

July 31, 2017

Dear Partners and Friends,

In the second quarter of 2017, Hayden Capital gained +12.6% (net of fees). This brings our performance to +13.7% year-to-date. Meanwhile, the S&P 500 and MSCI World were up +3.1% and +4.7% over the same period, respectively. The largest contributor to this outperformance was our recent investment in Zooplus, which I describe in more detail below.

Since inception, we have returned +11.0% annually, versus +9.1% for the S&P 500 and +6.3% for the MSCI World, while keeping 25% of the portfolio in cash.

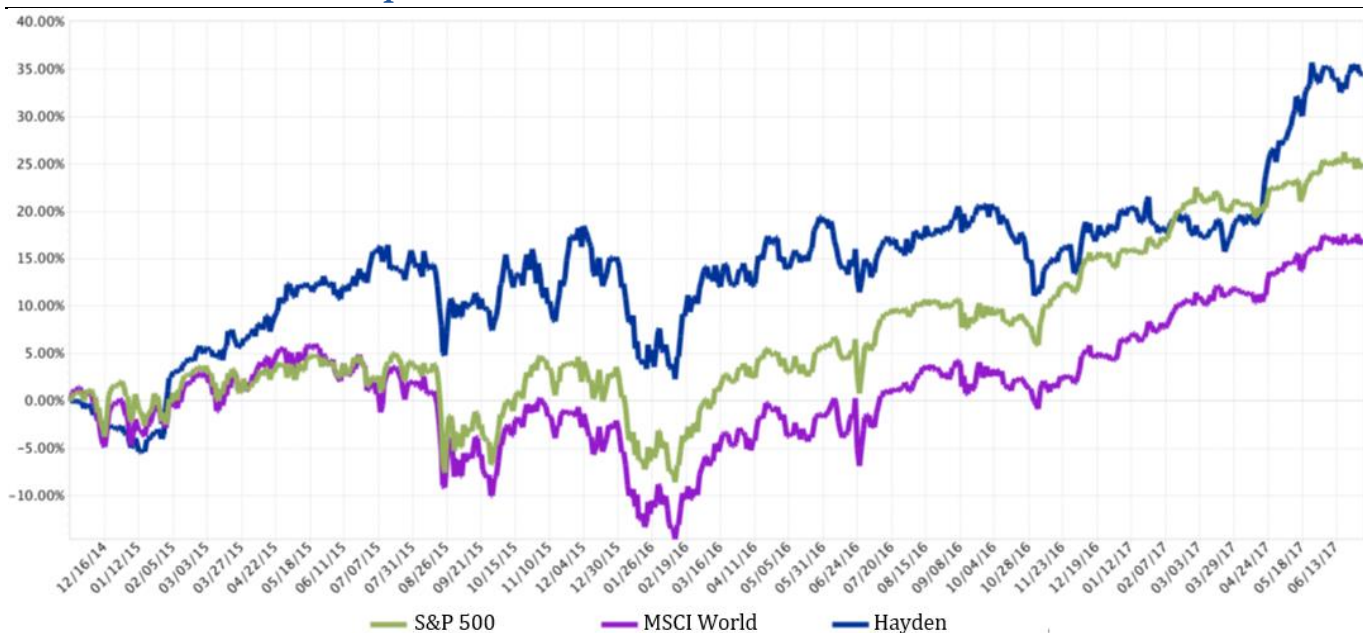
Time Period	Hayden (Net) <sup>1</sup>	S&P 500	MSCI World (ACWI)	Avg. Cash Exposure <sup>2</sup>
4 <sup>th</sup> Quarter <sup>3</sup>	(4.92%)	1.29%	(0.91%)	55.22%
<b>2014</b>	<b>(4.92%)</b>	<b>1.29%</b>	<b>(0.91%)</b>	<b>55.22%</b>
1 <sup>st</sup> Quarter	11.16%	0.95%	2.60%	37.79%
2 <sup>nd</sup> Quarter	6.70%	0.28%	0.22%	23.32%
3 <sup>rd</sup> Quarter	(6.00%)	(6.44%)	(9.27%)	23.92%
4 <sup>th</sup> Quarter	5.14%	7.03%	4.82%	20.34%
<b>2015</b>	<b>17.23%</b>	<b>1.37%</b>	<b>(2.22%)</b>	<b>26.31%</b>
1 <sup>st</sup> Quarter	(0.23%)	1.35%	0.43%	22.53%
2 <sup>nd</sup> Quarter	1.23%	2.46%	1.63%	27.64%
3 <sup>rd</sup> Quarter	5.04%	3.85%	5.10%	32.60%
4 <sup>th</sup> Quarter	(2.06%)	3.82%	1.05%	21.07%
<b>2016</b>	<b>3.90%</b>	<b>11.95%</b>	<b>8.40%</b>	<b>26.03%</b>
1 <sup>st</sup> Quarter	0.96%	6.07%	6.91%	18.75%
2 <sup>nd</sup> Quarter	12.62%	3.09%	4.68%	13.16%
<b>2017</b>	<b>13.70%</b>	<b>9.34%</b>	<b>11.92%</b>	<b>15.95%</b>
<b>Annualized Total Return</b>	<b>11.03%</b>	<b>9.08%</b>	<b>6.34%</b>	-
<b>1 Year</b>	<b>16.97%</b>	<b>17.89%</b>	<b>18.86%</b>	-
<b>Since Inception</b>	<b>31.68%</b>	<b>25.68%</b>	<b>17.55%</b>	<b>24.58%</b>

<sup>1</sup> Hayden Capital returns are net of actual fees. Individual client performance may differ based on fee schedule and date of funding.

<sup>2</sup> Includes Cash and Inverse S&P 500 ETF, which allows us to decrease our long exposure without paying taxes on profitable positions.

<sup>3</sup> Hayden Capital launched on November 13, 2014. Performance for both Hayden Capital and the indexes reflects performance beginning on this date.

## Performance Since Inception



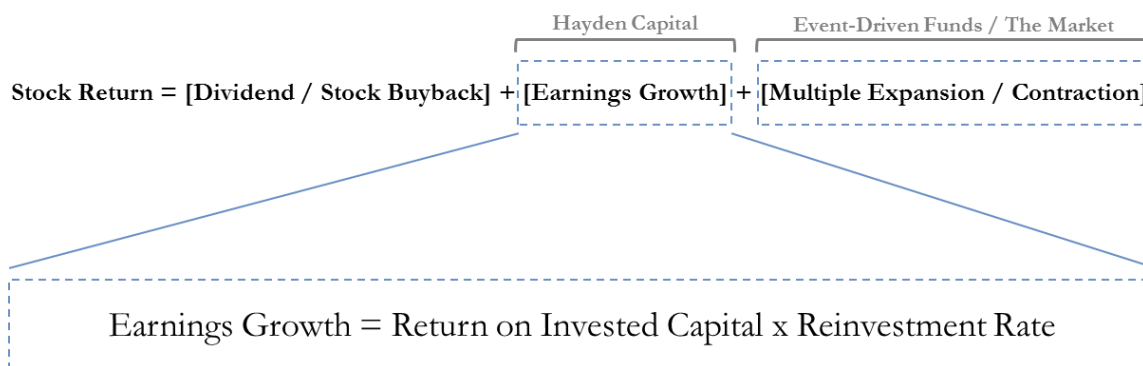
## Earnings Growth = ROIC x Reinvestment Rate

It's a pretty simple formula, although one that's largely ignored by most investors. I've alluded to this before in prior letters, but most investors tend to focus on the right-hand side, "multiple expansion" portion of the equation as a source of returns. This is essentially betting that other investors will pay more for the same asset in the future.

*(I believe this is an unsustainable method of investing and a more detailed discussion of its fallibilities can be found in our Q1 2017 Letter, [LINK](#)).*

### Where We Focus

Sources of stock returns



This method of "investing" has become ever more prevalent in recent years, as the time horizons of fundamental investors shorten (studies indicate the average is 18 months or less). 18 months is far too short of a time frame for positive developments at companies to show up in the form of earnings growth. Long-term value creating projects are not created overnight. There's often *years* of R&D, investment, implementation, and customer adoption, before investors will see the tangible results of these efforts.

Sadly, most investors are like over-active children – easily bored, and without the patience to stick around before moving on to the next hot stock.

Due to this dynamic, most market participants primarily rely upon multiple expansion for their stock returns. To spot this in stock pitches, look for the keywords “multiple re-rating”, “sentiment shifts”, “change in perception”, etc. Even the broader need for a “catalyst” can be grouped in this category.

While our portfolio certainly benefits from this at times, I view multiple expansion as a “bonus” and is never the crux of our thesis. I would be perfectly happy if our companies were never bid up (i.e. the multiple remained the same), and instead returns simply came from the growth in earnings power.

## Earnings Growth Drivers

*Illustrative example*

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Capital Reinvested</b>					
Prior Year Earnings		\$ 20	\$ 23	\$ 27	\$ 32
x Reinvestment Rate		80%	80%	100%	100%
<b>= Addl Capital Reinvested</b>		<b>\$ 16</b>	<b>\$ 19</b>	<b>\$ 27</b>	<b>\$ 32</b>
<b>Earnings Growth</b>					
Existing Capital		\$ 100	\$ 116	\$ 135	\$ 161
+ Reinvested Earnings		16	19	27	32
<b>= Total Capital Investment</b>	<b>\$ 100</b>	\$ 116	\$ 135	\$ 161	\$ 194
x Return on Inv. Capital	20%	20%	20%	20%	20%
<b>= Earnings</b>	<b>\$ 20</b>	<b>\$ 23</b>	<b>\$ 27</b>	<b>\$ 32</b>	<b>\$ 39</b>
<i>memo: Growth Y/Y - Earnings</i>		16.0%	16.0%	20.0%	20.0%

To evaluate the potential for earnings growth, I focus on ROIC x Reinvestment Rate. ROIC, or “Return on Invested Capital”, is the return a company can earn on each dollar it reinvests back into the business. If the return is sufficiently higher than what investors can achieve elsewhere, the money should be used for new projects that expand the company’s operations<sup>4</sup>. Thus the higher the incremental ROIC, the higher I look for the Reinvestment Rate to be.

Note though, that what we should care is about is the returns on *future* projects, not those that took place years ago. Simply looking at the average historical ROIC over the last 10 years from Morningstar isn’t going to cut it. Industry dynamics change, and so does the opportunity set for companies.

So the natural question is, how can we be forward-looking instead of backward looking? Can we collect the data necessary to estimate what the future return on projects will be?

## Gaining An Informational & Analytical Edge

The answer is what I call “data-point analysis”. The idea is if we can have a framework which we believe a company’s opportunities will fall under (i.e. the thesis), we can test the validity of this framework by looking at specific projects which we believe are representative of its economics.

For example, let’s assume an e-commerce company has recently announced it plans to build 100 new warehouses across the country. If we owned 100% of the business, we would naturally have the option of either saving the cash and putting it into our pockets, or building out these warehouses. We would want to know which is the better option. It is no different as a public markets investor (albeit only owning a *piece*, rather than the whole company).

<sup>4</sup> Additionally, this reinvestment is beneficial from a tax perspective. Many investments are expensed through the income statement, which saves on both corporate taxes and income taxes at the investor level.

Thus as investors, the most important thing we want to know is what type of return can we expect, from investing money into this project. If the return's lower than I could get in other similar risk investments (or worse, negative returns), I would rather have the cash in my pocket to invest elsewhere.

It's likely we wouldn't have the time or resources to evaluate all 100 warehouses individually. However, we could single out 5 – 10 of these warehouses, ones which we believe give a representative sample, and run the analysis on those. Although we won't get to 100% confidence, we'll at least be able to get to 80% confidence on whether this is a good or bad project. Crucially, this exercise it will give us insight into the broader capital allocation skills of management. If our analysis starts indicating paltry returns of 2% project ROIC's for example, we should be much more hesitant to hand over our hard-earned capital to the company and / or this management team.

So how do you do this in practice? Let's assume that one of the warehouses is being built in Rochester, NY. This warehouse is meant to replace another one 300 miles further, in order to cut the distance to the customer in half, and deliver goods quicker to households in the region.

The first thing we should do is call the Rochester Chamber of Commerce to get the public filings for this project. Whenever a company plans to build a new warehouse, it needs to get approval by the city. The firm will need to report how many jobs will be created, the average salary per employee (which we can use to estimate labor costs), how much tax revenue it will generate (used to estimate revenues), how large the property will be (used to estimate how many packages it can handle), etc. In public markets investing, where management teams are often reluctant to provide granular details, this type of data is invaluable.

By talking to industry experts, we can also determine how large of a region this size of warehouse can cover (let's assume 100 square miles in this example). With this knowledge in hand, we can then look at US census data to see how many households live within that parameter (let's say 1 million). If on average 5% of households use this company's services, this would imply a coverage of 50,000 households<sup>5</sup>.

In analyzing the prior financials, we were able to back out that on average it previously costed \$7 to ship a package to a customer. Using a rule of thumb of last mile shipping making up 50% of total logistics costs (which we determined by evaluating multiple e-commerce companies and speaking with logistics experts), we can estimate that it used to cost \$3.50 to deliver from the warehouse to the doorstep. By cutting the warehouse distance in half, this should drop to ~\$1.75 per package<sup>6</sup>.

Using company financials, we can see the average customer orders 5x per year. By saving \$1.75 per package, this would equate to a total savings of \$437,500 by building the warehouse (\$1.75 per package x 5 packages per year x 50,000 households).

If the warehouse costs \$2,000,000 to build (which would likely be disclosed in the city documents and / or company filings), then this would equate to an attractive 22% return on capital deployed. If the 5 – 10 warehouses that we examine show similar results, we can get a fairly high degree of confidence that this will be an attractive project.

This example is overly simplistic, and depends upon having a high confidence in our numbers. Additionally, it takes a fair amount of effort and time to put together – which is perhaps why so few investors do it.

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<sup>5</sup> This makes the key assumption that the Rochester area's take-rate is similar to that of the company's average.

<sup>6</sup> Obviously, some of these costs are going to be fixed, so it may not be as large of a discount. However, for simplicity's sake, let's assume all costs are variable.

Nevertheless, it is a useful illustration of how this “data-point analysis” can help us see around corners, and determine where a company’s earnings growth is heading. More significantly, it would give us insight into management’s thought process, and higher confidence in their shrewd capital allocation skills<sup>7</sup>.

*In a small real-life example of this, I was able gain insights into Cimpress’ (CMPR) expansion using this method. Last year, I was browsing Cimpress’ careers website (a favorite place to do some sleuthing into new projects) and noticed they were hiring for a new warehouse in Reno, NV. This seemed odd, and I proceeded to contact the Reno Chamber of Commerce for more information. The below exhibits are what they sent over (all of public record). Notice the objectives, tax, capex, and payroll information provided... information that most analysts would kill for. All months before the project was publicly discussed too ([LINK](#) to full document).*

## Cimpress Reno Facility Proposal - Overview

Dated September 15, 2016

Board Summary		Cimpress USA Manufacturing Incorporated		Date: September 15, 2016
		275 Wyman Street, Waltham, MA 02451		Main Location: Carson City, Nevada
		Jeffrey Snow, Senior Director Tax		
		Manufacturing		
Business Type: New	County: Washoe County	Development Authority Representative: Stan Thomas - EDAWN		
<b>APPLICATION HIGHLIGHTS</b>				
<ul style="list-style-type: none"> <li>- Cimpress USA Manufacturing Incorporated will be expanding their presence in the USA by establishing their first US based manufacturing facility.</li> <li>- The new manufacturing facility could potentially involve approximately \$14m in project investment and the creation of approximately 50-150 net new jobs over 3 years.</li> </ul>				
<b>PROFILE</b>				
Cimpress USA Manufacturing Incorporated is a publicly traded technology and manufacturing company specializing in commercial printing and mass customization of consumer products to more than 17 million customers. The company goes to market with 19 different brands around the world. Cimpress USA Manufacturing Incorporated currently holds 200 computer integrated manufacturing-related patents. The company is currently planning to build their first US manufacturing facility to support growth of their Vistaprint business to better service their customer base in the Western part of the US. Source: Cimpress USA Manufacturing Incorporated				
<b>SIGNIFICANCE OF ABATEMENTS IN THE COMPANY'S DECISION TO RELOCATE/EXPAND</b>				
Cimpress USA Manufacturing Incorporated's consideration to establish their new manufacturing facility in Reno is based upon several factors including the business environment, cost of living and logistical advantages offered by the region. A critical factor, in considering building locating the new manufacturing facility to Reno, is the availability of the State Incentive Program. Due to the need for strategic supply chain management and access to distribution markets, Reno may be uniquely suited for the project. Source: Cimpress USA Manufacturing Incorporated				
<b>REQUIREMENTS</b>	<b>Statutory</b>	<b>Application</b>	<b>Sufficient</b>	<b>% Over / Under</b>
Job Creation	50	50	Yes	0%
Average Wage	\$20.89	\$20.93	Yes	0%
Equipment Capex (5U & MBT)	\$1,000,000	\$12,701,000	Yes	1170%
Equipment Capex (FP)	\$5,000,000	\$12,701,000	Yes	154%
<b>INCENTIVES</b>	<b>Requested Terms</b>	<b>Estimated \$ Amount</b>		
Sales Tax Abmt.	Abated to 2%	\$727,132		
Modified Business Tax Abmt.	50% for 4 years	\$91,450		
Personal Property Tax Abmt.	50% for 10 years	\$475,255		
<b>Total</b>		<b>\$1,293,837</b>		
<b>JOB CREATION</b>	<b>Contracted</b>	<b>24-Month Projection</b>	<b>5-Year Projection</b>	
	50	50	150	
<b>OTHER CAPITAL INVESTMENT</b>	<b>Land</b>	<b>Building Purchase</b>	<b>BTS / Building Improvements</b>	
	\$0	\$0	\$420,000	
<b>ECONOMIC IMPACT ESTIMATES (10-Year Cumulative)</b>				
		<b>Total</b>	<b>Construction</b>	
Total Jobs Supported		239	4	
Total Payroll Supported		\$88,647,237	\$217,386	
Total Output Estimate		\$269,007,032	\$592,639	
Estimate includes jobs, payroll & output by the company assisted as well as the secondary impacts to other local businesses.				
<b>NEW TAX REVENUE ESTIMATES (10-Year Cumulative)</b>				
		<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
<b>Local Taxes</b>				
Property		\$920,756	\$2,854,220	\$3,774,976
Sales		\$15,629	\$1,465,029	\$1,480,658
Lodging		\$0	\$77,780	\$77,780
<b>State Taxes</b>				
Property		\$41,817	\$152,580	\$194,377
Sales		\$259,450	\$549,613	\$809,063
Modified Business		\$652,998	\$413,473	\$1,066,471
Lodging		\$0	\$2,244	\$2,244
<b>Total</b>		<b>\$1,890,680</b>	<b>\$5,514,919</b>	<b>\$7,405,599</b>
<b>IMPACT ASSESSMENT</b>	<b>Economic Impact per Abated Dollar</b>	<b>New Total Tax per Abated Dollar</b>		
	\$208	\$5.72		
<b>EMPLOYEE BENEFITS</b>				
<ul style="list-style-type: none"> <li>- Percentage of health insurance covered by company: 75%.</li> <li>- Health care package cost per employee - \$10,134 annually with options for dependents.</li> <li>- Overtime, PTO/Sick/Vacation, Retirement Plan, Merit Increases, Bonus, Tuition Assistance.</li> </ul>				
<b>NOTES</b>				
<ul style="list-style-type: none"> <li>- Percentage of market outside of Nevada: 96%.</li> <li>- Considering Las Vegas, NV and Salt Lake City, UT</li> </ul>				

<sup>7</sup> I would argue that this is more important than the outcome of the specific project itself. Since it’s impossible to analyze every single project a company undertakes, we as investors often need to trust in the capital allocation abilities of management. Therefore, we need to ensure management is thinking clearly before initially partnering with them. In this aspect, the saying “trust, but verify” is most apt.

# Cimpress Reno Facility Proposal - Positions & Salaries

Dated September 15, 2016

## 5(B) Employment Schedule

Company Name: Cimpress USA Manufacturing Incorporated

County: Washoe

### Section 1 - Full-Time Equivalent (FTE) Employees

Directions: Please provide an estimated list of full time employees [columns (a) through (d)] that will be hired and employed by the company by the end of the first eighth quarter of new / expanded operations. For example, if the effective date of new / expanded operations is April 1, 2015, the date would fall in Q2, 2015. The end of the first eighth quarter would be the last day of Q2, 2017 (i.e., June 30, 2017). Attach this form to the Incentives Application.

A qualified employee must be employed at the site of a qualified project, scheduled to work an average minimum of 30 per week, if offered coverage under a plan of health insurance provided by his or her employer, is eligible for health care coverage, and whose position of a "primary job" as set forth in NAC 360.474.

(a) New Hire Position Title/Description	(b) Number of Positions	(c) Average Hourly Wage	(d) Average Weekly Hours	(e) Annual Wage per Position	(f) Total Annual Wages
Plant Manager	1	\$60.13	40	\$125,070.40	\$125,070.40
Shift Supervisor	3	\$42.82	40	\$89,065.60	\$267,196.80
Accounting Manager	1	\$37.36	40	\$77,708.80	\$77,708.80
Human Resources Specialist	1	\$31.51	40	\$65,540.80	\$65,540.80
Printing Press Operator	8	\$19.92	40	\$41,433.60	\$331,468.80
Cutting Machine Operator	23	\$19.08	40	\$39,644.80	\$911,830.40
Shipping Coordinator	11	\$14.73	40	\$30,638.40	\$337,022.40
Material Handler	2	\$14.73	40	\$30,638.40	\$61,276.80
<b>TOTAL</b>	<b>50</b>			<b>\$20.93</b>	<b>\$2,177,115.20</b>

### Section 2 - Employment Projections

Directions: Please estimate full-time job growth in Section 2, complete [columns (b) through (c)]. These estimates are used for state economic impact and net tax revenue analysis that this agency is required to report. The company will not be required to reach these estimated levels of employment.

(a) Year	(b) Number of FTE(s) Projected	(c) Average Hourly Wage	(d) Payroll
3-Year	100	\$21.18	\$4,405,440.00
4-Year	150	\$22.00	\$6,864,000.00
5-Year	150	\$23.10	\$7,207,200.00

# Cimpress Reno Facility Proposal - Capital Equipment List

Dated September 15, 2016

## 5(A) Capital Equipment List

Company Name: Cimpress USA Manufacturing Incorporated

County: Washoe County

### Section 1 - Capital Equipment List

Directions: Please provide an estimated list of the equipment [columns (a) through (c)] which the company intends to purchase over the two-year allowable period. For example, if the effective date of new / expanded operations begins April 1, 2015, the two-year period would be until March 31, 2017. Add an additional page if needed. For guidelines on classifying equipment, visit: [tax.nv.gov/LocalGovt/PolicyPub/ArchiveFiles/Personal\\_Property\\_Manuals](http://tax.nv.gov/LocalGovt/PolicyPub/ArchiveFiles/Personal_Property_Manuals). Attach this form to the Incentives Application.

(a) Equipment Name/Description	(b) # of Units	(c) Price per Unit	(d) Total Cost
Large Format Digital Press	2	\$820,000.00	\$1,240,000.00
Large Format Digital Cutter (w/vacuum)	3	\$180,000.00	\$540,000.00
Large Format Laminator	1	\$20,000.00	\$20,000.00
Large Format Digital Press - Large Banners	2	\$30,000.00	\$60,000.00
Large Format Digital Press - Small Banners	3	\$29,000.00	\$87,000.00
Large Format - Welding	1	\$112,000.00	\$112,000.00
Large Format Grommeting	2	\$13,000.00	\$26,000.00
Large Format Box on Demand	1	\$180,000.00	\$180,000.00
Small Format Digital Press	3	\$1,250,000.00	\$3,750,000.00
Small Format Digital Chiller	4	\$35,000.00	\$140,000.00
Small Format UV Coater	4	\$162,000.00	\$688,000.00
Small Format Guillotine Cutter	4	\$135,000.00	\$540,000.00
Textiles Press	4	\$400,000.00	\$1,600,000.00
Textile Dryer	2	\$40,000.00	\$80,000.00
Garments Folder	1	\$90,000.00	\$90,000.00
Laser Engraver	1	\$115,000.00	\$115,000.00
Embroidery Machine	6	\$16,500.00	\$99,000.00
Digital Press (Mugs)	1	\$28,000.00	\$28,000.00
Wrapping Machine	2	\$140,000.00	\$280,000.00
Shrink Tunnel	2	\$23,000.00	\$46,000.00
Post-processing Equipment	1	\$600,000.00	\$600,000.00
Maintenance Workshop & Quality	1	\$100,000.00	\$100,000.00
Warehouse Racks	1	\$50,000.00	\$50,000.00
Technical Installations - MEP	1	\$1,000,000.00	\$1,000,000.00
Data Center and Network	1	\$450,000.00	\$450,000.00
Technical Installations - Access Control	1	\$60,000.00	\$60,000.00
Other Fit out Civil Works	1	\$800,000.00	\$800,000.00
<b>TOTAL EQUIPMENT COST</b>			<b>\$12,701,000.00</b>

Is any of this equipment\* to be acquired under an operating lease?  Yes  No

\*Certain lease hold equipment does not qualify for tax abatements

Having an informational edge is indeed harder in today's sea of (near instantaneous) news. However, there's still a lot of useful data-points to be uncovered (and thus insights to be gleaned) out there if you look hard enough. The previous case is only a small example of this.

The more information you have, the higher the quality your investment analysis will be. Putting this together within a broader investment framework, it can provide valuable insights to reach conclusions that few investors can see.

## Portfolio Updates

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**Amazon (AMZN):** Amazon announced it would be acquiring Whole Foods in June. The deal is attractive, as there very strong overlap between the Whole Foods customer base, and that of Amazon Prime. Both tend to skew towards higher income, urban households. This overlap creates numerous synergies, including collecting more data on the purchasing habits of these types of customers, cross-selling opportunities (since many Whole Foods households are already Prime members), and a higher likelihood of these customers adopting online grocery shopping.

Additionally, while many in the media are focusing on the \$13.7BN purchase price, and the rubble this will create in the grocery space, I find the logistics benefits this deal provides far more interesting.

My working framework for e-commerce companies is that at its core, these are logistics businesses. If you look at these companies' financial statements, shipping and fulfilment is typically the largest operating expense. The value-add of a retailer is simply taking a product from the manufacturer, and getting it as close to the customer as possible, where they can buy it conveniently. Twenty years ago, this was to a brick and mortar store in their town. Nowadays, it's almost as cheap to deliver to the customer's doorstep.

If a company has structurally lower costs than its competitors do, it can afford to sell at a lower price, which in turn leads to new customers. This then allows for lower shipping costs due to increased customer density, and the "flywheel" begins again. Those with the lowest cost of shipping will be the ultimate winners.

As an example, you're able to buy the same Tide Laundry detergent from Amazon, Wal-Mart, your local convenience store, or a plethora of other options. It's the exact same product. And when selling a commodity product that can be bought anywhere, the differentiating factors for customers are going to be *Price* and *Convenience*.

Both of these factors are driven by scale efficiencies (i.e. the benefits that come from being larger). Likewise, the more laundry detergent you sell, the cheaper each unit will cost, and hence the lower the *price* you can offer.

In the world of e-commerce, *convenience* is primarily measured by how long it takes an item to arrive, after placing the order. The more items you ship, the cheaper the per unit shipping cost will be (and thus allow you to invest more money in faster shipping).

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After examining numerous e-commerce companies, we've noticed a pattern. Shipping and fulfillment costs typically make up ~20% of revenues, with half of this (~10%) being allocated to of "last mile" (I used these numbers in the previous example). Amazon is no different.

In the scope of Whole Foods, the beauty of the transaction is that, if online grocery shopping takes off, it will lower the shipping cost for *all* of Amazon's goods (not just grocery), since shipping costs are driven by order

density (both geographic and across time). And since Americans buy groceries on average 1.5x per week, this would certainly drive up the density<sup>8</sup>.

Very similar to the warehouse example outlined previously, this increased density will drive down the last mile costs. If Amazon is successful in grocery delivery, the odds of two packages being delivered to the same neighborhood increases dramatically (vs. just one house getting a package). This means costs such as fuel, labor, truck depreciation, etc. can be shared among two customers instead of one.

If we use the (very rough) numbers above, I estimate that Amazon has the potential to save \$4.2BN on shipping costs alone. For instance, there are ~80M Prime members in the US<sup>9</sup>. Assuming \$3.50 in last mile shipping cost, that results in a \$1.75 savings if it's shared among two households. I estimate Prime members order from Amazon ~2.5x per month, and spend an average of \$1,200 per year<sup>10</sup>. Multiplying it together, this comes out to a \$4.2BN savings, or a 31% return on investment<sup>11</sup>.

On top of this, this doesn't include a multitude of other benefits too – including in-store pickup, new services, greater customer mindshare, increased order frequency, more purchasing power over suppliers, etc. All this will result in an even higher return on investment. It seems like Amazon + Whole Foods will be an attractive combination.

*Note: Alibaba is already pioneering a similar model in China, with its “Hema” stores. Early results indicate that these tech-enabled stores have sales 3-5x higher per square foot than traditional supermarkets<sup>12</sup>. To see the future of grocery shopping, I'd recommend watching this Alibaba Hema video ([LINK](#)).*

*Additionally, this is an example of why I believe investing globally gives us an edge at Hayden. By looking across geographies, we're often able to gain insights from international companies that are further along the technology curve, and apply these findings to domestic markets (and vice versa). It's a great advantage when you're able to peer into the future.*

**JD.com (JD):** Over the last few months, we have been building a new position in JD. JD.com is China's largest business-to-consumer (“B2C”) company, and expected to achieve over \$50BN in sales this year.

Our thesis for the company is consistent with our broader e-commerce framework – where retail is essentially a logistics business, and those with the lowest cost structure (and therefore passing on lower prices to consumers) will win.

Commonly known as the “Amazon of China,” JD has been doing just that. In the last few years, the company has been rapidly taking market share from Alibaba based upon its promise of faster delivery times, authentic quality products, and great customer service.

The key to this is JD's one-of-a-kind logistics network, first built in 2007. In 2007, China's logistics industry was extremely fragmented (and still is), with thousands of delivery operators – many of them under a franchised model. There wasn't a UPS or Fedex to manage the solution from end-to-end.

Because of this, the biggest complaint from customers was that of slow shipping times and even packages which never arrived. Seeing this bottleneck to customer satisfaction, JD recognized an opportunity and chose to build one itself.

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<sup>8</sup> Wall Street Journal, “Amazon Will Free You From The Minivan” ([LINK](#))

<sup>9</sup> Business Insider, “The Number of Amazon Prime Members Has Reportedly Doubled In the Past Two Years” ([LINK](#))

<sup>10</sup> Marketing Land, “30% of Prime Members Order from Amazon Every Week” ([LINK](#))

<sup>11</sup> 80M Prime members x 2.5x orders per month x 12 months x \$1.75 per order = \$4.2 Billion / \$13.7 Billion purchase price = 30.7% ROIC.

<sup>12</sup> Alizila, “Hema Supermarket Offers Shoppers New Retail Experience” ([LINK](#))



Over the last 10 years, JD has invested billions into its logistics network. This has allowed the creation of initiatives such as the “211 program,” where orders placed before 11am are delivered the same day, and orders placed by 11pm are delivered by 3pm the next day. Lately, JD has even begun wide-spread drone deliveries and is the first in the world to do so ([LINK](#)).

Alibaba on the other hand, still relies upon a partnership of third-party carriers (each with their own incentives and reluctance to help one another), to deliver its packages<sup>13</sup>.

This type of instant gratification is habit-forming, and very hard for competitors to replicate. After Amazon Prime popularized two-day shipping, it forced many competitors to step up their game as well (and incurring higher costs in the process). It’s hard to go back to waiting a week for your laundry detergent, when you can have it the same day via Amazon Prime Now or JD.com.

This instant gratification and higher expectations are becoming the norm in China, as domestic consumption picks up and consumers become wealthier. GDP per capita is growing over 6% a year, and has increased from just \$2K per person to over \$8K per person in the last decade. On top of this, JD’s customers skew much higher (+\$15K), typically focused on the higher-income, urban households. As these trends take place, consumers are increasingly looking for authentic brand-name goods, and better service (quick delivery, hassle-free returns, etc). JD is well positioned to capitalize upon this trend.

Evidence can be seen in JD’s market share gains, which have steadily grown 3 - 4% a year. Recently it reached 25% of China’s B2C market in 2016, vs. Alibaba’s 57%<sup>14</sup>. This is a 47% increase from just 3 years ago, when JD only had 17% share<sup>15</sup>.

On top of this, China’s broader e-commerce industry is growing at 19% y/y<sup>16</sup>. The company is successfully taking a bigger piece of a rapidly growing pie.

In terms of the stock / market dynamics, there seems to be a large opportunity in US-listed Chinese ADRs. From my conversations with US-based investors, the vast majority seem scared to invest in Chinese companies, due to concerns about fraud, lack of knowledge of the market, Variable Interest Entity structures, macro concerns, etc. The reputation of Chinese reverse-merger frauds from the 2009-11, seemed to have created a narrative that *all* Chinese companies are to be avoided (despite JD being one of China’s largest tech companies, versus the fraudulent sub-\$100M stocks of the early 2010’s).

In addition to these conversations, the “narrative” can also be seen when examining the top holders of US-listed Chinese names. Except for one large hedge fund family, there are few Western investors in these stocks (the list is almost entirely Asia dedicated funds). On the flip side, the Chinese customers who know and use these companies every day are unable to invest, due to capital controls restricting funds from going outside China.

This creates a favorable dynamic – one where the highest quality Chinese companies are without a natural shareholder base, resulting in very attractive valuations.

Where else can you find the #2 e-commerce company, serving the world’s largest population, with a highly loyal customer base, huge logistics advantage, and strong industry tail-wind (19% y/y growth)... all trading at

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<sup>13</sup> Business Insider, “Alibaba Battles SF Express Over Customer Data” ([LINK](#))

<sup>14</sup> eMarketerRetail.com, “Alibaba’s Tmall Maintains Reign Over China’s Retail Ecommerce” ([LINK](#))

<sup>15</sup> iResearchChina, “E-commerce in China – The Multi-Billion Dollar Game-Changing Industry” ([LINK](#))

<sup>16</sup> Wall Street Journal, “JD.com’s Growth Outpaces China’s E-Commerce Market” ([LINK](#))

1x EV / Sales (~20x long-term EBIT), and growing at 40% y/y? We were able to acquire shares of JD.com at an average cost of ~\$37.

At the risk of looking foolish, I'll go on record and say I believe there's a good chance JD can become the #1 Chinese online retailer within the next ten years.

**Zooplus (ZO1):** In April, PetSmart bought Chewy.com for \$3.35BN. This data point is interesting, as it gives an indication of what Zooplus may be worth to a strategic buyer.

The two companies are remarkably similar – both have 50% online market share, did ~\$900M in sales in 2016, have Amazon as their largest competitor, and are equally loved by their customers. The only difference is geographic focus – Chewy operates in the US, while Zooplus is in Europe.

Despite the similarities, Chewy was taken-out at a valuation twice that of Zooplus' current market multiple (2.2x EV / Sales vs. ~1x EV / Sales respectively).

*I described the Petsmart / Chewy deal in further depth in our 2017 Q1 Investor Letter. For more details, please see refer to the letter for reference ([LINK](#)).*

I never under-write an investment based upon hopes of multiple re-rating. However, it is always a nice “optionality” to have, if the market chooses to pay up for one of our assets. This deal is an indication of such a possibility.

Since our purchase late last year, Zooplus' share price has risen over 30%. However, this appreciation was purely driven by an equal increase in earnings power. The fact is, shares still trade at the same valuation multiples at which we bought it at, and thus are just as cheap today as it was when we began our purchases.

In the meantime, I trust Zooplus will continue taking market share, increasing their customer loyalty, and growing the company's value at 20 – 25% for the foreseeable future.

## Conclusion

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Lastly, I would like to welcome Jimmy Xiao, who has joined the team as a summer intern. He is studying finance and statistics at NYU's Stern School of Business (notice a trend yet?...).

As an investor, much of my time is spent thinking about the development of business models, industry frameworks, where to invest within them, and understanding where sources of investment edge may come from and why. Crucial to this process is voracious reading, and having the time / space to step back to think about the broader picture.

I believe these aspects are something that business schools and most entry-level analyst roles fail to teach, but are indispensable skills to learn as a long-term investor. I know for myself, it took me longer than I'd care to admit, before recognizing the value of these habits.

For this reason, I have begun an “Investor Reading Curriculum”, concurrent with “hands-on” analytical projects. My hope is that this will help accelerate the learning curve for these promising investors.

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As always, I'd also like to thank our investors for their continued support and trust in managing their hard-earned assets. While in the short-term our results may occasionally be volatile, I know our profits over time will be worth it.

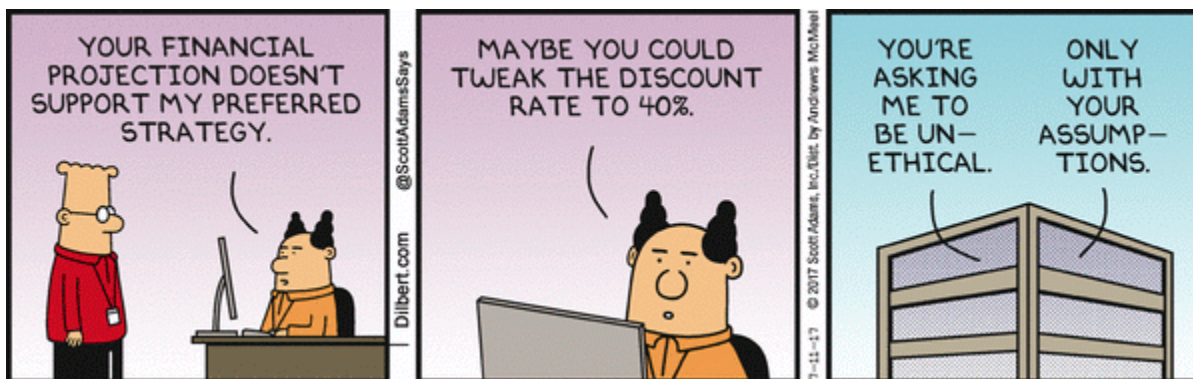
On the operational front, Hayden Capital’s minimum investment will be increasing to \$50K going forward (which I believe is still very low compared to industry standards). Ever since starting Hayden Capital, I have believed in transparency, liquidity, and the “democratizing” of our investment strategy – aspects that I believe will create a better experience for our clients.

Along these lines, I believe in keeping minimums low, to allow investors of all wealth levels to join in Hayden’s investing journey. The quality of investor has always mattered more to me than how big of a check they can write.

However, as firm assets grow, it is in the best interest of existing clients to raise minimums for new relationships. This ensures our existing clients will continue receiving the same quality of service they have come to expect, as we expand. If our success continues, we may need to raise the minimums again.

I’m always happy to meet new investors who you think may benefit from our services, or would like to learn more about our investment philosophy. If you know anyone who may be a good fit, please have them reach out.

Lastly, please feel free to reach out if there is anything I may help with. I’m always available to chat via email, phone, over coffee (or Twitter, Facebook, Instagram, WeChat, KakaoTalk, Slack, or any other service the cool kids are using nowadays).



Sincerely,

Fred Liu  
Managing Partner  
[fred.liu@haydencapital.com](mailto:fred.liu@haydencapital.com)

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