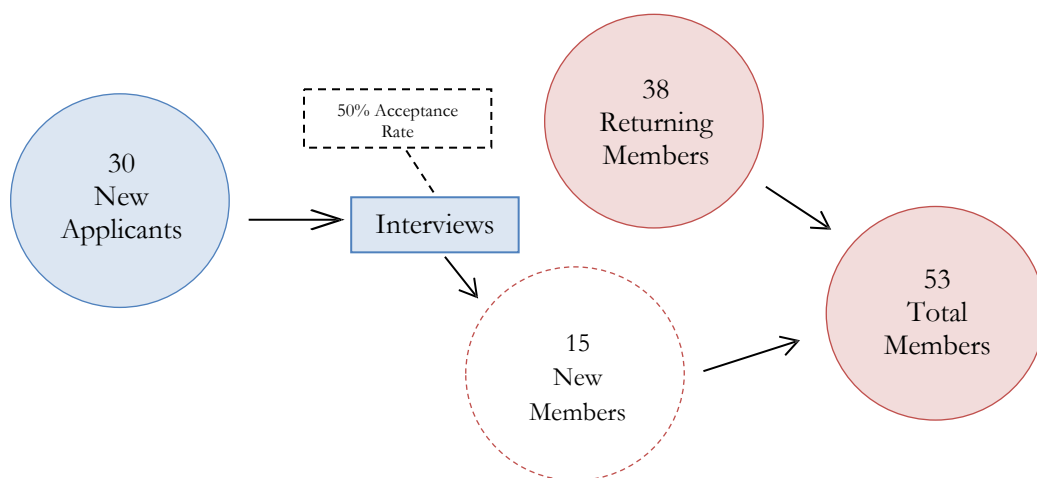
### Membership

The Fund is composed of 53 students as of December 2015. Membership consists of three executive officers, six managing directors, six vice presidents, one technology officer, and 37 analysts. Our members are top-performing students, scholars, and leaders. Individual members of the Fund have founded major student organizations, received prestigious fellowships and scholarships, led athletic teams, started their own businesses, and worked across multiple continents. The Fund values multidisciplinary excellence contributed by its members, and believes that a wide variety of perspectives enables a holistic investment process.

### Admissions

The Fund continues to attract talented CMC students interested in investment-related professions. During the fall 2015 recruitment cycle, the Fund received 23 freshman applications and seven sophomore applications, and extended analyst positions to ten freshman and five sophomores. While the 50% acceptance rate was significantly higher than last year's 11%, the quality of the freshman class was exceptional this year and the Fund felt motivated to accept all qualified students rather than deferring worthy candidates to the spring term. These new members have already added value to the Fund and will be a strong asset moving forward. In terms of gender, 15 out of the 53 members are women, or approximately 30%, and 47% of the fall 2015 admission class were women.

The SIF will commence with its spring 2016 recruitment cycle after spring break and will extend approximately 5 analyst offers.





## Career Development

Along with teaching the technicalities of investment management, the Fund has always taken a keen focus on preparing students for successful careers in finance and related professions. In 2015, the Fund not only continued to offer peer-to-peer mentorship opportunities via industry group breakout sessions but also expanded and added new initiatives for members to prepare for internships and full-time opportunities.

### Career Panels

To help junior members connect with senior members in their field of interest and learn about their many career options within finance and related industries, SIF continued to host career panels after our weekly general meetings. This opportunity for junior members to hear honest, unfiltered feedback on senior members' internships is invaluable in helping students to determine the right industry and firm fit. Further, once junior members narrow their interest to a particular firm, they can learn about firm-specific interview processes and alumni contacts.

### Investment Dinner Series

To further supplement Fund members' learning outside of weekly general and industry group meetings, SIF initiated a weekly investment dinner series at which CEO Brian Eckhardt invited members to discuss an investment management- or career-related article or tutorial over dinner at Collins Dining Hall. Though the dinner series was primarily targeted toward underclassmen hoping to gain an edge in career and education development, all Fund members were welcome. Topics discussed at the investment dinners include: origins of the financial crisis, how to value a company, the three financial statements, and comparing careers in consulting and investment banking. Underclassmen found the dinners to be particularly useful in learning the basic building blocks of finance.

### 5C Educational Seminars

SIF members are very fortunate to have access to education and career development opportunities early in their academic careers. This year, the Fund wanted to share what they had learned in SIF with the Claremont community by co-hosting educational seminars for non-Fund members with the Financial Economics Institute. SIF members hosted and presented two 5C educational seminars: first the Personal Finance & Investing Seminar on September 19 and later the Financial Accounting & Valuation Seminar on October 24. These seminars were unique opportunities for SIF members to teach our classmates about the fundamentals of financial literacy.

### Guest Speakers

The Fund is fortunate to host guest speakers at our weekly meetings and at special dinners at the Athenaeum. Guest speakers cover a breadth of topics, from career advice to broader discussion of financial markets. This past year the Fund hosted several speakers, including Peter Madsen (P'18),



Cornelia Chang and Shannon Howell from Prudential Capital Group, and several representatives from BMGI/Cascade Investments including Michael Larson ('80) and Alan Heuberger ('96).

### Placement History

Thanks in part to the initiatives outlined above and other informal career development opportunities, SIF members are extensively prepared for careers in finance and related professions. Year after year, SIF members have joined top-tier firms full-time, expanding our alumni network in prestigious companies around the globe. The following table details where our seniors will be working after graduating in May:

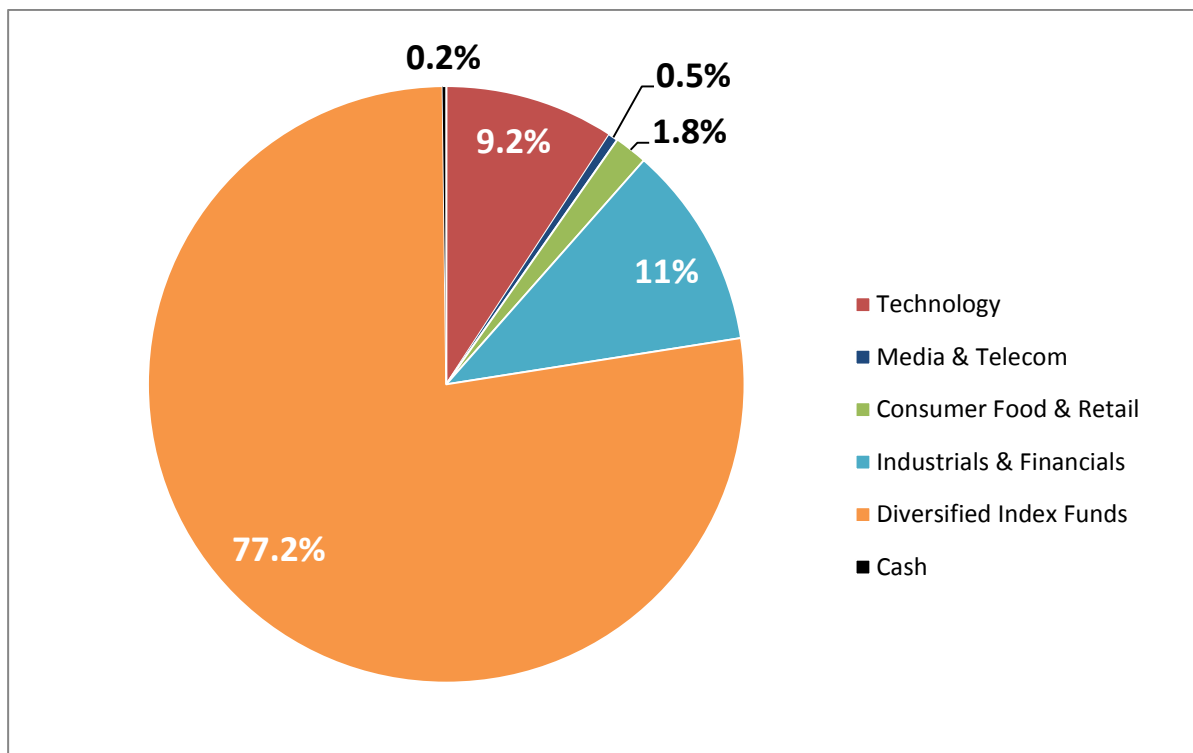
Name	Position	Function	Company
Gabriel Ayala	Analyst	Management Consulting	Alvarez & Marsal
Rachel Doehr	Analyst	Investment Banking	Goldman Sachs
Brian Eckhardt	Analyst	Merchant Banking	BDT Capital Partners
Amber Falkner	Analyst	Investment Banking	Wells Fargo Securities
Richard Harris	Analyst	Strategy and Operations	Deloitte
Kyle Johnson	Associate	Management Consulting	The Boston Consulting Group
Amanda Lin	Analyst	Corporate Finance	FTI Consulting
Raunak Sainani	Analyst	Investment Banking	Bank of America Merrill Lynch
Sean Sakaguchi	Analyst	Investment Banking Financial Restructuring	Millstein & Co.





## SIF Portfolio and Holdings

### Sector Allocation on December 31, 2015



### Historical Return and Risk Profile

The Fund grew its capital base by 141.4% in fiscal year 2015 to achieve a record size of just over \$1,650,000. This increase was largely due to George Roberts' extremely generous \$1 million gift in late June. We thank Mr. Roberts as well as the various CMC alumni and Fund affiliates for their continued support of the Fund and the learning opportunity it provides for our members.

Below, the "Summary of Holdings" table breaks down the Fund's equity holdings as of December 31, 2015. The summary consists of positions taken both in 2015 and in previous years. As of this date, our largest holdings were SPY S&P500 ETF, PayPal Holdings Inc., and Stantec Inc. Our cash holding remains low at a nominal 0.2%, illustrating our continued commitment to putting our capital base to work. Through the acquisition of PayPal, we successfully increased our technology holdings from 2.4% in 2014 to 9.2% in 2015. The Fund also exited the Healthcare and Biotechnology industry in late December with the profitable sale of Nectar Therapeutics. In 2016, we look forward to reinvesting in this sector and diversifying our investments outside of the SPY S&P500.

Next, the "2015 Investment Performance" reports Time Weighted Returns by security for the period between December 31, 2014 and December 31, 2015. This analysis allows us to minimize the distorting effect of increasing or decreasing our positions throughout the course of the year.



## Summary of Holdings

Holding	Market Value 12/31/14	Purchases	Withdrawals and Sales	Realized Gains	Unrealized Gains	Interest Dividends	Market Value 12/31/15
Alphabet Inc. (Google Cls A pre 10/5/15)	6,899	-	(7,142)	244	-	-	-
Alphabet Inc. (Google Cls C pre 10/5/15)	6,843	-	(6,992)	129	-	20	-
Bed, Bath and Beyond	28,183	-	(26,229)	(1,954)	-	-	-
BorgWarner Inc.	8,792	-	(9,173)	900	-	21	-
Carriage Services, Inc.	29,330	-	(35,069)	5,599	-	140	-
Continental Resources	19,602	-	-	-	(7,859)	-	11,473
Disney (Walt) Company	15,541	-	(18,336)	2,605	-	190	-
El Pollo Loco Holding Inc.	-	34,152	-	-	(18,996)	-	15,156
ExxonMobil Corp.	8,505	-	(265)	-	(1,334)	265	7,171
First Solar, Inc.	10,301	-	-	-	4,942	-	15,244
Goldman Sachs Group	9,692	-	(9,283)	(536)	-	128	-
Iconix Brand Group	-	49,617	-	-	(39,604)	-	10,013
Jamba, Inc.	5,387	-	(5,305)	(82)	-	-	-
Luxottica Group SpA	23,967	-	(30,163)	5,675	-	520	-
MWI Veterinary Supply, Inc	9,345	-	(10,408)	1,063	-	-	-
Monster Beverage Corp.	-	40,211	(52,600)	12,398	-	-	-
Naspers ADR	44,922	-	(46,255)	1,232	-	102	-
Nektar Therapeutics	27,900	-	(28,178)	278	-	-	-
Northern U.S. Government Money Market Fund	296	1,946,701	(1,944,389)	-	-	2	2,611
Paypal Holdings, Inc.	-	147,966	-	-	4,074	-	152,040
Qualcomm Incorporated	9,291	-	(6,174)	(2,810)	-	233	-
Roger Communications Inc.	8,938	8,508	(8,769)	-	(1,012)	261	7,926
SFX Entertainment Inc.	17,214	-	(1,653)	(15,561)	-	-	-



SP Plus Corporation	5,551	-	(5,413)	(138)	-	-	-
Standard & Poors Dept Rept UBI	355,790	1,339,391	(417,911)	3,145	(17,616)	12,204	1,275,003
Stantec Inc	-	150,146	-	-	(1,406)	-	148,740
Take-Two Interactive Software	23,489	-	(30,293)	6,804	-	-	-
Whole Foods Market, Inc.	8,067	-	(83)	-	(2,707)	83	5,360
<b>TOTAL FUND</b>	<b>683,845</b>	<b>3,716,694</b>	<b>(2,701,166)</b>	<b>18,983</b>	<b>(81,519)</b>	<b>14,168</b>	<b>1,651,007</b>



## 2015 Investment Performance

Security	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
First Solar, Inc.	(5.10)	41.17	0.08	(0.20)	(16.69)	(5.49)	(5.70)	7.99	(10.64)	33.50	(0.98)	16.78	<b>48.00</b>
Monster Beverage Corp.	-	19.32	(1.93)	(0.93)	(7.17)	5.30	14.57	(9.83)	(2.40)	0.87	13.42	0.06	<b>30.80</b>
Take-Two Interactive Software	6.03	(10.87)	(3.91)	(6.89)	15.49	0.73	14.54	(7.76)	(1.37)	15.56	6.54	2.20	<b>28.97</b>
Luxottica Group SpA	8.81	3.32	2.43	4.61	4.47	-	-	-	-	-	-	-	<b>25.84</b>
Carriage Services, Inc.	4.06	5.46	3.94	(0.96)	5.25	(3.92)	0.63	(4.49)	(5.82)	(0.37)	14.78	1.15	<b>19.62</b>
Disney (Walt) Company	(2.23)	14.42	0.78	3.65	1.16	-	-	-	-	-	-	-	<b>18.21</b>
MWI Veterinary Supply, Inc	11.37	-	-	-	-	-	-	-	-	-	-	-	<b>11.37</b>
BorgWarner Inc.	(1.71)	13.79	(1.38)	(2.12)	2.32	-	-	-	-	-	-	-	<b>10.47</b>
Alphabet Inc. (Google Cls A pre 10/5/15)	1.30	4.67	(1.41)	(1.07)	0.12	-	-	-	-	-	-	-	<b>3.54</b>
Naspers ADR	11.46	0.66	5.04	1.39	(6.25)	6.42	(10.14)	(7.62)	(3.42)	17.57	1.79	(9.96)	<b>2.99</b>
Paypal Holdings, Inc.	-	-	-	-	-	-	-	-	-	-	-	2.75	<b>2.75</b>
Alphabet Inc. (Google Cls C pre 10/5/15)	1.54	4.47	(1.86)	(1.95)	0.10	-	-	-	-	-	-	-	<b>2.18</b>
Nektar Therapeutics	(5.55)	(10.72)	(15.84)	(13.45)	20.80	8.78	0.80	(12.37)	(0.81)	8.30	31.93	(0.03)	<b>1.01</b>
Northern U.S. Government Money Market Fund	-	-	-	-	-	-	0.54	-	-	-	-	-	<b>0.54</b>
Standard & Poors Dept Rept UBI	(2.51)	5.82	(2.02)	1.47	0.85	(2.84)	2.40	(6.03)	(3.06)	9.05	0.28	(2.25)	<b>0.21</b>
Stantec Inc	-	-	-	-	-	-	-	-	-	-	3.42	(4.21)	<b>(0.93)</b>
Jamba, Inc.	8.88	(7.85)	(2.84)	7.14	(2.86)	1.18	5.16	(15.16)	7.52	-	-	-	<b>(1.52)</b>
SP Plus Corporation	(11.53)	1.30	(3.36)	4.16	8.10	-	-	-	-	-	-	-	<b>(2.48)</b>
Goldman Sachs Group	(11.05)	10.08	(0.64)	4.50	4.97	1.58	(1.78)	(8.03)	(7.53)	7.91	1.34	(3.29)	<b>(4.23)</b>
Bed, Bath and Beyond	(1.84)	(0.15)	2.83	(7.67)	-	-	-	-	-	-	-	-	<b>(6.94)</b>
Roger Communications Inc.	(7.61)	(0.67)	(5.40)	7.58	(3.89)	3.53	(0.46)	(2.74)	1.06	16.34	(3.27)	(10.49)	<b>(8.41)</b>
ExxonMobil Corp.	(5.44)	1.28	(3.24)	2.79	(2.48)	(1.50)	(4.80)	(5.01)	(0.21)	11.28	(1.31)	(3.67)	<b>(12.65)</b>
Qualcomm Incorporated	(15.97)	16.09	(3.80)	(1.93)	2.47	(9.44)	2.81	(12.13)	(4.20)	10.59	(17.89)	7.25	<b>(28.02)</b>
Whole Foods Market, Inc.	3.58	8.44	(7.81)	(8.05)	(13.65)	(4.36)	(7.39)	(10.00)	(3.39)	(4.94)	(2.70)	14.92	<b>(32.70)</b>
Continental Resources	18.35	(2.00)	(1.84)	20.52	(13.43)	(6.96)	(21.18)	(3.92)	(9.75)	17.05	7.05	(36.69)	<b>(40.08)</b>
El Pollo Loco Holding Inc.	-	-	-	(8.01)	(20.78)	(0.14)	(9.27)	(30.76)	(17.14)	6.49	6.97	2.85	<b>(55.62)</b>
Iconix Brand Group	-	-	(0.52)	(21.86)	(1.86)	(3.29)	(12.98)	(36.08)	(2.66)	13.31	(54.05)	(2.98)	<b>(79.82)</b>
SFX Entertainment Inc.	(27.37)	44.68	(14.08)	6.85	11.44	(7.80)	(29.18)	(67.92)	(57.35)	-	-	-	<b>(90.40)</b>
<b>Total Fund</b>	<b>(0.91)</b>	<b>5.81</b>	<b>(1.65)</b>	<b>(0.99)</b>	<b>(0.76)</b>	<b>(1.63)</b>	<b>1.20</b>	<b>(7.46)</b>	<b>(3.33)</b>	<b>9.17</b>	<b>1.03</b>	<b>(2.36)</b>	<b>(2.82)</b>



## Industry Group – Technology

### Summary

The Technology group manages the portion of our portfolio allocated towards positions within the hardware, software, Internet, and semi-conductor spaces. Current technology holdings make up a small portion of the portfolio, making up approximately 9.2% of our total holdings with a market value of around \$138,600 at the time of this report. As of the time of this report, the technology portfolio only holds one position which is PayPal Holdings, Inc. (PYPL) which was purchased in December of 2015. Our position in Qualcomm, Inc. (QCOM) was sold off in December 2015 after our thesis about QCOM's economic moat in China proved incorrect. We realized a holding period loss of 25%.

Overall, we were impressed with rapid growth in the sector in 2015 but have decided to allocate capital elsewhere because volatility in the space has been so high. The stock market has seen its worst start in US history, the S&P is down 9.4%, but the index's technology components are down 12%. The titans of the industry, the FANG stocks (Facebook, Amazon, Netflix and Google), are down on average of 17% this year after an 83% rise in 2015. As the overall market experiences a slowdown due to woes in China, a collapse in oil prices and other commodities, and higher interest rates, overvalued technology companies are seeing corrections in their valuations. The Fund has identified this trend within the market and is actively seeking market over-corrections within the technology sector.

### PayPal Holdings, Inc. (PYPL)

PayPal provides digital and mobile payment services for approximately 162 million customer accounts. Broadly, the company has three lines of business. The first and largest portion is their transactions business which includes products such as PayPal and Venmo that enable users to transfer and hold money. Second are gateway products such as Payflow Payments and Braintree. The final third line of business, called Bill Me Later, extends credit to consumers and merchants.

On December 3, 2015 the Fund invested \$148,000 in PYPL, the largest investment in a single position in the Fund's history. Given the increased size of the Fund, the position represents about 9% of the Fund's total capital currently. Our thesis is that PayPal is the frontrunner in the growing digital and mobile transactions market. Recent strategic acquisitions have enabled PayPal to be a part of every step of an online transaction on their platform. The company's size and legacy gives it the largest market penetration, strongest brand recognition and most importantly, customer loyalty and trust.

Recent financial performance has been strong. Net revenues increased by \$1.2 billion, or 15%, in 2015, beating analyst expectations. The primary growth driver was total payment volume, more people using PayPal products to transfer funds (which PayPal takes a percentage fee of). Net income came in at \$1.2 billion for FY2015, a 193% jump which was attributable to an increase of operating income by \$193 million and a recognition of \$582 million in deferred tax liabilities. Looking forward, we expect the growth of online and digital payments to continue, with ecommerce and mobile wallets becoming the norm. We also look forward to the monetization of platforms such as Venmo.



## Industry Group – Media and Telecom

### Summary

The Media & Telecommunications group currently has one holding. Over the past year, the Fund decided to sell three holdings, with a few of them being sold after they reached their price targets. Take-Two Interactive is an example of a holding that reached 98% stock appreciation since the initial investment. The Media & Telecommunications group currently manages \$8,000 in direct investments outside of the market index, or about 0.5% of the Fund's portfolio. The telecommunications industry revenue slightly declined in 2015 due to ongoing decline of legacy and access revenues. However, the industry is growing through strategic revenue opportunities, which include strategic broadband, video and enterprise hosting, and data center services.

### Rogers Communications (RCI)

Rogers Communications is Canada's largest telecommunications providers, with services in wireless connections, cable and business solutions, and media with a market capitalization of \$17.6 billion. It is Canada's only national carrier on the GSM/HSPA+/LTE platforms with approximately 9.5 million customers under Rogers, Fido, and Chatr brands. The threat of new entrants thus far has not materialized, with Rogers Communications maintaining a duopoly over the Canadian telecommunication space with Bell Canada.

Since the Fund's initial purchase in September 2013, Rogers Communications has seen a drop of 20.9%. One recent reason for the drop can be attributed to a disappointing Q4 2015 when the company missed the \$3.48 billion consensus revenue by \$30 million. This may be due to Rogers undergoing a shift from using low prices to lure subscribers to satisfy higher paying customers, as well as an increased focused on its wireless and Internet business. Recently, the acquisition of 700 MHz spectrum licenses of \$3.3 billion doubled intangible assets, but resulted in a decrease in cash. Nonetheless, Rogers Communications' pole position as Canada's largest wireless network operators, along with its shift in operations away from the declining avenues of cable television and home phone services should leave it well-positioned for the future.



## Industry Group – Consumer, Food, and Retail

### Summary

The CFR industry outperformed expectations for 2015. Industry success was driven largely by some of the largest megadeals seen within the sector in recent years. However, while deal value did increase, overall deal volume for 2015 stood at 12% of total US deal volume, 2% lower than the prior year. Key sub-industries within CFR were food and beverage, as well as mass sector retailing, which together were the vanguard for increased deal flow. Going forward, we anticipate the push towards increasingly sophisticated digital strategies will be fundamental to success within the industry. Firms that can successfully integrate and present a strong multi-channel consumer experience present exciting investment opportunities as the push to digital becomes pervasive. On the broader level, we believe that moderate growth in the American economy, coupled with relatively low interest rates and an acceptable rise in employment levels, will leave consumers positioned to spend.

We have been trimming our holdings over the last three months in time to avoid part of the recent market fall and now hold only 3 stocks in our sector. Carriage Services has been a very stable company with revenue slowly increasing along with the mortality rate, and favorable long-term growth prospects as their funeral service consolidation strategy continues. Whole Foods has suffered from perceived high prices but their low-cost “365” initiative seeks to reverse that perception. Lastly, El Pollo Loco continues to see modest organic growth. All current holdings have declined slightly over the past 3 months in line with the market. We are in the process of vetting these and looking at some exciting new investment opportunities.

### El Pollo Loco Holdings, Inc. (LOCO)

Founded in 1980, El Pollo Loco began operations in Los Angeles and now has stores throughout the southwest of the United States. With over 4,600 employees the Quick Service Plus Restaurant (QRS+) provides a hybrid service combining fast food with traditional sit-down styles. El Pollo Loco provides counter service and offers a more customized selection, as well as freshly prepared foods, delivered with a nicer ambiance compared to the classic fast food restaurant. More specifically, El Pollo Loco is known for its chicken, which is marinated in a special recipe of herbs, spices, fruit juices and garlic. Recently, they have implemented a “healthier” option with the under 500 calorie menu as the industry moves towards this space. The firm’s market cap is approximately \$403 M.

Over the past year, El Pollo Loco’s share price has dropped about 54%. A number of events occurred over the last year that may explain this precipitous decline. First, in LOCO’s third quarter earnings, expectations for the full year same store sales growth were lowered by almost 50% from 3% to 1.7% (SIF had estimated a 7% organic growth). Second, El Pollo Loco planned on opening 11 new stores over the course of the year; however, due to developmental slips only 5 new stores were opened. Finally, LOCO attempted to raise their prices and took away the \$5 Combo Plate, which resulted in the loss of value-oriented customers which in turn contributed to the lack of



same store sales growth. In an attempt to regain customers, LOCO reintroduced the combo plate, but impact from this decision has yet to be felt. In conclusion, the cause for the 54% drop may likely be attributed to the market adjusting for the lower same store sales growth and lower new store growth in relation to the lofty valuation at the beginning of the year.

The original investment thesis hinged on organic and inorganic growth, a positive millennial effect on the restaurant business, health trends, and growth in the QSR+ market. The organic and inorganic growth expectations did not play out to the Fund's expectations as discussed above. The millennial effect may still exist, however, its magnitude does not outweigh the other negative factors contributing to the poor earnings growth, such as the slowing economic state of our country. Similarly, the "healthy trend" is typically more expensive and with the decreasing economic state consumers look to spend less or with more discretion. The main arguments and predictions that the thesis claimed have not come to fruition, as evident by the large drop in share price. We plan to perform a deeper-dive in the near future.

### **Whole Foods Market Inc. (WFM)**

Whole Foods Market Inc. (WFM: NASDAQ) is an American grocery store chain specializing in organic foods. Founded in 1980 in Austin, Texas, Whole Foods has 431 store locations around the US. Generally, Whole Foods Markets are found in locations with higher disposable income, as the business model remains centered on capturing a consumer who is capable of and willing to pay a premium for organic goods. The stores aim to focus on product quality, local sourcing, food safety, and organic ingredients. Whole Foods' market cap currently stands at approximately \$9.47 billion.

The past year, WFM shares have fallen more than 45% from around \$57 to \$29. This compares to a 12% drop in the food retail sub-industry over the past 12 months. Some key figures include a P/E ratio of 19.64, a return on equity of 14.14, and an annual dividend yield of 1.85%. In 2015, revenue fell from \$4.7 to \$3.6 to \$3.4 billion. Additionally, net income fell each quarter of 2015, with a net income of \$57 million in the fourth quarter. In Q4 of 2015, WFM reported a 5.6% YoY increase in sales, which was below the consensus estimate of 6.6% and the company's goal of 7%.

Purchased by the SIF in September of 2012, Whole Foods has fallen 41.6%. The original thesis was centered on emerging demand for natural and organic foods during a period of economic growth. Whole Foods was a trending company at the time, and there was pressure on consumers to look for healthier food options. Whole Foods capitalized on this trend by providing locally-sourced natural foods to consumers for higher prices than traditional grocery stores. Unfortunately, there were not significant barriers to entry into Whole Foods's niche. As a result, traditional grocery chains which already have heavy market penetration were able to freely adjust to the demands of consumers. Sprouts Farmers Market, The Fresh Market, Kroger Company, Costco Wholesale Corporation all quickly entered. When organic and healthy eating became popular, it did not take long for the average grocery store to start supplying the newer, more expensive foods in demand right next to the old, less expensive groceries. In addition Whole Foods was found mislabeling and overcharging at NYC stores and was fined \$500,000.





Management plans to compensate for these setbacks by reducing expenses at a \$300 million run rate by the end of 2017, investing in technology in fiscal 2016 by integrating Instacart into its app and rolling out an improved point of sale system at all stores, and launch a chain known as 365 into markets previously untapped by the firm. Thus far, the play on 365 stores has yet to prove if it will capture significant market share.

### **Carriage Services Inc. (CSV)**

Founded in 1991 by current Chairman of the Board and Chief Executive Officer Mel Payne, Carriage Services provides both funeral services and cemetery services for both “at need” and “pre-need” consumers. Operating in more than 26 states, Carriage Services has 167 funeral homes. The funeral home segment receives revenue primarily through burial and cremation services, as well as selling caskets and urns. Around 20% of their funeral services comes from pre-need consumers. Their cemetery operations focus primarily on interment services primarily selling graves and markers. Approximately 50% of Carriage’s revenue in this segment comes from pre-need consumers. Approximately 75% of their revenue is in the funeral home operations segment, while the remainder comes from cemetery operations. Carriage Services operates at a market cap of approximately \$358 M.

In the first six months of 2015, Carriage delivered record free cash flow results at 25.4 million. With the access cash, Carrier repurchased nearly 25 million common shares, and looks to continue acquiring high quality funeral and cemetery businesses. After hitting a 52 week high in early December at \$25.96, Carriage has since dropped in the last two months to just above \$20.

The Fund first bought Carriage Services both as an industry and firm-specific play. The industry-level investment hypothesis forecasted a growing death rate (based on an aging and longer-living US population), increase in revenue per contract (increasing popularity of personalization and “green” funerals), and expansion/consolidation of a fragmented industry. The firm specific considerations looked at Carriage’s unique branch model as a particularly effective mechanism to dominate during industry consolidation as well as plans to aggressively pursue accretive M&As that also expanded the firm’s geographic reach. In particular, Carriage Services’ acquisition strategy relies on purchasing “mom & pop” shops in order to retain loyal customer bases.

The initial valuation estimated a 12 month price target of \$22/share (upside of 26.9%). While CSV met that valuation on schedule and particularly exceeded it in late 2015, since then the stock has been on the decline. We plan to reevaluate CSV shortly.



## Industry Group – Healthcare and Biotechnology

### Summary

The Healthcare group invests in stocks of companies in various health-industry sectors including pharmaceuticals, services, devices, and biotechnology. The group seeks to invest across sectors, geographies, and company sizes with a dual focus on both value and growth opportunities.

### Holdings

The Healthcare & Biotechnology group divested all holdings at the beginning of 2015. The IBB Nasdaq Biotechnology Fund – which has 42% of its holdings in five of the largest market-capitalization Healthcare & Biotechnology companies (Gilead, Amgen, Biogen, Regeneron, and Celgene) – fell in mid-July in conjunction with China’s currency devaluation. The index dropped further due to political pressure in the United States surrounding pharmaceutical drug pricing

Overall, the Nasdaq IBB Fund has fallen 38% since mid-July, when consumer sentiment began to turn negative. This freefall has occurred due to a combination of negative publicity, U.S. presidential candidate speeches about drug pricing, and Federal Reserve rate hikes. Industry experts maintain that fundamentals remain strong, and the general consensus on the outlook is positive. However, volatility is expected to be constant until the U.S. presidential election in November of 2016.



## Industry Group – Industrials and Financials

### Summary

The Industrials and Financials industry group of CMC's Student Investment Fund is responsible for managing four current holdings. The sector primarily targets fundamentally undervalued industrial equities as the Fund finds that their greater transparency leads to better long-term returns. Our financial holdings have been scaled down over the recent past as many of our investments have reached their price targets.

### Exxon Mobil (XOM)

Exxon Mobil (NYSE: XOM) is a multinational oil and gas corporation that was established in 1999 following the merger of Exxon and Mobil. Headquartered in Irving, Texas, ExxonMobil is currently the world's largest refiner in the world, with 37 oil refineries in 21 countries. The company has three main business divisions: upstream, downstream, and chemical. The upstream segment focuses on oil exploration, testing, and extraction, while downstream operations refine, market, and distribute oil products. The ExxonMobil chemical business is a leader in a wide range of products from solvents and synthetic rubber to plastic bottles and other consumer goods. Exxon Mobil brands are well respected and reliable for customers' personal and business needs.

The Fund first invested in Exxon Mobil in April 2013 at \$87.34 per share. Since then, our investment has fallen 10.16% per share. However, the Fund has benefited from a large 3.72% dividend yield in the last year. During the third quarter, Exxon Mobil's quarterly profit fell 58% due to a prolonged slump in oil prices. Crude oil has experienced a downturn, currently trading at US\$32.28 a barrel, nearly down 70% from 2014 highs of approximately \$100 USD a barrel. Nevertheless, the company finished ahead of fourth quarter revenue estimates, insulated by its downstream and chemicals operations, and maintained strong refining margins. Looking ahead, Exxon Mobil projects global oil demand to continue to increase and is in a fantastic position to leverage its positions in emerging market situations. In the short term, however, the Fund will look to re-evaluate the financial position of the company, especially as its credit rating is coming under increased scrutiny.

### Stantec Inc. (STN)

Stantec is an international professional services company in the design and consulting industry. Founded in 1954, Stantec provides professional consulting services in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics for infrastructure and facilities projects. The Company provides services on projects around the world through over 15,000 employees operating out of more than 250 locations in North America and 7 locations internationally.

Purchased in November 2015 at about \$25 per share for a total of approximately \$150,000, the Stantec play is a recent example of the Fund's strategy to consolidate its holdings. By market value, the Stantec investment contributes approximately 10% of the Fund's total portfolio and represents the Fund's



bullish sentiment regarding forward demand for public infrastructure and maintenance services, construction, and utility investment in the US and Canada. With bullish attitudes on the sector's forward-looking performance, the Fund believes design and consulting to be a relatively high-margin, low-risk vantage point from which to capitalize on the industry's growth. That growth should be driven by an aging and neglected infrastructure, an increasingly aging US population, growing demand for sustainable design and engineering, advances in technology, increasingly frequent and unpredictable natural disasters due to climate change, and stricter regulatory and quality requirements which will require the expert navigation of firms in Stantec's category. The first half of 2015 alone indicated increased deal activity and, in June, Obama announced a clean-energy investment program that includes \$4B committed to the private sector. In particular, Stantec's broadened client portfolio and service offerings from its 75+ acquisitions in the last 15 years should enable it to increasingly capture market share. The Fund maintains a price target of about \$45 per share for Stantec.

### **First Solar, Inc. (FSLR)**

First Solar provides solar energy solutions worldwide. The company operates through two segments, Components and Systems. The Components segment designs, manufactures, and sells solar modules that convert sunlight into electricity. This segment manufactures cadmium telluride and crystalline silicon modules for project developers and system integrators, as well as owners and operators of photovoltaic (PV) solar power systems. The Systems segment provides turn-key PV solar power systems or solar solutions, such as project development; engineering, procurement, and construction; operating and maintenance; and project finance services to investor owned utilities, independent power developers and producers, commercial and industrial companies, and PV solar power system owners.

The company represents one of the Fund's most successful holdings, returning approximately 35% in 2015 as it continued to execute major utility projects, form new partnerships, and navigate its IPO of 8Point3. Purchased in April 2012 for about \$60 per share, the stock has returned approximately 165% to date. However, the Fund currently has little exposure to First Solar. Given that the market value of the position is only approximately 1% of the portfolio, the Fund will look to re-evaluate the company and potentially scale up the position. That said, the broader solar sector has not performed as well as First Solar and some of its peers. For example, the Guggenheim Solar ETF (NYSE: TAN) fell nearly 9% in 2015 amidst the backdrop of a slump in the broader stock market. Additionally, 2015's industry performance was largely attributed to cheap oil, the solar sector's exposure to the Chinese stock market, and the riskier, small-cap nature of many publicly-traded solar companies. Nevertheless, the Fund believes that growing demand for sustainable utility-scale energy solutions and the current regulatory and legislative environment in the US, renewed in December 2015 with an extended Investment Tax Credit, will bolster the solar industry going forward. According to Bloomberg New Energy Finance, the credit could add 20 gigawatts over the next five years. Given First Solar's extensive distribution network, economies of scale, and impressive pipeline, the company appears poised to increasingly win market share.

### **Continental Resources (CLR)**

Continental Resources is a leading, independent oil producer in the United States, focusing on the



exploration and production of oil and gas. Based in Oklahoma City, Continental is the largest leaseholder and one of the largest producers in the nation's premier oil field, the Bakken play of North Dakota and Montana. The Company also has significant positions in Oklahoma, including its SCOOP Woodford and SCOOP Springer discoveries and the Northwest Cana play.

The Fund purchased CLR in November 2014 at a price of approximately \$53 per share, expecting 75% upside on the investment. However, the failure among major oil-producing countries to coordinate and effectively control the global surplus of oil, the resulting depressed price of crude oil, and volatile market expectations continue to weigh on the Fund's initial investment thesis. The crude oil volatility index remains nearly 2.5x above the S&P's VIX, and Congress's oil export ban lift in Q4 has failed to provide Continental relief in a material way. Given the prolonged, unresolved circumstances surrounding the domestic and international oil market, poor company performance, nearly 50 oil and gas bankruptcies in 2015, dampened real estate values in their core Midwest oilfields, as well as Standard & Poor's recent downgrade of CLR's credit quality, Continental deserves serious scrutiny by the Fund as the former price target of \$90 per share now appears obsolete. The company presently trades at about \$20 per share. Currently, the holding only counts for about 0.6% of the Fund's portfolio.



## Executive Committee

**Brian Eckhardt | Chief Executive Officer | [beckhardt16@cmc.edu](mailto:beckhardt16@cmc.edu)**



Brian, originally from Paradise Valley, AZ, is a senior at CMC earning a Bachelor's degree in Economics and Master's degree in Finance as part of the Robert Day School's 4-year BA/MA program. His previous roles in the Student Investment Fund include Chief Operating Officer and Analyst in the Consumer, Food, and Retail group.

In addition to being a member of the Student Investment Fund, Brian is a Robert Day Scholar, Frank Seaver Leadership Scholar, and two-year BMGI/Michael Larson Asset Management Fellow. He is also a researcher with the Rose Institute of State and Local Government, a performing member of Under the Lights, CMC's theatre club, and a guest writer with the campus newspaper The Forum.

The summer after his junior year, Brian interned in the investment banking division of Bank of America Merrill Lynch. Prior to that, he interned with Hawk Ridge Management, a long-short equity hedge fund based in Los Angeles. Next year, Brian will be joining BDT Capital Partners in Chicago, IL, and looks forward to rooting for the Cubs.

**Amber Falkner | Chief Investment Officer | [afalkner16@cmc.edu](mailto:afalkner16@cmc.edu)**



Amber Falkner is a senior from Bradenton, FL, earning a Bachelor's degree in Economics and Master's degree in Finance as part of the Robert Day School's 4-year BA/MA program.

In addition to being a BMGI/Michael Larson Asset Management Fellow and a Robert Day Scholar, she is the President of Claremont Colleges Against Cancer. Amber has held internships at a search fund, Danville Capital, and at a mutual fund, Dodge & Cox, after her freshman and sophomore years, respectively. Last summer, she interned as an investment banking analyst in the Consumer, Healthcare and Gaming group at Wells Fargo Securities.

She will return to the Charlotte office of Wells Fargo Securities after graduation as a full-time analyst. Her interests include fishing, creative writing, and kickboxing.



**Kaitlyn Kelleher | Chief Operating Officer | [kkelleher17@cmc.edu](mailto:kkelleher17@cmc.edu)**



Kaitlyn Kelleher, born and raised in Pasadena, CA, is a junior at Claremont McKenna College majoring in Economics and Government. Around campus, she is as a student consultant at the Career Services Center, a research assistant at the Financial Economics Institute, and a member of the CMS Varsity Soccer team.

After sophomore year, Kaitlyn worked at Clifford Swan Investment Council, a boutique investment advisory firm in Pasadena. In her free time, Kaitlyn enjoys long-distance running and spending time with her three younger sisters.



## Acknowledgments

We graciously thank Professor Eric Hughson, Jim Floyd, Michael Denny, and Ernie Iseminger for their support of the Fund. We also greatly appreciate the Financial Economics Institute, Professor Josh Rosett, and Terri Van Eaton for providing access to the FEI Lab and for the administrative support. We sincerely appreciate your contributions and sustained involvement.



Eric Hughson received an undergraduate degree in mechanical engineering from MIT and a PhD in financial economics from Carnegie Mellon University. He has served on the faculties in both economics and finance at the California Institute of Technology, the University of British Columbia, the University of Utah, and the University of Colorado, Boulder. His current research interests include market microstructure, financial econometrics, and decision theory. His publications have appeared in such journals as *The American Economic Review*, *The Review of Financial Studies*, *The Journal of Financial Economics*, *The Journal of Economic Theory*, *the Financial Analysts Journal* and *The Journal of Financial Markets*.

At CMC, Professor Hughson teaches derivatives and investments.





# Activision Blizzard



Dennis Gu · Kaitlyn Kelleher · Nick Lillie · Andrew Yeh  
Monday, November 9 2015

# Investment Thesis



eSports shows the most potential to drive long term growth

Activision Blizzard is well positioned to take advantage of industry trends

Industry is growing rapidly across multiple business segments



Thesis

Company

Industry

ESports

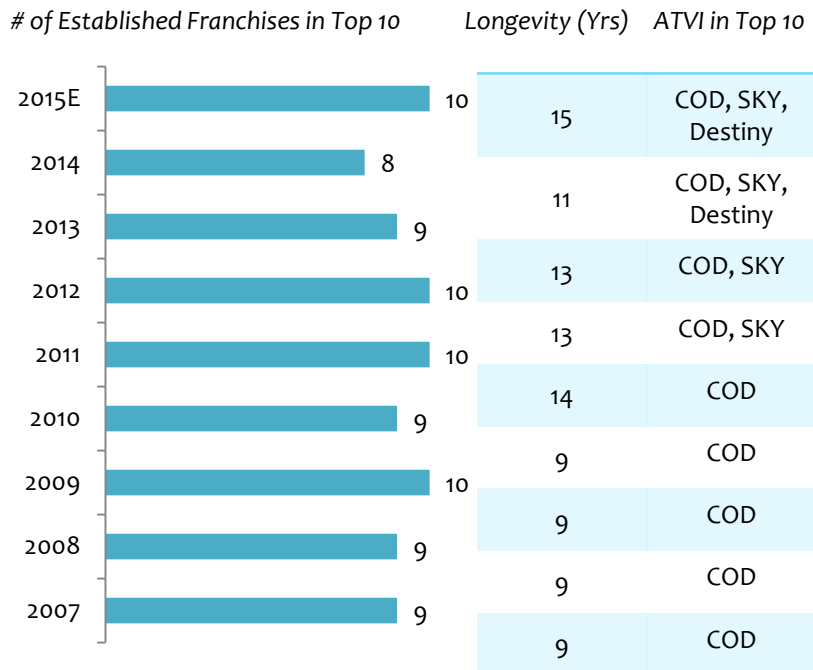
Valuation



## Business Description

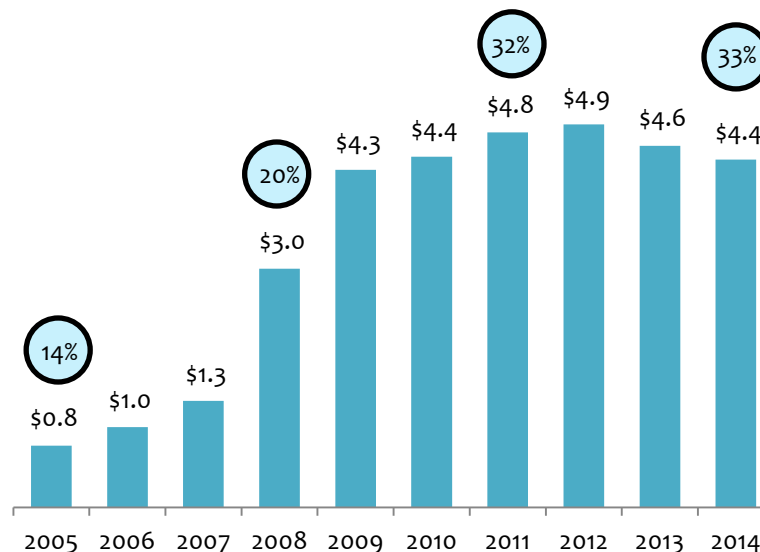
- Activision Blizzard is the largest and most profitable western video game developer, producing household names like Call of Duty, World of Warcraft, and Diablo
- In 2014, 150 million people played Activision Blizzard entertainment for more than 13 billion hours

### Established Franchises Across Platforms



### Track Record of Consistent Growth & Margin Expansion

Activision Blizzard Total Revenues (\$ in billions) & Adj. EBITDA Margins



Source: Venturebeat.

Source: ATVI Investor Relations

Thesis

Company

Industry

ESports

Valuation

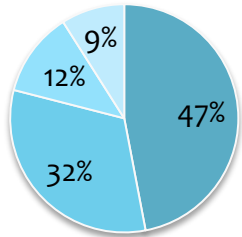


STUDENT INVESTMENT FUND  
CLAREMONT MCKENNA COLLEGE

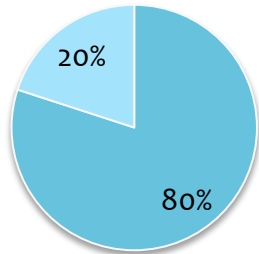
# Diversified Video Game Empire



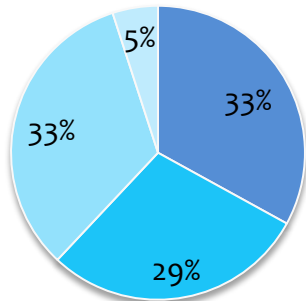
ATVI Standalone



King Standalone



Combined Company



Source: ATVI Investor Relations

Thesis

Company

Industry

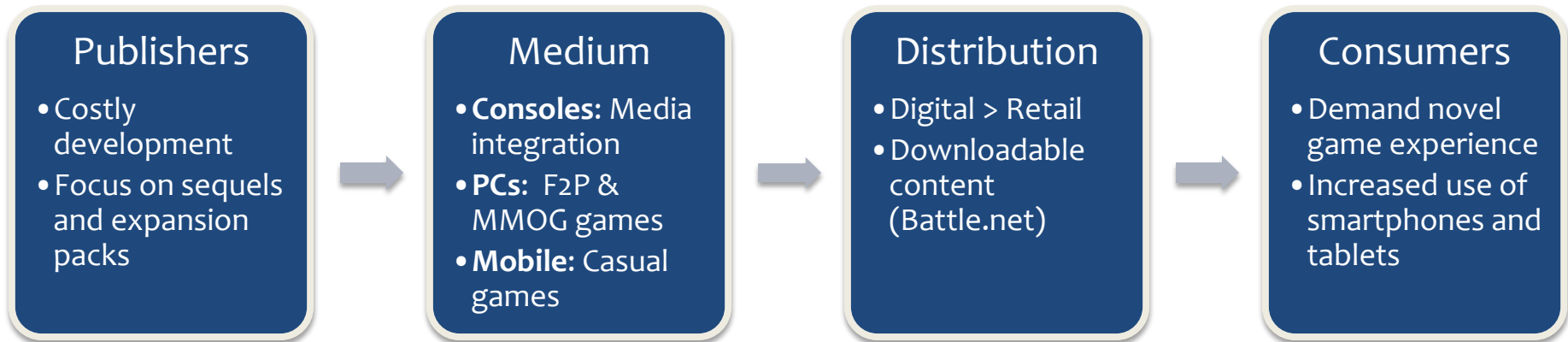
ESports

Valuation



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CLAREMONT MCKENNA COLLEGE

## Value Chain



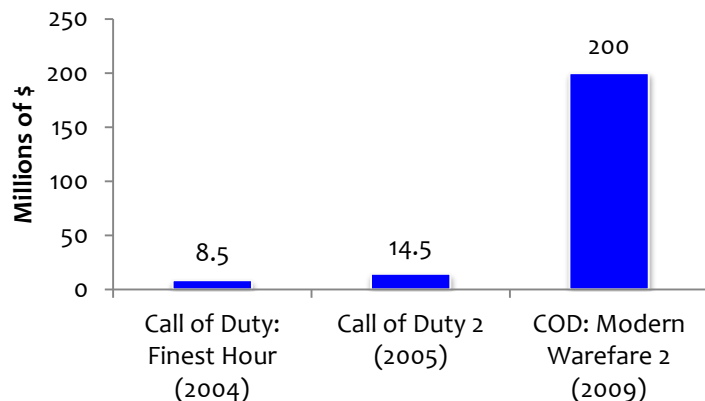
Activision: Publishes games for all three mediums & games distributed digitally

Blizzard: Publishes games primarily for online distribution

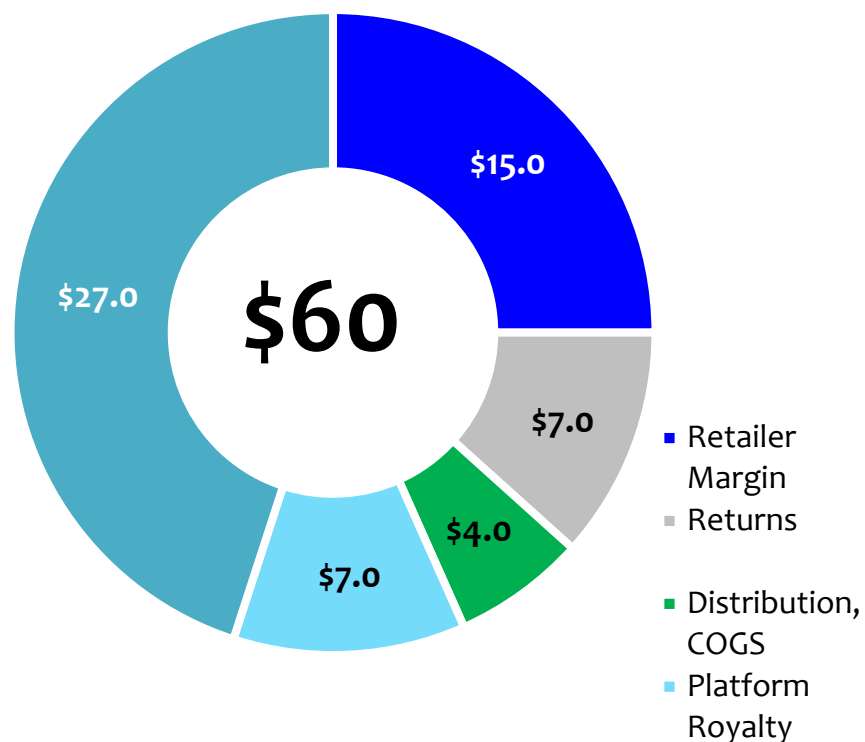


## Economics of a Video Game: Call of Duty Case Study

Cost of Producing Blockbusters Over Time



Where Does the Money Go?



### Blockbuster Key Takeaways

- Drivers: Advancements in technology (internet speed, connectivity, and hardware), critical mass/network effect, hundreds of hours of content, online community and competition
- Trends: smaller studios become contractors, more digital distribution, advertising is huge

Source: Los Angeles Times

Thesis

Company

Industry

ESports

Valuation



STUDENT INVESTMENT FUND  
CLAREMONT MCKENNA COLLEGE

## Growing Industry Driven by Millennial Generation

### Overview

#### Key Figures

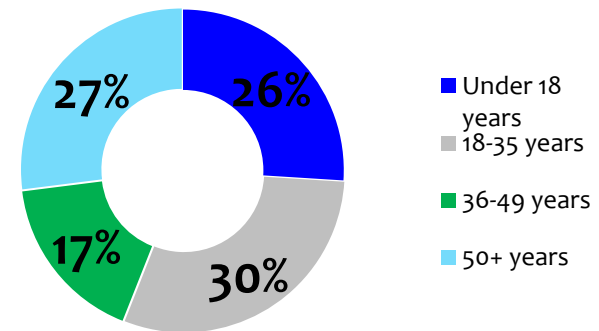
**155 million** Americans play video games

**42%** of Americans play video games regularly (3 hrs/week)

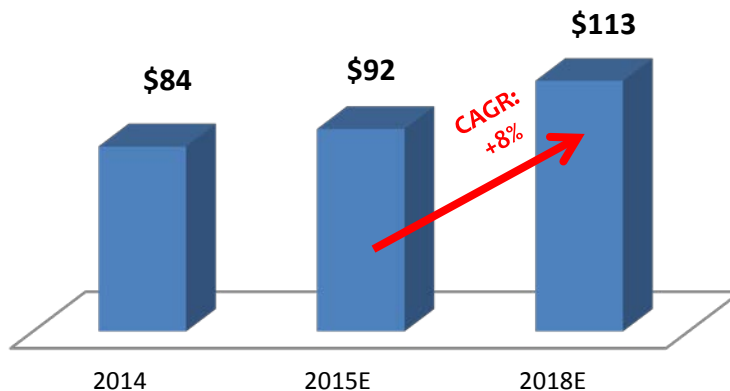
**51%** of US households own game console

### Demographics

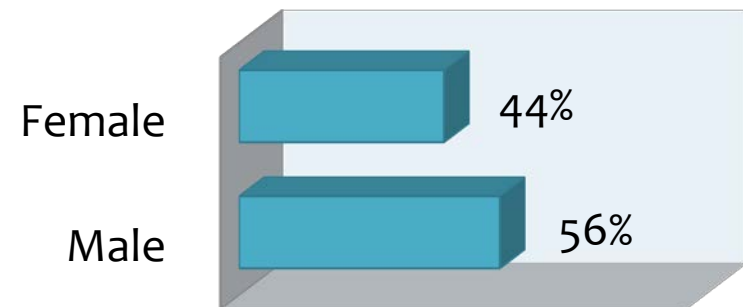
#### Age of US Game Players (2014)



#### Global Games Market Revenue (\$BN)



#### Gender of US Game Players (2014)



Source: Entertainment Software Association

Thesis

Company

Industry

ESports

Valuation



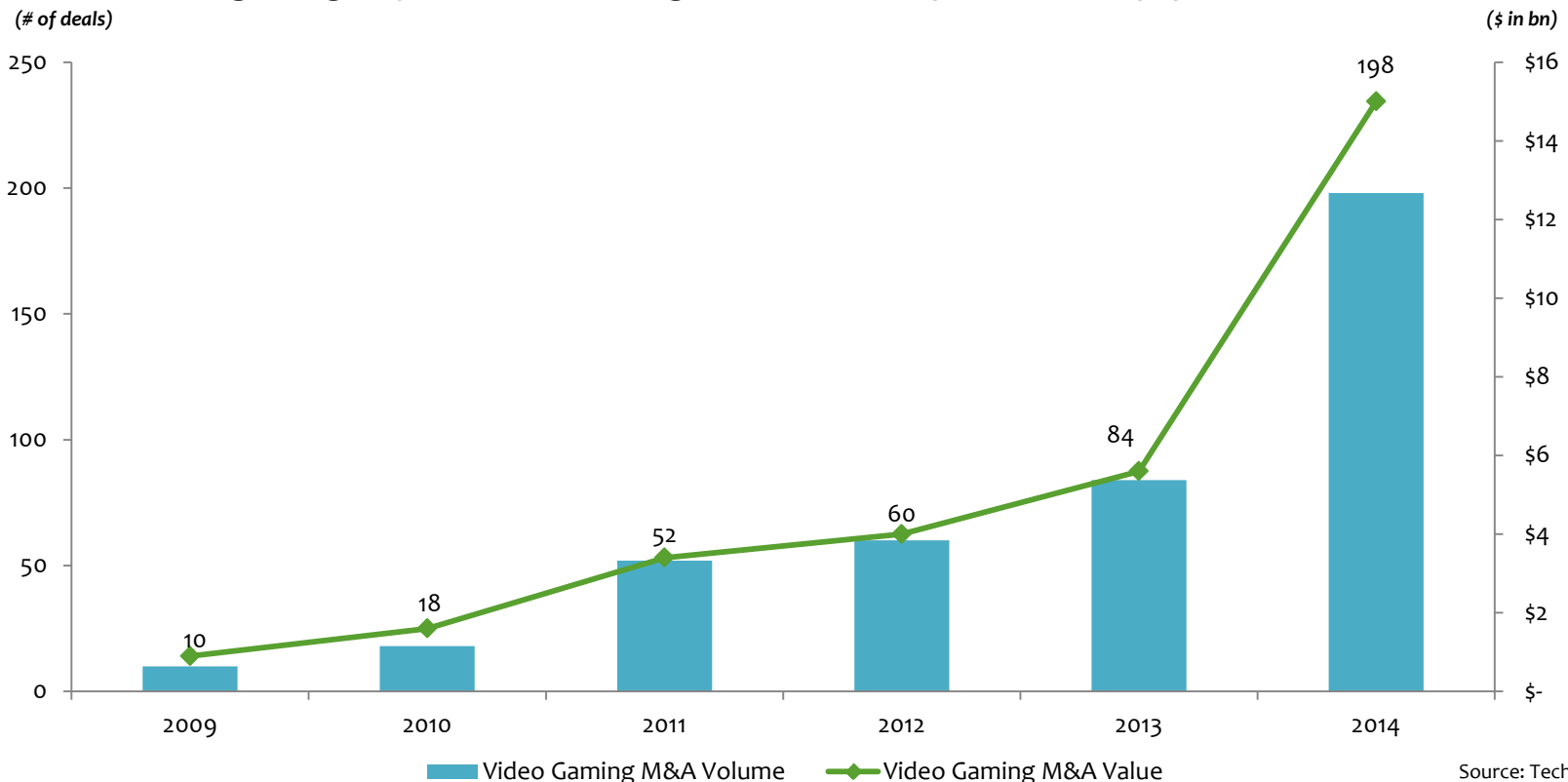
STUDENT INVESTMENT FUND  
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# Industry Consolidation

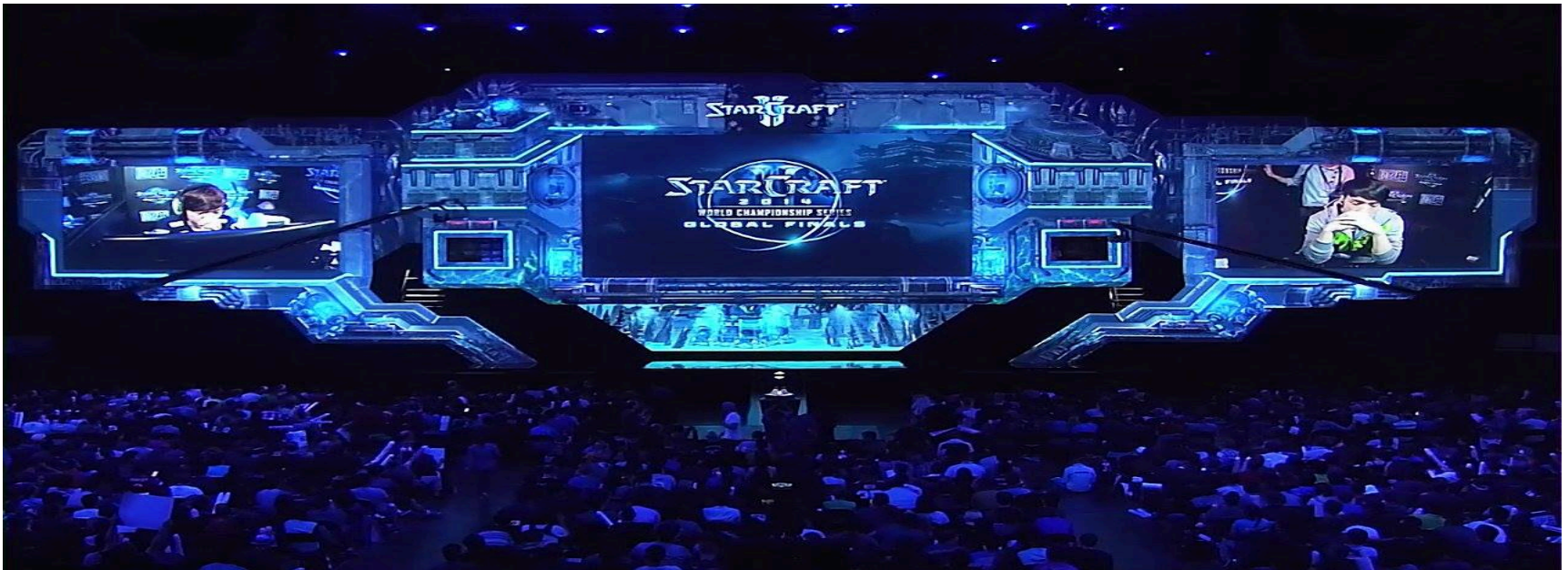
## The M&A Story

- Increased M&A volume over time has resulted in considerable industry consolidation, raising the barriers to entry
- Modern gaming requires an increasing amount of manpower and equipment



## Activision Blizzard announced creation of dedicated eSports studio

- The division will be run by Steve Bornstein, the former CEO of ESPN and NFL Network, and Mike Sepso, co-founder of Major League Gaming
- There is significant opportunity to rival the biggest “traditional” leagues through advertising, ticket sales, licensing, sponsorships and merchandising
- Earlier this year, ESPN2 televised Blizzard’s Heroes of the Storm collegiate eSport event that had over 6,000 players competing in the Heroes of the Storm tournament for a chance to win free tuition



Source: Fortune.com

Thesis

Company

Industry

eSports

Valuation



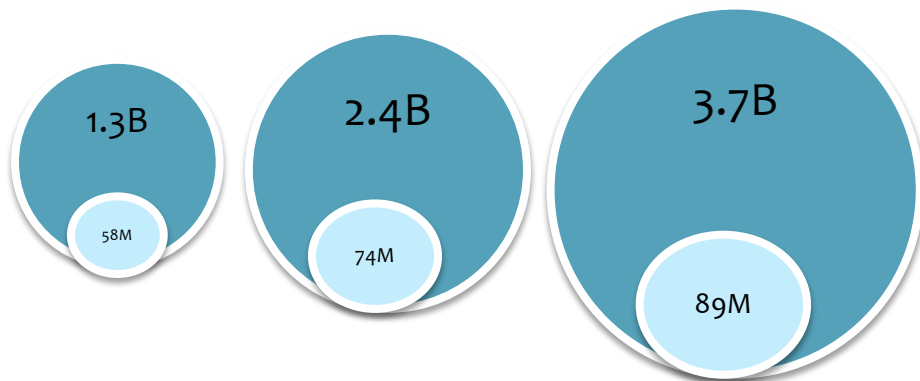
STUDENT INVESTMENT FUND  
CLAREMONT MCKENNA COLLEGE

# eSports Offers Exciting Future of Gaming

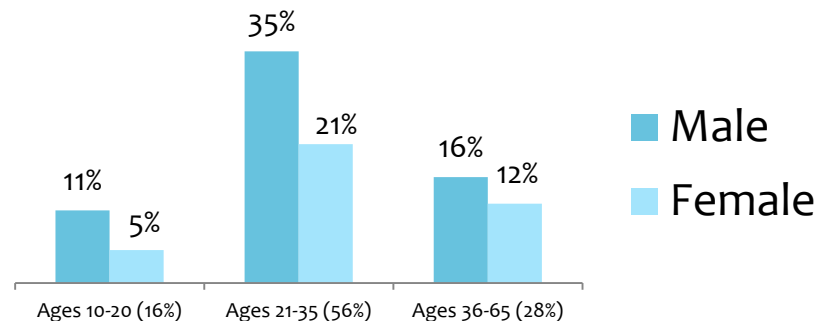


## A Highly Attractive Industry Poised for Expansion

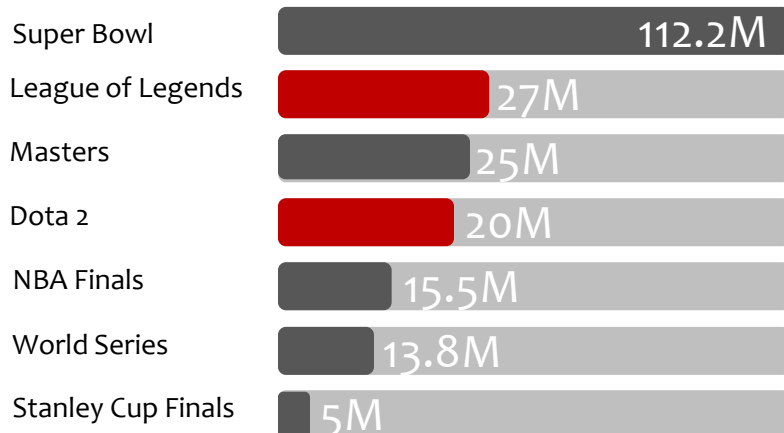
Time Spent Watching and Enthusiast Growth 2012-2014



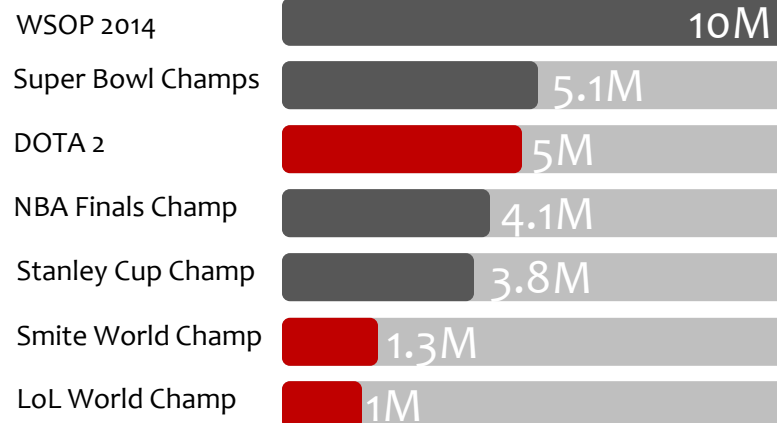
Demographics



Viewership



International Prize Pools and Winnings



Source: ESPN.com

Thesis

Company

Industry

eSports

Valuation



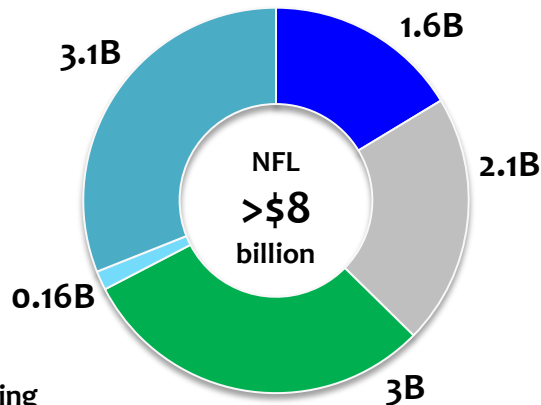
STUDENT INVESTMENT FUND  
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# eSports Trajectory Tracks Traditional Sports

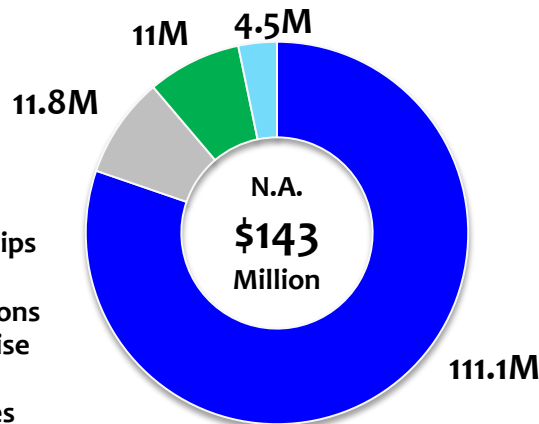


## Comparison of NFL and eSports

NFL (Top) vs. eSports (Bottom) Revenue by Segment

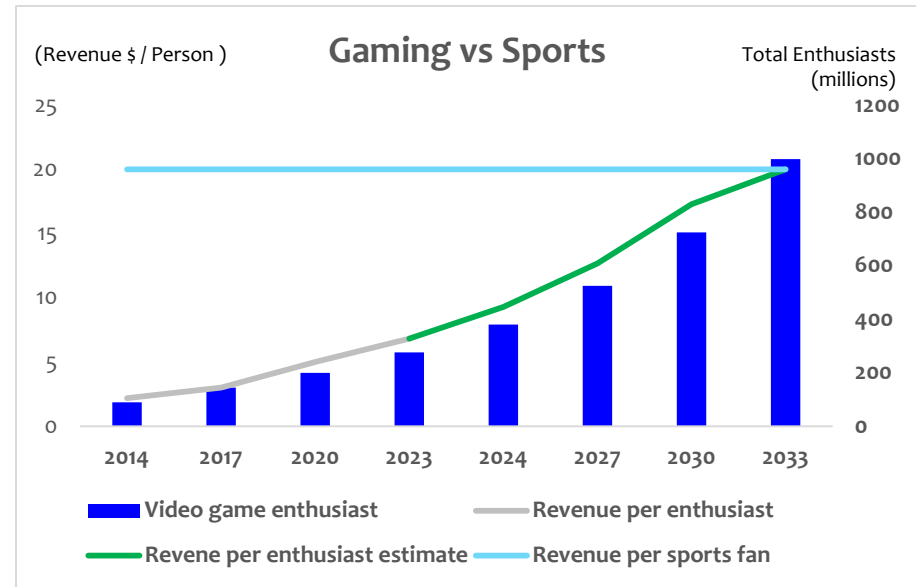


- ticket sales
- merchandising
- advertising
- venue



- Corporate Sponsorships
- Prize Pool Contributions
- Merchandise
- Ticket Sales

Gaming vs. Sports



*Anticipated catch-up with traditional sports economics*



# Gaming Industry in 20 Years

## Future of Virtual Reality (VR)

Current Stage

- Facebook's Oculus Rift
- Sony's Morpheus
- HTC Valve's Vive

5 Year Projection

- Widespread access to headsets
- Arcade model for larger devices (treadmills, simulators, etc.)
- VR offerings for traditional & eSports

20 Year Projection

- Advancement in both accessories and larger devices
- Widespread household adoption of all hardware
- Game console of the future



Thesis

Company

Industry

ESports

Valuation



# Competitive Landscape

## Activision Blizzard Is The Most Complete Company In The Industry

	Ubisoft	EA	TakeTwo Interactive	Activision Blizzard
Console				
PC				
Mobile				
eSports				
Other Media				



# Valuation- DCF

Current Information (USD millions)	
Current Stock Price	\$34.57
Shares Outstanding (in millions)	729.0
Equity Value	\$ 25,202
Plus: Total Debt	4078.0
Plus: Preferred Stock	-
Plus: Minority Interest	-
Less: Cash & Equivalents	4519.0
<b>Enterprise Value</b>	<b>\$24,761</b>

CAPM Calculation	
Capital Structure (% Debt)	16.5%
Risk-Free Rate	2.3%
Equity Beta	0.8
Asset (unlevered) Beta	0.7
Market Risk Premium	7.5%
Tax Rate	18%
<b>Cost of Equity</b>	<b>9.8%</b>
Terminal Growth Rate:	2.0%

WACC Calculation	
Capital Structure (% Debt)	16.5%
Cost of Debt	3%
Cost of Equity	9.8%
Tax Rate	18%
<b>Discount Rate</b>	<b>8.6%</b>

		PC Growth Rate				
		6.0%	7.0%	8.0%	9.0%	10.0%
VR Ramp	0.5%	51.27	51.77	52.30	52.85	53.43
	1.0%	54.87	55.37	55.90	56.45	57.03
	1.5%	59.38	59.88	<b>\$60.41</b>	60.96	61.54
	2.0%	64.99	65.49	66.02	66.57	67.15
	2.5%	71.92	72.42	72.95	73.51	74.08

Implied upside of 75%

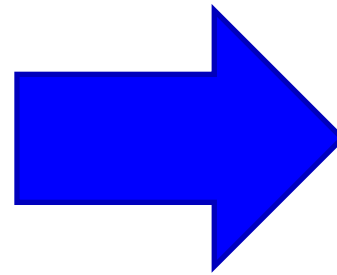


## Rapid growth in video game industry

- Enormous millennial consumer base
- Increasing availability & connectivity
- Content available across multiple platforms

## ATVI poised to benefit from industry trends

- Largest company in space
- Blockbuster titles and diversified operations
- Great player ecosystem



**Activision  
Blizzard will lead  
the eSports and  
VR industry  
transformation**

## eSports is the largest long term growth driver

- ATVI's tradition to produce high-quality, competitive games
- Tracking traditional sports economics
- New, experienced management





**ACTIVISION®**

**BILZARD®**

**Appendix**

## Activision Blizzard Positioned for Growth with Recent Announcements

### Recent News

#### November 2, 2015

- Acquisition of King Digital Entertainment for \$5.9 billion
- King is the developer of popular mobile games including chart-topper Candy Crush
- ATVI believes addition of King high complements existing business lines and helps grow their media empire by positioning them as a global leader in interactive entertainment across mobile

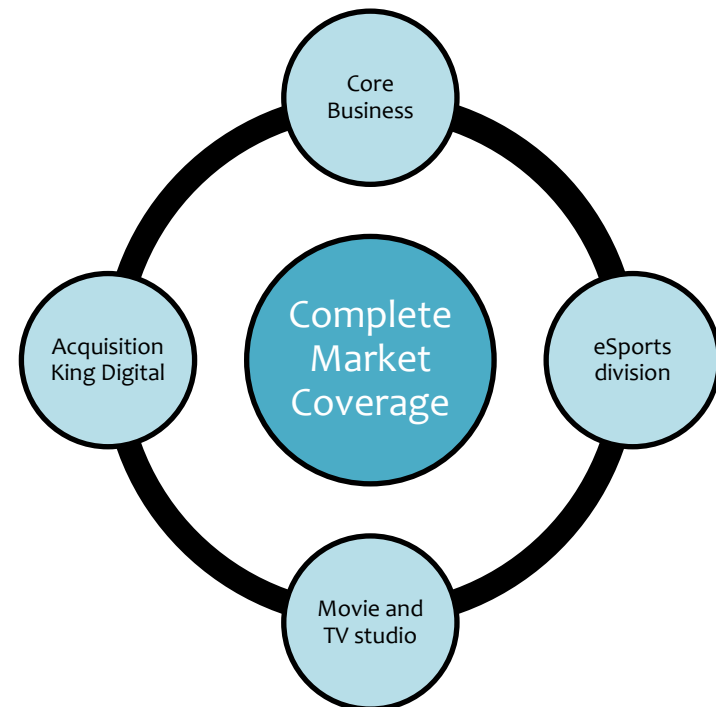
#### November 6, 2015

- Launch of new TV and movie studio to complement and amplify core business
- Will deploy many characters and plots into new entertainment mediums

#### October 22, 2015

- Announced the creation of an entire division focused on eSports
- The division will be run by Steve Bornstein, the former CEO of ESPN and NFL Network, and Mike Sepso, co-founder of Major League Gaming
- The company believes eSports will rival traditional sports in future opportunities

### Takeaway



Source: Wall Street Journal

Thesis

Company

Industry

ESports

Valuation



STUDENT INVESTMENT FUND  
CLAREMONT MCKENNA COLLEGE

# Diversified Operations

## Broad & Constantly Evolving Product Suite

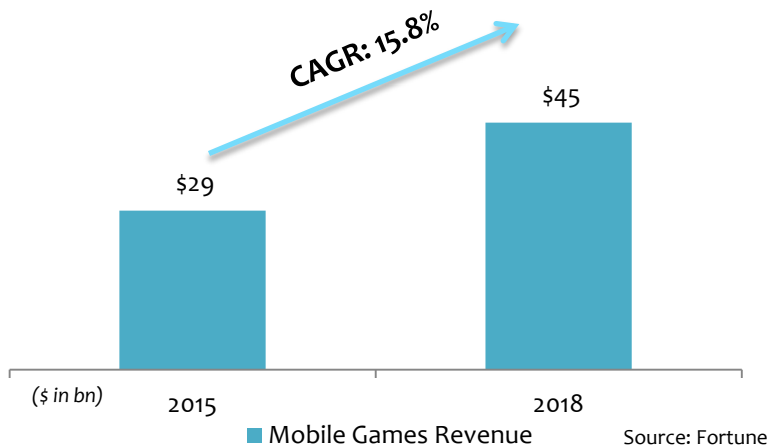
### Acquisition of King Digital

- Increased focus on rapidly growing mobile industry with recent acquisition of King Digital Entertainment for \$5.9 billion
- King is the developer of popular mobile games including chart-topper Candy Crush
- ATVI believes the addition of King grows their media empire by positioning them as a global leader in mobile entertainment

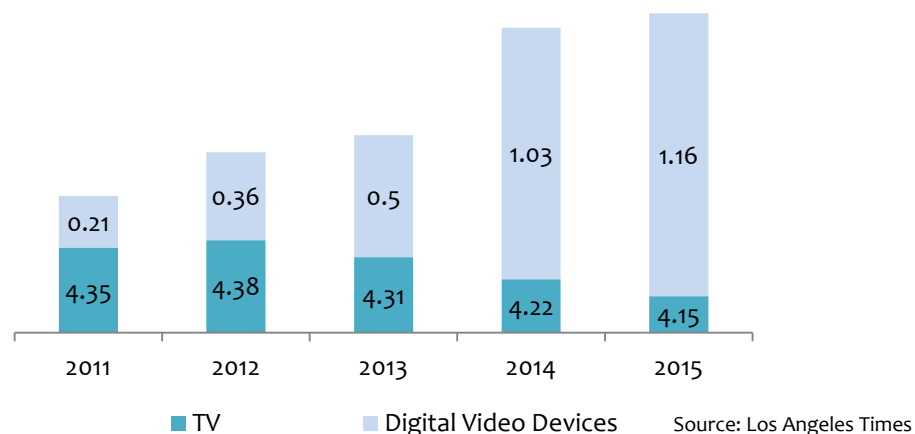
### TV / Movie Studio

*“We’re really focused on making fantastic standalone, quality content that can help broaden the appeal of [a] franchise”*  
 – Nick van Dyk, head of new Activision Studios

- On Nov. 6<sup>th</sup> announced creation of their own movie and TV studio to bring hit titles such as Call of Duty and Skylanders to screens
- Film and TV are a natural extensions of video games, especially as media becomes increasingly interconnected and devices to watch TV proliferate



Average Time Spent per Day with Video by U.S. Adults, by Media



## Management Team



### Robert Kotick, CEO of Activision Blizzard

- Served as CEO since 1991
- Ranked 10<sup>th</sup> most influential CEO in the world in 2013
- Believes heavily in video game industry innovation



### Michael Morhaime, CEO of Blizzard

- Co-founded Blizzard entertainment in 1991
- One of only three designers/producers to accept both a Technology & Engineering Emmy and an Academy of Interactive Arts & Sciences Interactive Achievement Award
- B.S. degree in electrical engineering from UCLA



### Eric Hirshberg, President and CEO of Activision

- CEO of Activision Publishing
- Previously was Co-president and Chief Creative Officer of Deutsch, LA
- B.F.A. degree from UCLA



### Dennis Durkins, Chief Financial Officer of Activision Blizzard

- Served as CFO since 2012
- Former Microsoft's COO and CFO of Microsoft's interactive entertainment division

## Major Risk Factors

- Upfront development and launch expense
  - Games like Call of Duty cost millions of dollars and three year time period to develop and advertise
- Mismanagement of blockbuster and sequels may deteriorate profitability
  - A large portion of its revenue comes from Call of Duty, World of Warcraft and other major games
- International trading and exchange rate risk
  - Activision Blizzard operates in North America, Europe, and Asia
- Limited availability of top external software developers
  - A mix of internal and external developers involve in develop the new IPs and sequels of popular games

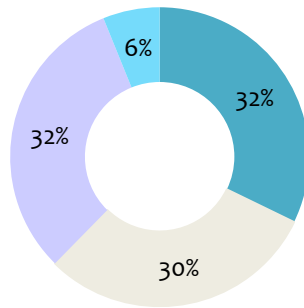


# More eSports Industry Overview

## A Highly Attractive Industry Poised for Expansion

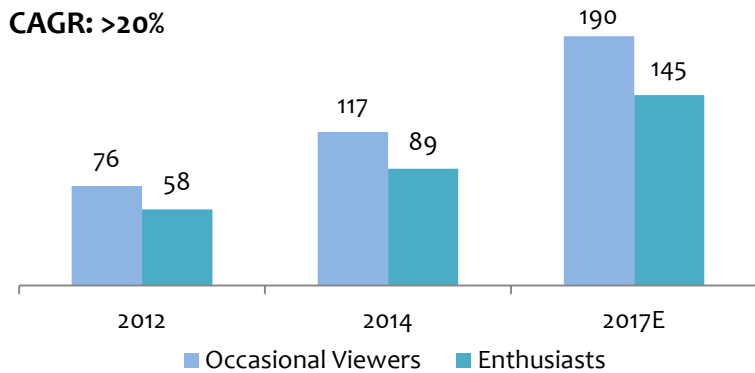
Global Games Market by Region (2015E, Billion \$)

■ North America ■ Europe ■ Asia ■ Latin America



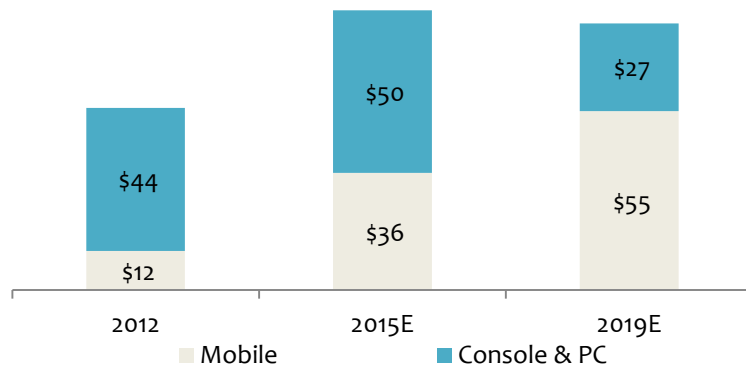
eSports Audience Growth

CAGR: >20%

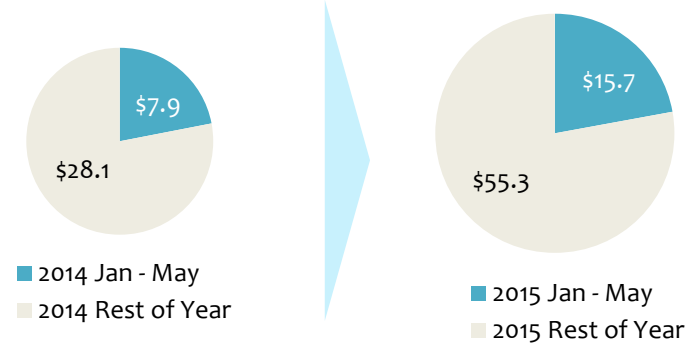


Demographics of eSports

(\$ in bn)



Global Prize Money (2014 vs. 2015E)



Source:NewZoo.Com



# Valuation- DCF

	Historical			Future							
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenue	4856	4583	4408	4428	4461	4506	4566	4641	4733	4752	4803
<i>Growth</i>	0.0%	-5.6%	-3.8%	0.5%	0.7%	1.0%	1.3%	1.6%	2.0%	0.4%	1.1%
COGS	1662	1531	1525	1509	1517	1547	1554	1584	1615	1598	1591
<b>Gross Profit</b>	<b>3194</b>	<b>3052</b>	<b>2883</b>	<b>2919</b>	<b>2944</b>	<b>2959</b>	<b>3012</b>	<b>3057</b>	<b>3118</b>	<b>3154</b>	<b>3212</b>
<i>Margin</i>	65.8%	66.6%	65.4%	65.9%	66.0%	65.7%	66.0%	65.9%	65.9%	66.4%	66.9%
SG&A	1139	1096	1129	1151	1194	1241	1293	1350	1413	1455	1508
R&D Exp.	604	584	571	576	580	586	594	603	615	618	624
Dep & Amort.	316	108	90	97	104	111	119	127	136	144	152
<b>EBIT</b>	<b>1451</b>	<b>1372</b>	<b>1183</b>	<b>1192</b>	<b>1170</b>	<b>1132</b>	<b>1126</b>	<b>1104</b>	<b>1090</b>	<b>1081</b>	<b>1080</b>
Tax Expense	309	309	146	215	211	204	203	199	196	195	194
EBIT after tax	1142	1063	1037	978	959	928	923	905	894	887	886
Less: Other	282	242	-208	105	17	-51	61	24	9	11	31
Plus: Dep. & Amort.	316	108	90	97	104	111	119	127	136	144	152
Less: CapEx	73	74	107	82	101	123	147	174	205	234	267
Less: Change NWC	-169	-335	43	-154	-149	-86	-130	-122	-112	-121	-118
<b>Free Cash Flow</b>	<b>1272</b>	<b>1190</b>	<b>1185</b>	<b>1040</b>	<b>1093</b>	<b>1054</b>	<b>963</b>	<b>956</b>	<b>929</b>	<b>906</b>	<b>857</b>
Discounted at WACC of 8.6%				1019	1093	1054	963	956	929	906	857
<b>Total PV of Free Cash Flow</b>											



# Valuation- DCF

2023	2024	2025	2026	2027	2028	2029	2030	
4886	5002	5153	5343	5579	5866	6216	6643	
1.7%	2.4%	3.0%	3.7%	4.4%	5.2%	6.0%	6.9%	
1594	1607	1630	1663	1708	1767	1842	1935	
<b>3292</b>	<b>3395</b>	<b>3523</b>	<b>3680</b>	<b>3870</b>	<b>4099</b>	<b>4375</b>	<b>4708</b>	
67.4%	67.9%	68.4%	68.9%	69.4%	69.9%	70.4%	70.9%	
1571	1647	1737	1842	1966	2112	2286	2494	
635	650	670	695	725	763	808	864	
161	172	185	199	215	235	257	284	
<b>1085</b>	<b>1098</b>	<b>1117</b>	<b>1144</b>	<b>1179</b>	<b>1224</b>	<b>1280</b>	<b>1350</b>	
195	198	201	206	212	220	230	243	
890	900	916	938	967	1004	1050	1107	
15	17	19	21	17	19	19	19	
161	172	185	199	215	235	257	284	
305	348	397	453	519	596	687	796	
-117	-119	-118	-118	-118	-118	-118	-118	
<b>849</b>	<b>826</b>	<b>803</b>	<b>781</b>	<b>765</b>	<b>741</b>	<b>719</b>	<b>694</b>	
849	826	803	781	765	741	719	694	
								<b>\$13,956</b>

PV of Terminal Value \$29,642.28

**Enterprise Value \$43,598.19**

**Implied Equity Per Share Value \$60.41**





## Multiples Analysis (2014)

	Ticker	Market Cap	Sales Breakdown (%)			Sales Growth	SG&A / Sales	ROA	P/E	TL/E
			PC	Console	Other					
Ubisoft	UBI	\$3.05B	12%	82%	5%	41.6%	26.3%	5.8%	36.5	1.34
Electronic Arts	EA	\$22.56B	19%	67%	14%	26.3%	22.9%	15.6%	24.5	0.21
TakeTwo Interactive	TTWO	\$2.92B	18.6%	81.4%	~0%	-54%	37.9%	-	-	0.86
Activision Blizzard	ATVI	\$25.52B	33%	48%	19%	-4%	39%	7.0%	23.8	0.51

Source: ATVI Investor Relations

- Higher diversification weakens historical sales growth but positions ATVI for stronger growth in the future
- Higher SG&A/Sales the result of more intensive marketing efforts from their media empire

