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Fall 2017

## Research Project in Finance: KSS Kohl's Corporation

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# KSS

# Kohl's Corporation

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## Company Description

Kohl's Corporation (\$KSS) is a discount department store. Kohl's was founded in 1927 as a grocery store, building their first department store in 1962 in Menomonee Falls, Wisconsin. In 1972, British American Tobacco purchased an 80% stake in Kohl's and took complete control. In 1986, due to the mismatch between Kohl's and British American Tobacco's strategies, Kohl's was purchased by a group of investors led by Kohl's management. From 1988 to 1992 when they went public, Kohl's increased their sales from \$388 million to \$1 billion. Kohl's completed its initial public offering for 11.1 million shares in May of 1992, listing on the New York Stock Exchange under the KSS symbol that is still used today. At the time of their IPO, KSS had just below 100 department stores. By 2000, Kohl's had nearly 300 stores in 25 states. Today, Kohl's operates over 1150 locations in 49 states.

In 2006, Kohl's sold their credit card line to J.P. Morgan Chase for \$1.5 billion in order to raise money to open new locations. In 2011 Kohl's announced they would be issuing their first dividend. In 2011, Kohl's also replaced J.P. Morgan Chase with Capital One as their credit card processor for an undisclosed amount.

Kohl's sells a range of products including shoes, clothing, home goods and more. They focus on discounted merchandise, selling bargains from companies like Nike, Under Armor, Adidas, Marc Anthony and more. They have a diffusion line (secondary low price lines from high end designers) from Vera Wang called Simply Vera. Kohl's also has a few private brands like Sonoma, Croft and Barrow and Apt 9. About half of their revenue comes from the private brands. With this strategy, Kohl's targets middle-income shoppers. Kohl's is able to maintain low prices by utilizing a

low cost structure, by keeping limited staff in stores, and through the use of a centralized process for their buying, distribution and advertising. Kohl's has also come up with innovative ways to sell their products and set up their stores, like Kohl's Cash and the "racetrack" layout of their stores.

Within the past few years, KSS has made major changes within their business. There have been large shifts within the retail industry over last few years, specifically with respect to the growth in E-Commerce. Kohl's has strived to become a user-friendly, omnichannel retailer. The retail industry used to be a relatively stable industry, but has become a fast-paced space that has made tectonic shifts as of late.

In 2014, Kohl's introduced "The Greatness Agenda". According to Kohl's, "The Greatness Agenda is a strategic framework built on five pillars: amazing product, incredible savings, easy experience, personalized connections and winning teams. Ultimately, our goal is to be the most engaging retailer in America. We will achieve that goal by focusing on our customers and creating product assortments that excite them. By building genuine, lasting relationships with them. By designing easy, seamless shopping experiences no matter how our customer shops. By helping customers get more from every dollar they spend at Kohl's. And by building teams of engaged and talented Associates. Kohl's is on the path to greatness."

[Source: [Kohl's Corporate](#)]

Throughout the past year, Kohl's has outlined major changes to be made to their management team. Kevin Mansell, the CEO since 2008 and President since 1999 will be stepping down from the company in May of 2018. Sona Chawla and

Michelle Gass will replace him. Kohl's also brought two new executive team members on in the middle of 2017. Of the six officers at Kohl's Corporation, only 1 has been in their current position more than 2 years and none of them have been in their current positions for more than 3 years. That being said, many of them have a long history with the company and within the retail industry.

### Management

<b>Executive</b>	<b>Position</b>	<b>Biography</b>
Kevin Mansell	Chairman of the Board, President, CEO	Effective May 16, 2018 Mansell will no longer be a part of KSS. Mansell has served as Chairman since 2009, CEO since 2008 and President/Director since 1999. Mansell began in retail in 1975.
Sona Chawla	President-Elect, COO	Joined KSS in 2015 as COO. She previously served as CMO of Walgreens, and before that she was President of E-Commerce at Walgreens.
Michelle Gass	CEO-Elect, Chief Merchandising and Customer Officer	Joined KSS in 2013 as CCO, and has been the CMO since 2015. Previously Gass was in management at Starbucks since 1996.
Bruce Besanko	CFO, Principal Financial and Accounting Officer	Began his role with KSS in July of 2017. Besanko has more than 21 years of previous experience in financial leadership of retailers. Besanko was COO and CFO of SUPERVALU, as well as CFO of OfficeMax.
Richard Schepp	Chief Administrative Officer	Schepp has been CAO since 2015. Previously he was Senior VP of HR and General Counsel and Secretary from 2013. He started has EVP, General Counsel and Secretary in 2001. Schepp began his career in retail in 1992.
Greg Revelle	Chief Marketing Officer	Revelle joined KSS in April 2017. Previously, Revelle was CMO of Best Buy Co., Inc. Before Best Buy, Revelle served as CMO of AutoNation. Before AutoNation Revelle was a VP at Expedia and an investment banker for Credit Suisse.

Source: Reuters Eikon Management

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- Well known retailer</li> <li>- Large customer base</li> <li>- Centralized systems</li> <li>- Have a degree of protection from a recessionary environment due to being a discount store</li> <li>- Foot traffic in KSS stores is high</li> <li>- KSS has a high quality rewards program that keeps members coming back</li> </ul>	<ul style="list-style-type: none"> <li>- Financial ratios have been weakening for &gt; 10 years</li> <li>- All retailers have seen struggles over the past few years</li> <li>- Management overhaul leaves a large unknown for the company</li> <li>- Currently have an unsustainably high dividend payout ratio</li> <li>- Have a store base well above the industry average</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- “Amazon Effect” has caused nearly all retailers to be sold off; this provides a potential buying opportunity</li> <li>- The new management could be exactly what KSS needed to turn their business around</li> <li>- Have begun doing more and more business with Amazon, potentially making them a takeover target as well as protecting them from destruction via Amazon</li> </ul>	<ul style="list-style-type: none"> <li>- Susceptible to the “Amazon Effect”</li> <li>- Highly competitive space</li> <li>- As customers push harder for e-commerce, KSS margins could deteriorate further</li> <li>- Do not sell overly differentiated products; even their private lines can be found on Amazon</li> <li>- Stock price would get crushed if they had to sacrifice the high dividend yield</li> </ul>

## Industry Analysis

Kohl's Corporation (KSS) is a diversified department store retail operator, focusing on discount department store sales. According to Reuters Eikon on 11/12/17, year-to-date the diversified retail industry has seen a total return of ~13%. This can be compared to the overall Cyclical Consumer Goods and Services space in the United States, which has returned ~28% year to date.

The retail industry is a cyclical industry that is a subsection of the consumer goods and services space. Since the retail industry is cyclical, we must look at our macroeconomic analysis to determine where the industry is currently. Cyclical industries move hand-in-hand with the overall economy. The reason retail is a cyclical industry is because when the economy is growing, employment and wages typically increase as well. When there are more people working and more people are making more money, they have more disposable income. When you have an increase in disposable income, you are more likely to buy new clothes, shoes, etc. On the contrary, during a recession people are more likely to make their old clothing last a little longer. Consumers will be less inclined to go splurge on new purchases because a recession is typically accompanied by an increase in unemployment and a decrease in consumer sentiment.

It is my opinion that the economy is poised to continue to perform well in the short-term, but that we will be in a recessionary environment in the medium-term. According to The Balance, "2017 will be a prosperous year as we continue to say goodbye to the effects of the financial crisis. Be on the lookout for irrational exuberance in the stock market. That usually signals the peak of the business cycle.

That means another recession is probably two or three years out. It all depends on whether President Trump's tax cuts will create the jobs he promised."

[Source: [The Balance](#)]

If that is the case, the retail industry will be due for a pullback within the medium-term as well. That being said, I believe firms that focus on selling discounted products like Kohl's Corporation will be less affected by a recession than full price retailers. The reason for this opinion is that clothing is an essential part of life. When there is a recession, people will still need to purchase clothing. In a recessionary environment I believe people will be more inclined to try and purchase clothing at the lowest possible price, rather than splurging on luxury items.

One indicator we can look at when considering the retail industry is the Advance Monthly Sales for Retail and Food Services as published by the US Census Bureau. This survey gives an early estimate of monthly sales for retail and food services companies in the US. This can be a useful indicator because it gives an indication of how employers believe their sales are going to be affected month to month. The reason I like the advance survey is because it has a degree of employer sentiment to it. If employers believe the industry is poised to take off, they will forecast higher advance sales. The advance sales survey has shown an increase in the data over the past 3 reported months YoY (July, August, September), with a relatively large increase in September by 1.6%. One issue with using this survey as an indicator is that it has a lag between when the data period is and when it is released. The lag is typically equal to about a month and a half. It is my opinion that the recent data shows strength in the retail industry.



Another important ratio to look at for the department store retail industry is the E-commerce Retail Sales as a Percent of Total Sales ratio. Since the beginning of 2000 e-commerce has increased from 0.8% of total sales to the current level of 8.9%. This is important to look at when considering how Kohl's is positioning their business to accommodate online shoppers going forward.

Exhibit 1: E-Commerce Retail Sales



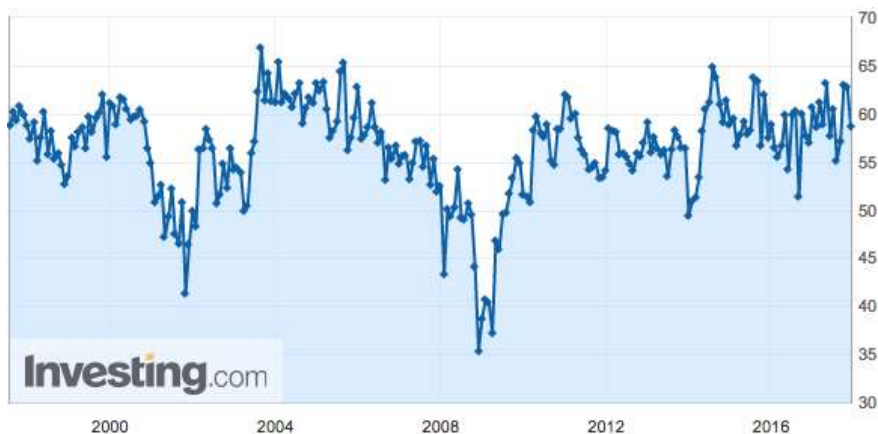
[Source: [U.S. Bureau of the Census](#)]

This e-commerce percentage should continue to increase going forward so Kohl's must continue to evolve in order to provide the most value possible to consumers. One of the biggest conversations surrounding the retail industry today is the "Amazon Effect". The retail industry has changed rapidly over the past decade as a result of the expansion of E-Commerce. As technology continues to progress and expand, people want things faster and in a more convenient way. This has led to the impressive growth of Amazon. Amazon has led the way in E-commerce, and is now leading the way in customer satisfaction techniques like two day shipping, etc. Due to the composition of Amazon's business they are also able to sell products at a lower price than most physical retailers. This has led to retail stocks being crushed, as investors seem to fear that Amazon will force several retailers out of business. Over the past few years, there have been several retail bankruptcies. Once

successful firms like Gordman's, Gander Mountain, Toys R Us and Payless ShoeSource have all filed for Chapter 11 bankruptcy in 2017. Other major retailers like Macy's and JC Penney's have seen their stock prices decrease by 43% and 62% respectively. This has caused a panic among the markets that several other retailers, including retail giant Sears, could be in long-term trouble of bankruptcy. I believe this Amazon Effect has caused some retailers to be unnecessarily sold off. I believe there is a potential "baby thrown out with the bathwater" situation setting up within the retail industry.

An important indicator for the retail industry is the Institute of Supply Management (ISM) Non-Manufacturing New Orders. This is a leading indicator that tracks the activity of the non-manufacturing side of the economy. A reading below 50 signifies a contraction of the economy while a reading above 50 signifies growth. The index has been consistently above levels of 50 since June of 2014, and its recent reading of 63 is near its highest level of 66.9. This indicates that the economy and the subsequent retail industry should continue to grow in the near term.

Exhibit 2: ISM Non-Manufacturing New Orders



[Source: [ISM via Investing.com](#)]

Another indicator to watch for the retail industry is the Consumer Sentiment index. The Consumer Sentiment index has increased significantly since the 2008 recession, but has been relatively flat since February of 2015. The Consumer Sentiment survey is important to the Retail industry because if the general public has a positive attitude about the direction of the economy in the near-term, they are more likely to spend their disposable income on new items rather than save their funds. This will typically help the retail and diversified retail industry. The Consumer Sentiment index will be discussed further below.

The National Retail Federation recently revised down their 2017 sales forecast at the beginning of September. The Federation lowered their sales forecasts to a 3.2-3.8% growth from 3.7-4.2%. Reuters reported that the downward revision was due to “shoppers dropping their visit to malls, seeking steep discounts and preferring shopping on online retailers for the convenience the medium provides.”

[Source: [Thomson Reuters](#)]

Another forecast from Kiplinger in October sees sales increasing 3.8%, equal to the 2016 increase. They forecast a 15% increase in E-Commerce sales and a 1.8% increase in In-store sales (minus building materials). This data shows the importance of Kohl's and others progress towards continued improvement in their online sales options, in order to take part in the E-Commerce growth. Kiplinger also forecasts 2018 sales growth of 4% (ex. gasoline), an increase of 0.2% over the 2017. This forecast shows that Kiplinger sees the economy and retail industry continuing to grow in the near-term, in line with my previously stated forecast.

[Source: [Kiplinger](#)]

I continue to believe that the retail industry will grow alongside the general economy over the near term. In the medium term, I see a pullback in the macroeconomy, causing a subsequent recession in the retail industry. That being said, I believe discount retailers like Kohl's is poised to perform better throughout the next recession than other major retailers due to their low and affordable prices, while still providing high quality goods.

### **Porter's Five Forces Analysis**

**Competition in the industry** – Within the retail industry the competition and rivalry is high. Kohl's faces heavy pressure from other department stores, discount retailers, and online retailers. Kohl's and others within the retail industry are in constant competition to get the edge over their competition. From rewards programs to store set-up, each retailer is trying to differentiate themselves while keeping up with the changing landscape of the industry.

**Threat of New Entrants** – The threat of new entrants into the retail industry is low. In order to create a brand like Kohl's, there are huge capital requirements because you need high amounts of inventory, lots of storefronts, and an extensive distribution system. On top of that, a new entrant would have to develop agreements with major apparel and home goods manufacturers that would take time. These problems protect Kohl's and the retail industry from new entrants.

**Bargaining Power of Suppliers** – Kohl's has a diverse product mix of both nationally recognized brands and private label products. Kohl's does not have a heavy supplier concentration, so they have the ability to drop a supplier relatively

easily if they try to raise prices too much. This protects Kohl's from the bargaining power of suppliers.

**Bargaining Power of Customers** – Kohl's has a very large customer base. While the base is not overly diverse (the majority of Kohl's shoppers are middle-class), it is a large base. There is a minimal amount of customer concentration at Kohl's. With that in mind, there is nothing stopping Kohl's customers from going somewhere else for their products. The switching costs at Kohl's and within the retail industry are nearly zero. This makes the bargaining power of customers moderate because Kohl's must price their items in line with customer expectations otherwise the customers will go to the next closest place. The rise of E-commerce has increased the bargaining power of customers as well. More and more customers are demanding options like two day shipping from e-commerce. Online shopping has also made it much easier for customers to locate where the best deal is. This is different than in the past because previously customers would not be able to quickly search whether the Kohl's price was comparable to other stores. These reasons are why the bargaining power of customers is moderate for Kohl's and its competitors.

**Threat of Substitutes** - The threat of substitutes is high for Kohl's and the rest of the retail industry. The products Kohl's sells, whether it be apparel or home goods, is not a differentiated product. The only exception is their private label goods available only at Kohl's. The majority of the products sold at Kohl's can be found elsewhere, and therefore the threat of substitutes is high because customers can buy similar products elsewhere.

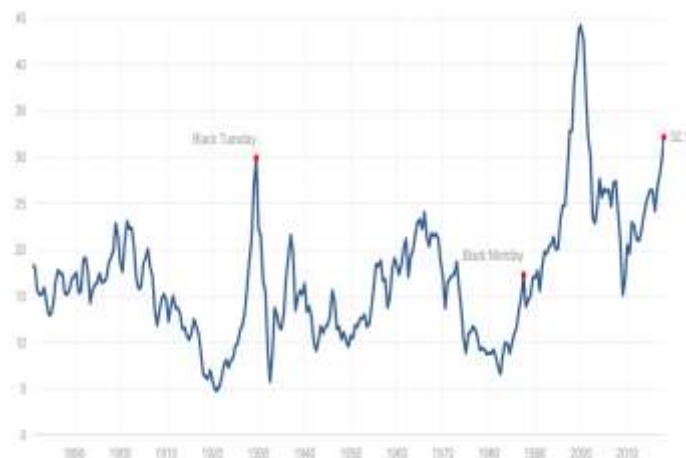
## Economic Picture

The S&P 500 is a leading indicator for the state of both the United States and global economies. As of closing on December 8<sup>th</sup>, the S&P 500 was at a value of 2,651.50. This was yet another historically high close for the index. The current PE ratio of the S&P 500 is 25.49, which is the highest valuation for the stock index except for the tech bubble recession and the Financial Crisis of 2008. The Schiller PE of the market can be analyzed as well (Schiller PE is a cyclically adjusted version of the PE). The current Schiller PE is 32.17, which is the highest it has been since 1999. When looking at both price levels and valuation levels of the index, it can be seen that we are in the late stages of the current market cycle (which is the second-oldest on record without a 20% decline in the S&P500). When compared to levels of the index, it is due to a correction. The chart of the S&P 500 to the lower left uses a logarithmic y-axis scale to better show the historical swings of the market.

Exhibit 3: S&P 500 Historic Price



Exhibit 4: S&P 500 Shiller PE Ratio

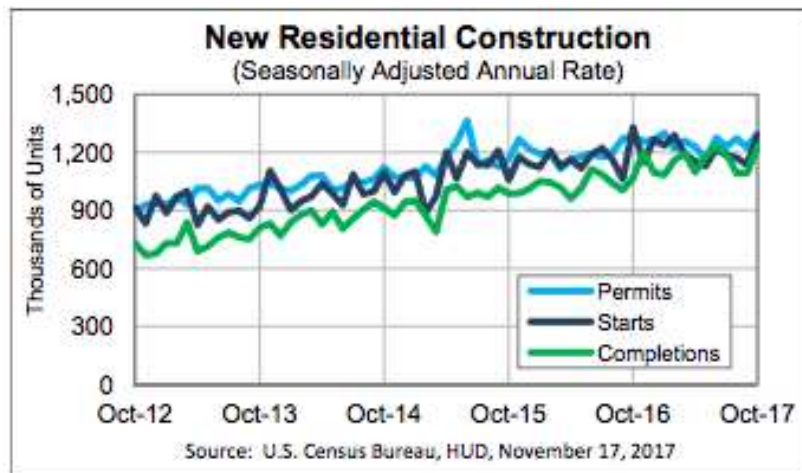


[Source: [Yahoo Finance](#)]

[Source: [Multpl](#)]

Another major indicator to consider is housing starts because it is a signal of economic growth within the United States. As we can see in the chart below, new residential construction data has been in a slow uptrend. However, the number of new residential housing starts has leveled off over the past year and a half or so.

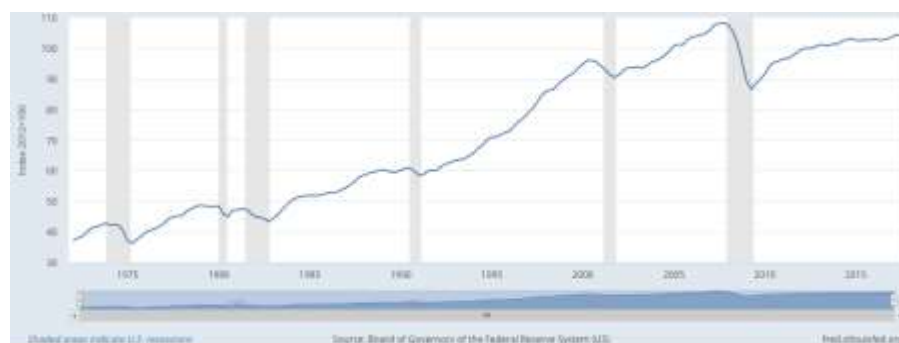
Exhibit 5: New Residential Construction



Manufacturing data is looked at when analyzing the state of the economy because if manufacturers are producing more, they obviously have a positive outlook on the economy. If manufacturers are pulling back on their production, it is likely that they see product demand decreasing in the future. When looking at

Manufacturing Production as given on the Federal Reserve of St. Louis webpage, you can see that manufacturing activity has remained relatively stable over since the third quarter of 2014. It is still lower than the peak before the Financial Crisis, but is at the highest point since the recession ended. This indicates that manufacturers have seen demand remain stable and have not been predicting much more economic growth over the past 3 years. It also indicates that while they are not projecting for major growth in the future, they also are not pulling back on production, which indicates they do not see a recession happening in the short-term. That being said, it is important to look at this indicator with caution. Manufacturers began curtailing production before the 2001 recession, but they kept increasing production right up until the Financial Crisis.

#### Exhibit 6: Industrial Production - Manufacturing



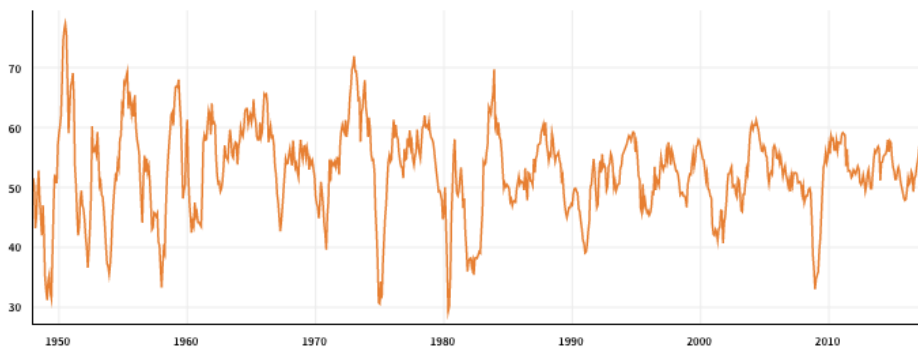
[Source: [Federal Reserve of St. Louis](https://fred.stlouisfed.org/)]

Purchasing Managers Index, or PMI, is one of the major leading indicators that economists use to track manufacturing activity in the US. When looking at historic trends for the PMI, you can see that manufacturers began pulling back on their purchasing in 2004, well before the Financial Crisis. However, the pullback in purchasing coincided with the recession at the beginning of the century rather than



led it. While the PMI has not shown a major trend change yet, the last three months have shown decreases from 60.8, to 58.7, to 58.2. The PMI will be something to keep a close eye on going forward as we continue through the current economic cycle.

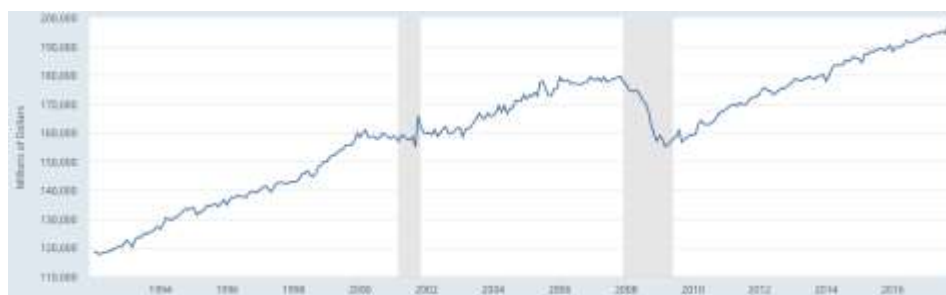
Exhibit 7: PMI Composite Index



[Source: [Quandl - ISM](#)]

Retail sales is an important coincident economic indicator to look at when considering Kohl's Corporation as an investment. When looking at retail sales one can analyze that retail sales are at an all-time high. In September of 2017, retail sales recorded sales adjusted for inflation of \$196,407 million. Real retail sales have increased at a relatively steady rate since the beginning of the current cycle. Just before the past two recessions, retail sales leveled off for about a year to a year and a half leading up to the recession. We are yet to see a leveling off of retail sales, indicating that we will not be seeing a recession in the short-term.

### Exhibit 8: Real Retail and Food Sales



[Source: [Federal Reserve of St. Louis](#)]

The University of Michigan's Consumer Sentiment Survey is important to look at when considering the overall economy and a retail company within the economy. The Consumer Sentiment survey shows the current sentiment of the general public and how positive they are about the future prospects of the economy. If the Consumer Sentiment is increasing, it indicates that consumers will be willing to spend more of their income on both staple and discretionary purchases. It is also important to be cautious when using the Consumer Sentiment as a singular measure of the economy. The general public does not always have the information or knowledge needed to understand the direction of the economy. The Consumer Sentiment Survey has increased from about 65 at the end of the 2008-09 recession to today's level of 95.1. The sentiment level has been flat on a net basis since February of 2015.

### Exhibit 9: Michigan Consumer Sentiment



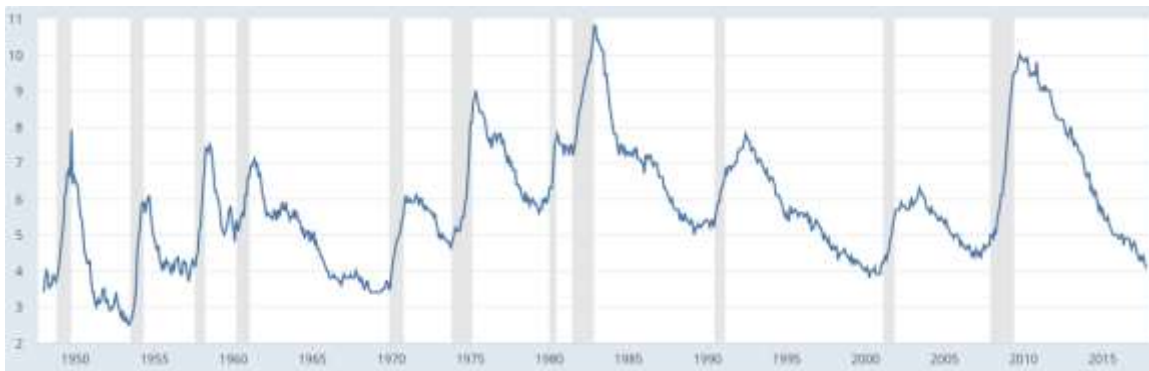
[Source: [Federal Reserve Bank of St. Louis](#)]

E-commerce as a percent of total retail sales is not a macro-economic indicator, but rather is important to look at when considering a firm within the retail space. Since the beginning of 2000 e-commerce has increased from 0.8% of total sales to the current level of 8.9%. This is important to look at when considering how Kohl's is positioning their business to accommodate online shoppers going forward. This e-commerce percentage should continue to increase going forward so Kohl's must continue to evolve in order to provide the most value possible to consumers.

An investor must look at the change in Gross Domestic Product for the country they are looking to invest in. I choose to look at Real GDP, which is the final value of all goods and services produced in an economy in a given period adjusted for inflation. On a period-by-period basis, the United States economy has seen Real GDP increase every year since 2009. In 2015 GDP increased by 2.9%, and the increase was reduced to 1.5% in 2016. GDP is considered to be a lagging indicator because it does not indicate when a recession will happen, but rather helps to validate that a recession has happened.

The last major economic indicator I choose to look at is the unemployment rate. The unemployment is a major indicator for the state of the economy. As economic conditions worsen, more employees get laid off and unemployment increases. If the economy is healthy and growing, firms will increase their hiring. The current unemployment rate is 4.1%, the lowest level since December 2000. This helps to validate my belief that we are in the late stage of the current business cycle. Historically when unemployment levels are as low as they currently are, a recession happens and a massive increase in unemployment rates is seen. Unemployment is important to look at when considering a retailer because as unemployment decreases, more people are working which in turn means more people are making money. When more people have jobs, there is more disposable income that can be spent on clothes and other household items a retailer may offer.

Exhibit 10: Unemployment Rate



[Source: [Federal Reserve Bank of St. Louis](#)]

While one or two indicators cannot help determine the future direction of the economy, when several indicators are taken into account it paints a clearer picture. I believe the United States economy is in the late stages of the cycle. I like to use an analogy that I overheard... "We are in the 8<sup>th</sup> inning. I just don't know if it's a 9 or a

16 inning game". While I believe that we are in the late stages of the business cycle, I do not believe we will have a recession in the short term. When the next recession will happen will rely heavily on moves made by the current administration. It is my opinion that a recession can be expected by the end of 2019. Until then, I believe the economy will continue upwards at a slow pace.

## **Financial Ratio Analysis (see appendix for spreadsheet)**

### **Liquidity Ratios**

The first liquidity ratio looked at was the current ratio. The current ratio for KSS has been trending downwards significantly since 2008. In 2008, the current ratio for Kohl's was 2.1. Since 2008, the ratio has averaged a year-over-year decrease of -2%. In the most recent fiscal year, the ratio was 1.76. While this is a large difference from 2008 it is still stronger than the industry average of 1.43.

The second major liquidity ratio analyzed was the quick ratio. The quick ratio for Kohl's has been more stable over the years than the current ratio, indicating that there is variability in the inventory levels. Over the past ten years the quick ratio has ranged from a low of 0.38 in 2013 and 2016 to a high of 1.04 in 2010 (2010 was an anomaly for all liquidity ratios compared to other years). The most recent quick ratio for the company was 0.49, nearly 20% higher than the industry average of 0.41.

Kohl's cash ratio of 0.36 is also better than the industry average. Like the quick ratio, the cash ratio for Kohl's has been relatively more stable than the current ratio. The cash ratio median for the past 10 years is 0.37, only 1 basis point above the most year fiscal year.

When you compare the liquidity ratios of Kohl's over time you can see that the variability in their liquidity stems from the inventories because the quick and cash ratios have been much more stable than the current ratio, which has been decreasing over time. That being said, all of Kohl's liquidity ratios are significantly stronger than the industry average. If Kohl's can stop the decrease in their current ratio they will be in great shape in terms of liquidity.

### **Activity Ratios**

Activity ratios are important to consider for a company because they give insight into the cash management of firm. A major activity ratio is the inventory turnover ratio. The recent fiscal year inventory turnover ratio was 3.05, decreasing an average of 2% per year since 2008. I would like to see Kohl's reverse this trend of decreasing inventory turnover because it shows that they are having a harder time turning inventory into sales. Another insightful way to look at inventory turnover is to convert it to "average days in inventory". When converted to days, we see that the day-count has increased from 99 in 2008 to 120 in 2017. These numbers tell us that on average throughout the year, it is taking Kohl's 21 more days to sell inventory than it did ten years ago. The current inventory turnover ratio of 3.05 is 0.65 worse than the industry average of 3.7 (translates into a 'days' value of 99 for the industry).

Another major activity ratio to compare is the payables turnover. The payables turnover ratio has decreased from 12.18 in 2008 to 8.66 today. On an 'average days payable' basis, this converts to an increase from 30 days to 42 days. The industry average is 7.64, or 48 days. Opposite to the days in inventory, an

increase in days payable is a positive for a company as long as they are meeting all their obligations. An increase in day's payable means that the company will have more cash available.

When analyzing activity ratios, you can combine the different ratios to come up with the cash conversion cycle of the firm. Kohl's cash conversion cycle has increased from 69 in 2008 to 78 in 2017. This is also higher than the industry average of 65. This is a negative for the firm because it shows that the firm is taking increasingly longer to turn inventory investments back into cash.

### **DuPont Analysis**

The DuPont Analysis was developed as a way to analyze specific aspects of the return on equity. The DuPont ratio is divided into five separate ratios; asset turnover, tax burden, interest burden, operating profit margin and financial leverage. The asset turnover ratio for Kohl's is currently 1.38, in line with the industry average of 1.37. This ratio has been in a steady decline since 2008, with an average yearly decrease of 1%. This decline tells us that on an annual basis Kohl's is making less sales with their fixed assets.

The tax burden ratio measures the impact taxes have on return on equity. The tax burden ratio at Kohl's has been in a very steady rise over the past ten years, which will slightly increase ROE. Since 2008 when the burden was 0.62, it has increased by one basis points every three to four years (it currently sits at 0.64). This is in line with the industry peers, who have an average of a 0.65 tax burden.

Another component of the DuPont analysis is the interest burden ratio, a measure of the impact interest expenses have on the firm's ROE. Kohl's interest

burden ratio has declined significantly over the past decade, falling from 0.97 to 0.74 today. This decline will significantly lower ROE. This is also well below the industry average of 1.11, showing that interest expenses are a larger drag on Kohl's than their competitors.

Operating profit margin is not only an important ratio for the DuPont analysis, but for other aspects of the business as well. As an investor, I would like to see steadily increasing margins indicating stability within the company and an ability to increase the bottom line profits. The operating margin has fallen sharply since 2012, falling from 11% to 6% today. This is both a major drag on ROE and on company earnings. This is also much worse than the industry average of 14.4%, meaning Kohl's competitors are able to get much higher earnings out of the same level of sales.

The last component of the DuPont analysis is the financial leverage ratio. This ratio shows how the company is financing their assets. While a high financial leverage ratio will increase return on equity, it will also increase risk because it means they are taking on more debt and other liabilities. Kohl's financial leverage has been increasing since its 2009 level of 1.69 at an average of 5% per year, a troubling trend if it does not reverse. While today's leverage of 2.62 is much higher than the ratio after the Financial Crisis, it is still well below the industry median of 3.1.

When you multiply all five components of the DuPont analysis, you get the return on equity. Like many of the ratios at Kohl's, there has been a significant deterioration since 2008. The ROE has decreased from 18% (2008) to 11% (2017).



This is below the industry median ROE of 14.4%. The advantage of calculating ROE through a DuPont analysis is that you can see what has been driving changes in the return. By looking at the changes in the components, you can see that the decrease in ROE has been driven mainly by interest burden and operating profit margin (and less asset turnover). While the company's financial leverage has helped offset the deterioration in the other components, it has not been enough to stop the declines in ROE.

### **Profitability Ratios**

Profitability ratios are an important aspect of ratio analysis because profitability ratios paint a picture for how well the company is converting sales to bottom line earnings. Working down the income statement, I looked at gross margin, operating margin (also included in the DuPont analysis) and profit margin/net income margin.

Kohl's gross margins have been stable over the past ten years. For the past five years, the ratio has been 36%, which is in line with the industry average of 36%. As we discussed previously, the operating margin at Kohl's has been eroding over time. It has declined from 11% ten years ago to 6% today. The profit margin has also eroded significantly (if the operating margin has been declining, it is highly likely the profit margin is too), falling from 7% in 2008 to 3% today. What this ratio tells an analyst is that of all the sales at Kohl's, only 3% is making it to the bottom line as net income. While this margin ratio has declined, it is still in line with the industry average. By looking at the income statement (see appendix), we can see that the

decline in operating margins and profit margins have been largely driven by depreciation and net interest expense respectively.

The last profitability ratio I like to look at is the return on invested capital (ROIC). The ROIC is important because it tells an investor, whether it be an equity or debt holder, what kind of returns the company is able to generate with your money. Kohl's ROIC is currently 5% and has been in a significant decline since its 2008 high of 14%. Another important aspect of ROIC is when compared to growth. If a company has a low ROIC, higher growth does not add as much value to the owners as finding ways to increasing ROIC would. I would look for Kohl's to focus more on increasing their return on invested capital in the future as opposed to trying to grow the business.

### **Industry Specific**

For each industry, there are certain ratios that only make sense to look at for companies within that space. In the retail and department store industry, these are same store sales (SSS), number of stores, and sales per square foot. Over the past ten years, Kohl's has seen an average annual increase of one basis point in their same store sales. The decline in 2017 was 2.4%, a large difference than the industry average of 0.0%. Over the past four years, there has been a decrease in SSS three times.

Kohl's has one of the largest department store bases of their competitors. 2017 was the first time in ten years the number of Kohl's locations decreased instead of increased. Kohl's location count increased from 929 in 2008 to 1,164 in

2016. It decreased by 10 locations in 2017. Compared to the industry median location count of 1,095, Kohl's still has a much larger store base. I expect a new trend to emerge for Kohl's in terms of the number of stores. I expect Kohl's to continue to close store until they get at or below the industry average. The reason I expect this trend to form is the increase in e-commerce. More and more shoppers are opting to buy their products online, eliminating the need to have a store location on every corner.

The sales per square foot data is important because it gives insight into how productive a company is with their stores. If the sales per square foot is low, the company likely has more retail space than they should. Kohl's sales per square foot has declined slightly since 2008. That said Kohl's 2017 sales per sq. of \$224 is much higher than their industry peers median of \$188.

When looking at all the ratios together in a ratio analysis, a few clear trends emerge. First, it is clear to see that Kohl's as a whole has deteriorated over the past ten years. Many of their ratios have declined steadily over the years and I would look for them to outline steps to stop this deterioration in the future. With that in mind, even though Kohl's has slipped over the past decade, they are still a strong company when compared to their industry peers. Kohl's is a more liquid company with less leverage. They have strong productivity in their stores and are utilizing their fixed assets. I would look for Kohl's management to build off these strengths and work towards returning their declining ratios to their former levels.

### **External Financing Needed**

According to my pro-forma statements, the company will require minimal external financing in order to carry out their operations. In 2018E, the company will actually need \$-193 million in external financing, meaning they will not require any external financing. However, they will require some financing as time progresses. The reason that Kohl's will require financing is because of their desired minimum cash balance of \$700 million. I have calculated that they will require \$667 million of financing in 2019 and \$52 million in 2020.

### **Investment Recommendation**

I recommend Kohl's as a hold investment at today's current market price of \$49.78. I valued KSS on an EBITDA multiple basis, with a terminal Discounted Cash Flow model, and with a dividend discount growth model. The calculations are in the appendix but are summarized below.

The least useful valuation method used was the dividend discount growth model. The reason it is a difficult method to use for Kohl's Corporation is because of the lack of consistency with their dividend. When a dividend is as unstable and unpredictable as Kohl's, a multi-stage growth model must be used. For Kohl's, things become more complicated due to the currently high dividend yield of the company. Kohl's has a dividend yield today of 4.5% and a dividend payout ratio of 64%. The payout ratio has been increasing significantly since the firm began paying a dividend, and the ratio is getting to a point that it is unsustainably high. This makes a DDM valuation more difficult because at any point in the future the company could be required to make a major cut to the dividend in order to preserve the company. At that time I believe the stock price will take a major hit as well. For my DDM

model, I calculated a valuation of \$29.83. I believe this valuation is far below the true intrinsic value of the stock, but the DDM value was construed due to the lack of consistency and extremely high growth of the dividend.

The most detailed (and subjective) valuation model I applied to Kohl's was the discounted cash flows model. The DCF intrinsic value I calculated for KSS was \$67.51 per share, using a terminal growth rate of 0.5% and a discount rate of 12%. I chose to apply a 50 basis point terminal growth rate due to the low growth of the retail industry as a whole, and the uncertainty about the future direction of the economy. While the e-commerce space is growing rapidly, it is not causing the entire retail industry to grow at that pace. Rather, e-commerce is mostly cannibalizing from in-store sales. I believe 0.5% could be a conservative value, but it still allows for Kohl's to grow. I chose a discount rate by applying a premium to my WACC. I am not confident enough in the future direction of Kohl's and with management's ability to turn the company around to warrant a lower discount rate. I feel strongly that a 12% discount rate is a conservative rate that allows my error to be with being too conservative, rather than too aggressive. My DCF intrinsic value of \$67.51 leaves a 35% margin of safety compared to the current market price \$49.78.

The third valuation technique I applied to Kohl's Corporation was the EBITDA multiple model. For my value I used a 12% discount rate like in my DCF model and an EBITDA multiple of 9x. I chose to use 9x EBITDA as my multiple because my research showed that the industry average multiple for department store retailers like Kohl's is just above 9x. On an EBITDA multiple basis, I calculated a value of \$46.83 per share, 6% below the current market price.

On a discount dividend growth basis, my calculations show that Kohl's is massively overvalued at today's price. On a discounted cash flow basis, I found KSS to be an undervalued opportunity. On an EBITDA multiple basis, I found KSS to be correctly valued. Had this report been written a month ago when the share price was ~\$40, I most likely would have rated it as a buying opportunity. However, due to the values I calculated using the different techniques, I believe the share price has run up enough to become fairly valued. I believe of the three valuation methods I used, the EBITDA multiple method gave me the most reliable value for the security. I do not like the DDM model for Kohl's because of the lack of consistency and the uncertainty with their dividend, and I am hesitant to rely solely on the DCF model due to major changes happening within the retail space.

I believe Kohl's has the potential to become a buy opportunity if management can outline and implement a plan designed to stop the deterioration of Kohl's business. As we saw when we compared financial ratios, the business has declined significantly over the past ten years. If Kohl's can properly leverage different partnerships and become a leading omnichannel retailer, it is my opinion that they will be able to reverse these trends. With an almost completely new suite of executives, there could be some progress in the right direction. I will continue to await more details as to how new management will improve the company, and will continue to rate Kohl's Corporation as a hold until then.

## **Appendix**

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