Analyst: Jacob Hornak **INVESTMENT MANAGEMENT CERTIFICATE PROGRAM** January 7, 2017

Department Stores

Kohl's Corporation

Recommendation	NEUTRAL
Target (today's value)	$50
Current Price	$42.01
52 week range	$54.37 - $88.58

Share Data	
Ticker:	KSS
Market Cap. (Billion):	$7.41
Inside Ownership	0.8%
Inst. Ownership	106.5%
Beta	0.73
Dividend Yield	4.76%
Payout Ratio	60.7%
Cons. Long-Term Growth Rate	4.3%

	'14	'15	'16E	'17E	'18E
Sales (billions)					
Year	$19.02	$19.20	$18.87	$19.01	$19.17
Gr %	0%	1%	-1.8%	0.8%	0.8%
Cons	-	-	$18.71	$18.93	$18.85
EPS					
Year	$4.45	$3.45	$3.28	$4.03	$4.05
Gr %	2.0%	-22.4%	-5.1%	22.9%	0.5%
Cons	-	-	$3.05	$4.25	$4.45

Ratio	'14	'15	'16E	'17E	'18E
ROE (%)	14.1%	14.1%	14.1%	11.5%	11.2%
Industry	19.8%	19.8%	19.8%	29.5%	32.4%
NPM (%)	4.0%	4.0%	4.0%	2.9%	2.8%
Industry	2.2%	2.2%	2.2%	1.8%	2.3%
A. T/O	1.32	1.41	1.42	1.45	
ROA (%)	6.0%	5.7%	5.0%	5.0%	
Industry	4.7%	4.7%	4.7%	3.2%	4.2%
D/A	35.2%	36.5%	35.7%	36.0%	

Valuation	'15	'16E	'17E	'18E
P/E	9.1	10.3	10.2	10.1
Industry	13.8	16.8	28.6	13.1
P/S	0.5	0.4	0.4	0.4
P/B	1.8	1.4	1.4	1.4
P/CF	5.6	3.9	4.4	4.3
EV/EBITDA	5.4	4.6	4.6	4.4

Performance	Stock	Industry
1 Month	-22.9%	-0.7%
3 Month	-5.2%	10.6%
YTD	-14.9%	1.7%
52-week	-15.6%	30%
3-year	-26.1%	22%

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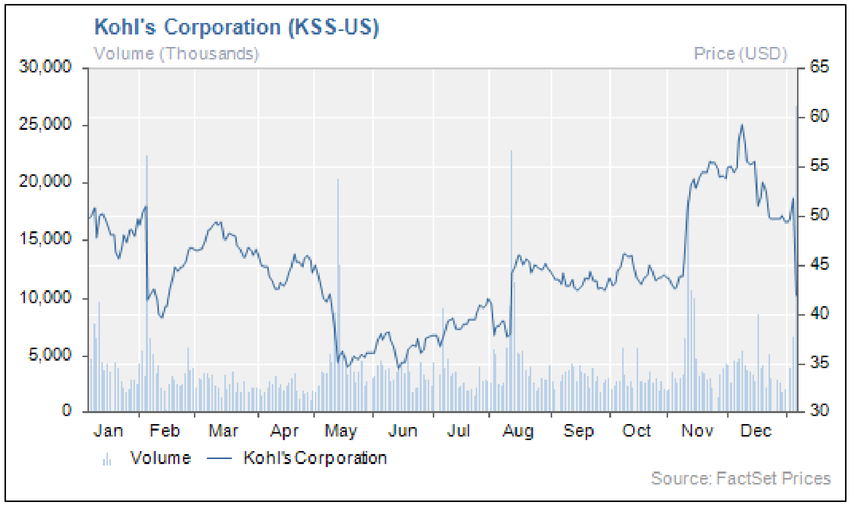


Summary: I recommend a neutral rating with a target of $50. Although KSS has an opportunity to dramatically improve online sales, declining revenues are a headwind. This uncertainty offsets my optimism that core business development can improve greatly. The stock is moderately undervalued based on relative and DCF analysis, but there are few short-term catalysts to realize this value.

Key Drivers:

- Number of locations: Adding or removing store locations currently affect Kohl's sales more than any other factor. Kohl's has reached maturity and its number of store locations remains flat.
- Same-store-sales: Kohl's is heavily reliant on its product selection and store experience to maintain its brand image. KSS recent struggle to grow SSS represents a loss in momentum. Its ability to charge premium prices is predicated upon its ability to remain a strong brand. Its most serious challenge is to broaden its appeal without losing its identity.
- Change in consumer spending habits: Kohl's operates in an extremely competitive environment in which consumers have become more value-conscious. It is imperative that Kohl's maintains an excellent shopping experience to maintain its margins that are higher than many of its competitors.
- Omni-channel offerings: Technology has altered the preferences of consumers in how they shop. Recently, Kohl's has focused on different methods in which consumers can shop, especially online; however, omni-channel offerings have only kept net sales steady.

Valuation: Using a relative valuation approach, Kohl's appears to be fairly valued in comparison to the department store sub-industry. DCF analysis suggests a target of $48.22. A combination of the approaches suggests that KSS is moderately undervalued, as the stock's value is about $50 and the shares trade at $42.01.

Risks: Threats to the business include declining sales, competition, and loss of brand identity.

Company Overview

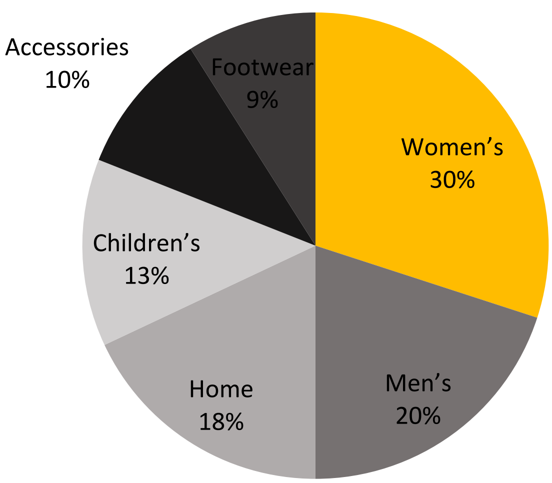
Kohl's Corporation (KSS) is a multiline retailer that sells a moderately priced variety of apparel, footwear, accessories, beauty, and home products. Kohl's merchandise consists of national brands as well as private-label and exclusive brands that fit all ages. The firm operates domestically in 49 states and has 782 locations in strip centers, 297 free standing locations, and 85 community and regional mall locations. Kohl's has developed and is focused on improving its omnichannel offerings as opposed to being a store-only retailer. Kohl's offers in-store, on-line (www.Kohls.com), mobile, social media, and other shopping options that provide the consumer with flexibility in how, when, and where they shop. Kohl's Corporation is headquartered in Menomonee Falls, Wisconsin.

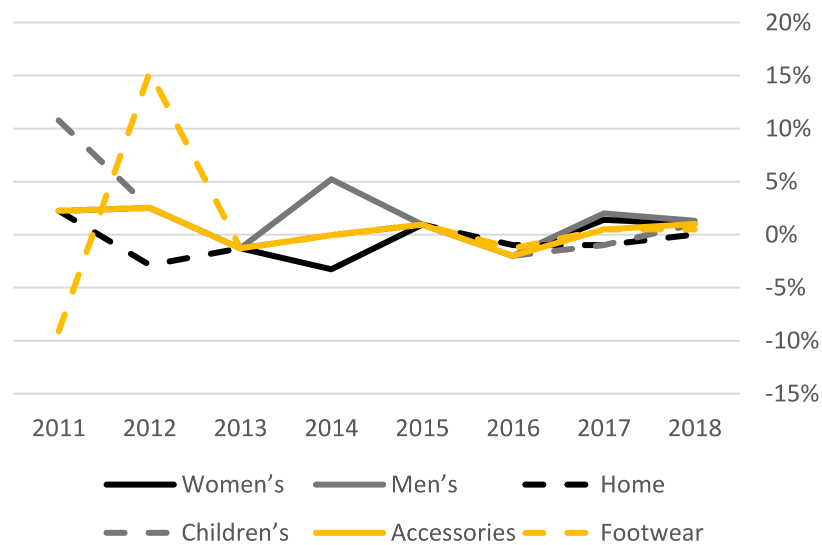
Kohl's Corporation generates revenue from its U.S. retail operations as well as a small amount from its U.S. credit card segment in partnership with Capital One. Kohl's runs stores and direct-to-consumer operations in six segments:

- Women's: Casual, formal, and workout. Tops, bottoms, undergarments, coats and jackets, swimwear, dresses, and beauty
- Men's: Casual, formal, and workout. Tops, bottoms, undergarments, coats and jackets, and swimwear
- Children's: Encapsulates both gender babies through juniors. Tops, bottoms, undergarments, coats and jackets, swimwear, dresses, toys, baby feeding and nursing, strollers, car seats, and other infant necessities
- Accessories: Jewelry, handbags and wallets, belts and suspenders, scarves & wraps, cold weather gear, hats, sunglasses, ties, hair accessories, cologne and perfume
- Footwear: Men's, women's, juniors, and baby's. Athletic, sneakers, casual, comfort, slippers, sandals, evening, flats, heels & pumps, wedges, wide-width shoes
- Home: Bedding, mattresses, bath, kitchen & dining, small appliances, home décor, seasonal décor, electronics

Growth in 2015 among all divisions was meager, and 2016 has only shown negative sales growth. While KSS has struggled to grow sales, the 2017 introduction of Under Armour should boost Men's, Women's, and footwear in the future.

Figures 1 and 2: Revenue Sources for KSS, year-end 2015 (left) and Revenue Growth by Segment History





Source: Company reports

Business/Industry Drivers

Though several factors may contribute to Kohl's future success, the following are the most important business drivers:

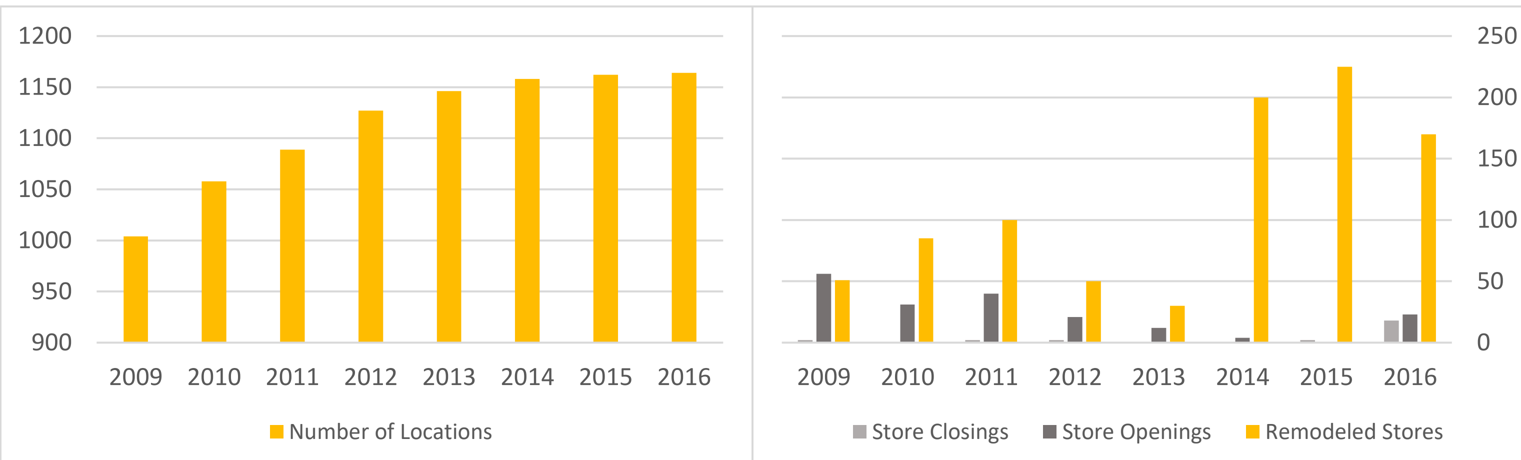
1) Number of locations
2) Same store sales and omni-channel offerings
3) Change in consumer spending habits
4) Macroeconomic trends

<u>Number of Retail Locations</u>

KSS location growth has plateaued over recent years

The number of Kohl's stores has plateaued the last five years; minimal stores have been cut, but minimal have been added. In 2016, 18 stores are closing; however, this is offset by a total of 23 new locations. Management has stated that it will continue to close underperforming operations; however, no guidance for future closings has been given. It is no secret though, that Kohl's has reached the mature state of the business life cycle.

Figures 3 and 4: Number of KSS locations BOY (left) and openings, closings, remodels



Source: Company reports

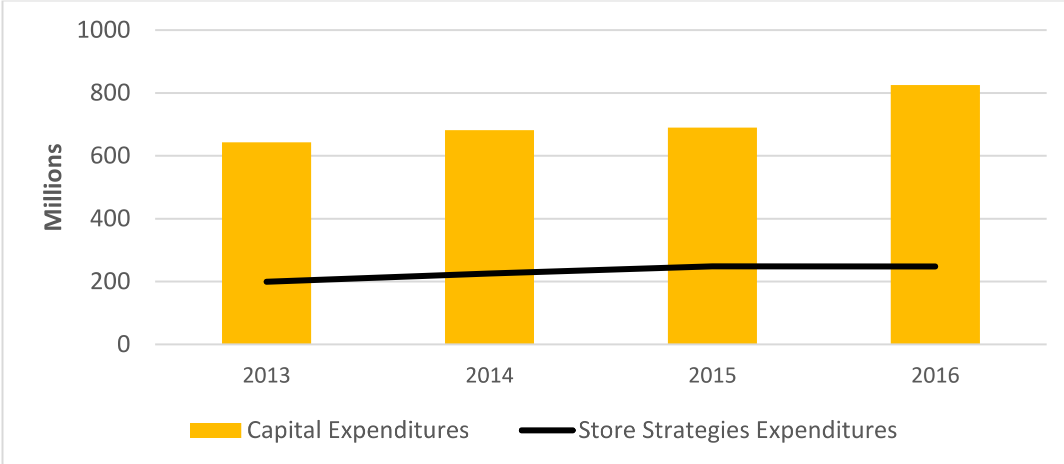
Nearly all the new locations that have been added and those that will be finished in fiscal year 2016 are unique. The new store locations include two Off-Aisle clearance centers and twelve FILA outlets that are considered "test" stores. These operations should appeal to a broader audience as general consumer spending habits have shown greater attraction to discounted merchandise in recent years. The FILA outlet stores are a play on the Kohl's' fastest growing merchandise segment: men's and women's sportswear. Having saturated most markets in the U.S. with traditional Kohl's locations, these new growth "tests" could serve to be a valuable growth addition to its portfolio.

Kohl's is opening new store formats as "tests" and investing heavily in store remodels

Perhaps more important than store openings and closings, there has been an emphasis on remodeling stores. Over the last three years, the firm has remodeled about one-third of its stores. Capital expenditures now run at the same rate as NOPAT. While store remodels have been incorporated in different varieties, the remodels have primarily revolved around the beauty line of business. The investment in remodeling is an approach towards creating the most enjoyable consumer experience possible through the implementation of new brands and visual appeal. Since the remodels have taken place, there has been a significant increase in beauty sales, resulting in Kohl's accessories segment to outperform company average sales.

Store strategies expenditures, including remodeling, has been a large expenditure in recent years

Figure 5: Store Strategies Expenditures and Total Capital Expenditures



Source: Company reports

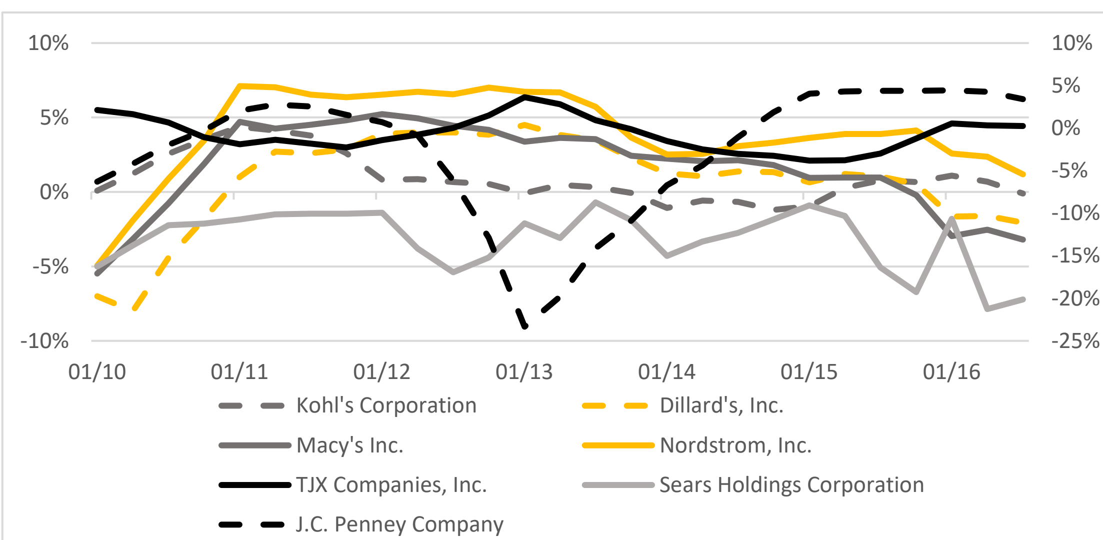
Management has stated that remodels have led to an average growth rate in the mid-double-digits in the beauty and fine jewelry categories. While this growth is impressive, the handbags category more than offsets it and holds the accessories segment to negative growth.

<u>Same Store Sales and Omni-channel Offerings</u>

Department stores, such as Kohl's, create an effective shopping experience within their locations through proper inventory selection, merchandising, and customer service. While all three contribute greatly to a store's success, it is imperative that Kohl's, primarily a fashion-based retailer, accurately analyzes and predicts the next fashion trend of the whimsical consumer. Improper inventory selection leads to excess inventory, which is impending doom for a retailer. An effective way of measuring how well a department store's product is being accepted is same store sales growth (SSS). Kohl's SSS compared to its peers has been lackluster. The only other company that has consistently lagged behind Kohl's is Sears Holdings (SHLD), and it is in grave danger. Despite store closings and a substantial investment in store remodeling, Kohl's has struggled to reinvigorate its SSS performance.

SHLD is the only company to have consistently underperformed KSS in SSS

Figure 6: Same Store Sales vs Competitors (J.C. Penny scale on right axis)



Source: FactSet

Growth of e-commerce (e.g. Amazon) has been a big headwind for stores such as KSS. Many retailers have resorted to shutting down stores with poor SSS and have invested in their online-based selling platforms. Macy's, for example, plans to shut down 100 locations with underperforming SSS next year.

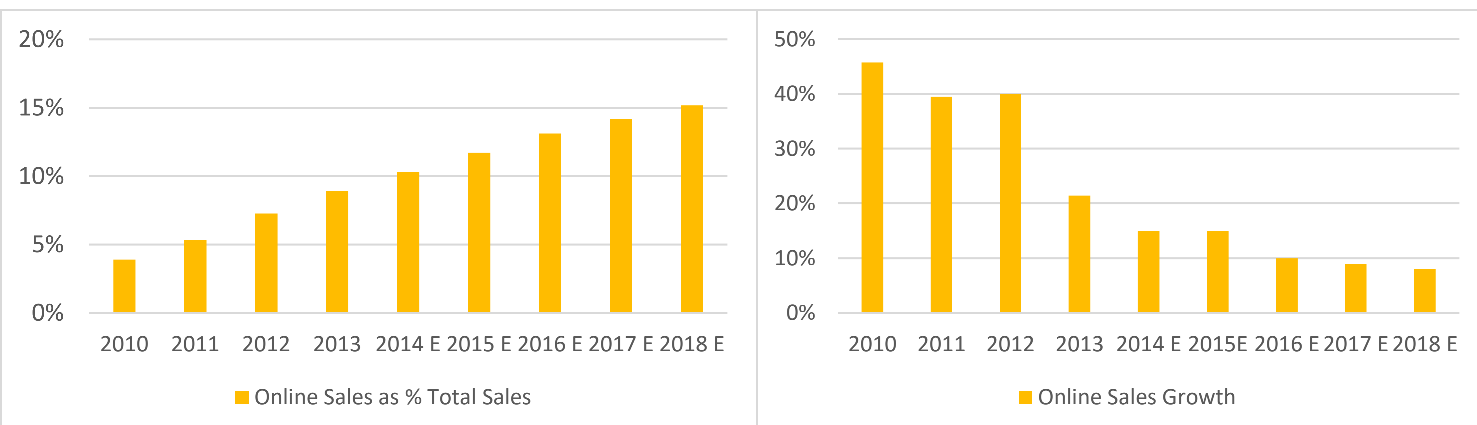
In order to adapt, Kohl's has placed a focus on its online offerings in the recent years. Kohl's has declared that complexity of its omni-channel offerings, or different methods of selling, have made it unfeasible to report "online" sales separate from "store" sales. In particular, Kohl's has difficulty distinguishing sales that are buy online and pick-up in store (BOPUS), especially because customers make additional purchases averaging 25% of the original BOPUS order while they pick up their items. Kohl's also stated that customers often pre-shop online before making purchases in store.

Prior to the 2014 release of BOPUS, Kohl's reported "online" sales separate from "store" sales. From 2010 to 2012, Kohl's experienced annual growth of 40% for online sales. Online sales made up 7% of total sales in 2012. In 2013, online sales growth slowed dramatically to 20% and made up 9% of total sales.

KSS stopped reporting online sales in 2014. I have estimated years 2014-2018.

I believe that BOPUS purchases should be recognized as online purchases, and any additional items that are purchased while picking up items in store should be considered "store" purchases. The notion that customers pre-shop online before making purchases in store is not a new circumstance. Taking this into consideration, I estimate that annual online sales growth has slowed to 10% in 2016, and online sales will have made up 13% of total sales.

Figure 7 and 8: Online Sales as % of Total Sales (left) and Online Sales Growth



Online sales are becoming a large portion of total sales. Management has stated that as this trend continues, they will scale down store sizes, but this is a long-term goal. As online sales grow, I forsee there to be increased investment in IT which will negatively impact EBIT margin.

Technology has created a number of new outlets for consumers to make purchases as well as changed consumer preferences for how they shop. Given the prevalence of the internet and mobile technology, consumers can make purchases anywhere and anytime they want. It is imperative that traditional retailers adapt accordingly to the changing environment.

Kohl's has begun to make the change from an in-store only experience to developing desireable online, mobile, social media, and other interactions. Omni-channel offerings include:

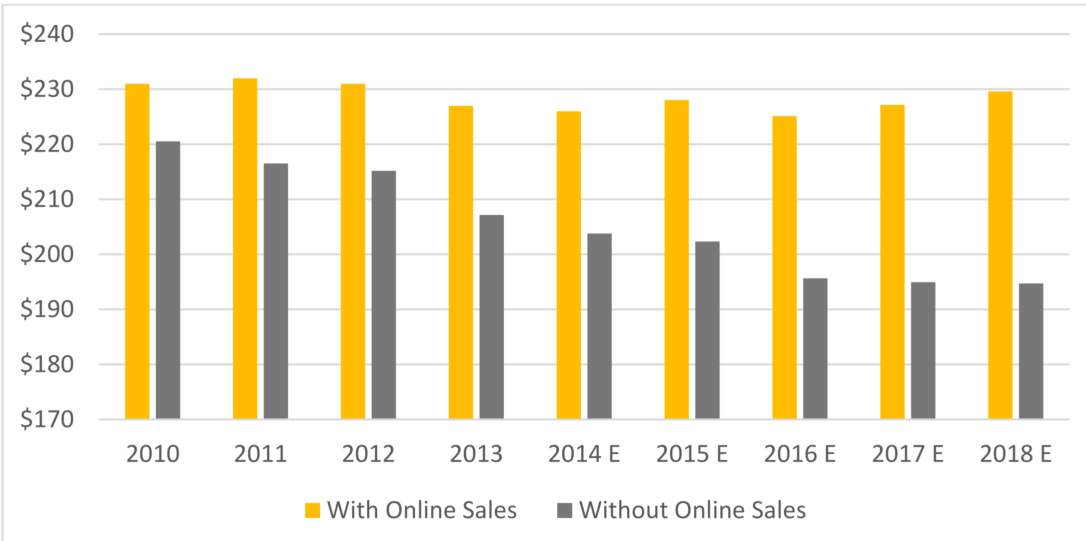
- Order online via in-store kiosks
- Order online and pick-up in any Kohl's store
- Order online and ship direct to consumer
- Kohl's app that grants exclusive coupon offerings

- Return online purchases in stores
- Ability to view, touch, and try on items before making online purchase

As I stated before, Kohl's does not differentiate between online and store sales. Given that the added omni-channel offerings in recent years have primarily been online-based, I have extrapolated past reported online sales and my estimates to create a measure of how much the implementation of these offerings and the adaption to the modern consumer has impacted Kohl's business. More detailed numbers can be found in Appendix 7.

Kohl's omni-channel offerings have kept net sales per selling square foot steady

Figure 14: KSS Net Sales Per Selling Square Foot



Source: Company Reports

As made clear by the graph above, Kohl's omni-channel offerings and focus on online-based selling have held up the company's net sales per selling square foot and is incredibly important to the consumer. While the impact of the omni-channel offerings has been significant, KSS still struggles to create sales growth. While sales growth has slowed for all competitors over the recent years, competitors continue to grow sales. Kohl's has been in an indefinite state of stalling for quite some time now and has a long way to go to compete against other retailers which are heavily investing in their omni-channel offerings.

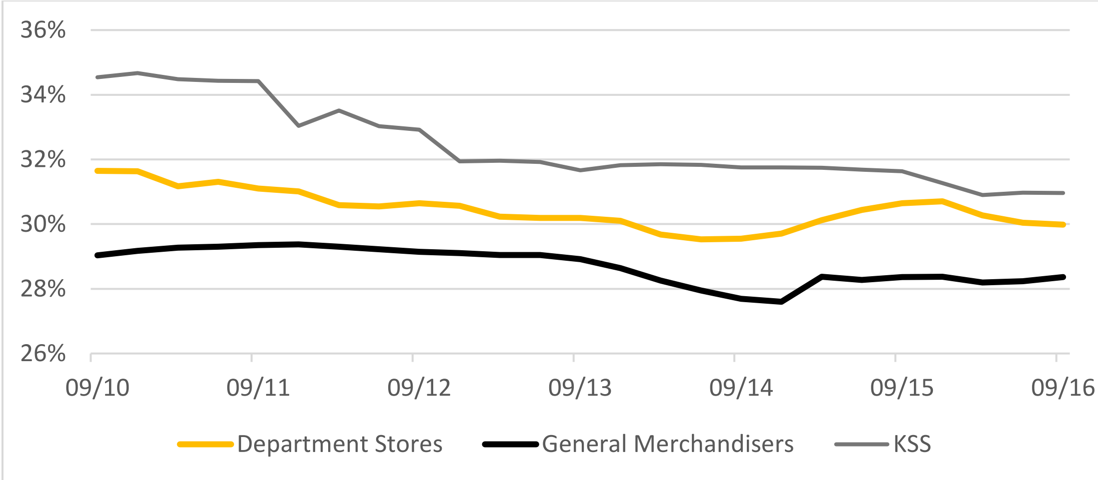
Change in Consumer Spending Habits

Since the Great Recession, both department stores and general merchandisers (also known as discount retailers) have experienced a slow, but steady decline in gross margins. This decline has come at a time when interest rates have been near zero, gasoline prices have come down, employment has improved, and inflation has been minimal. Despite the positive effects these trends have on a consumer's disposable income, the fall in retailers' markups seems to show no sign of reversal.

The decline in gross margin reflects the increase in competition within the market. Specialty retailers have increased their presence causing both department stores and general merchandisers to drive down prices in response. In addition to the adverse effect of brick and mortar store competition, online sales are driving up retailer shipping expenses. Amazon is also driving down prices as they dominate online sales. According to the U.S. Census Bureau, there was $430.6 billion in North American electronic shopping and mail-orders in 2015; Amazon's electronics and general merchandise sales make up an impressive 18% of that number largely due to its competitive pricing.

Department stores and general merchandisers have experienced a steady gross margin decline

Figure 9: Department Store and General Merchandiser Gross Margin

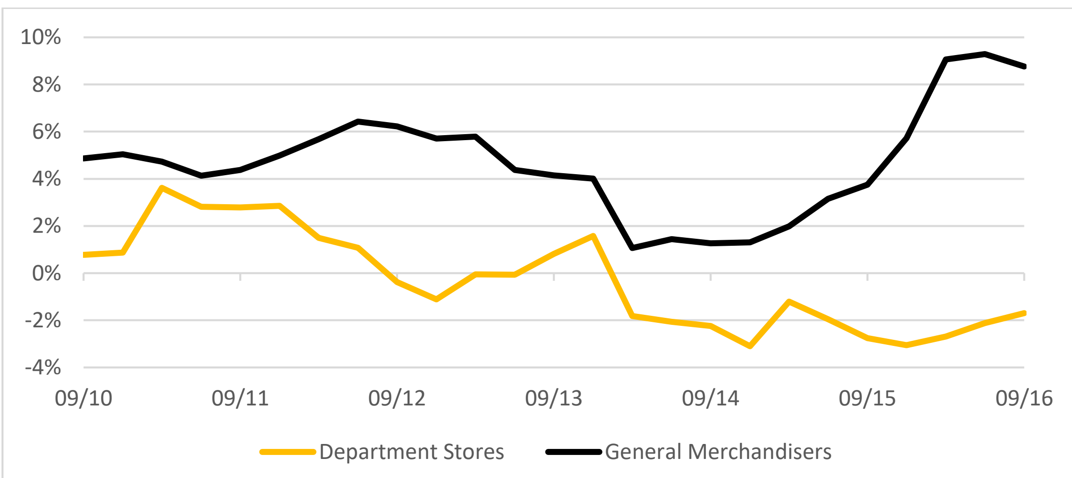


Source: FactSet, Company Reports

While gross margins have fallen for both department stores and general merchandisers, the general merchandisers have experienced a much healthier sales growth over the same period of time. The large spread between the sales growth represents the success of selling merchandise at a lower cost and higher volume. The consumer has become cautious and value-conscious. The opening of the Kohl's Off-Aisle clearance centers and FILA outlets should be a well-received concept give the current trend.

Department stores have lagged behind general merchandisers sales growth

Figure 10: Department Store and General Merchandiser Sales Growth



Source: FactSet

<u>Macroeconomic Trends</u>

Because Kohl's is a consumer discretionary company, its performance is significantly tied to the performance of the overall economy. As can be seen in figure 11, when consumer confidence rises and falls, Kohl's price typically rises or falls at a faster pace than the S&P 500. Consumer confidence has risen, but remains below prior peaks. On the other hand, unemployment and oil remain at favorable levels for consumer spending.

Figure 11: Relative Price of Target to S&P 500 Index vs. Consumer Confidence YOY

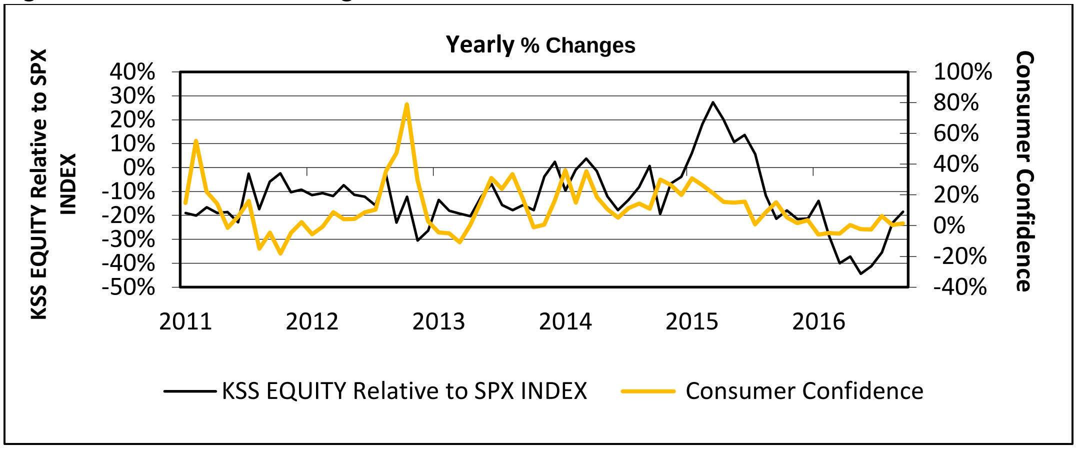


Figure 12: Relative Price of Target to S&P 500 Index vs. Unemployment Rate YOY

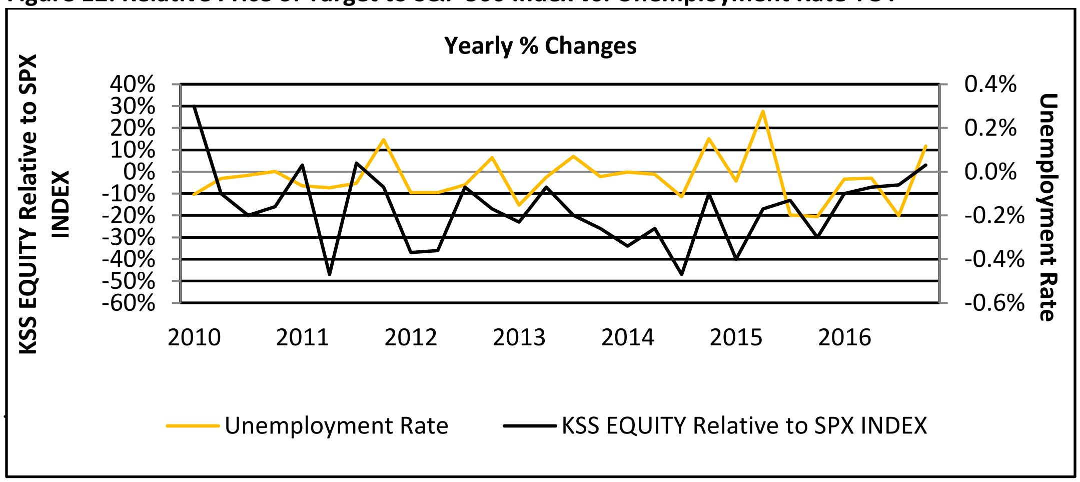
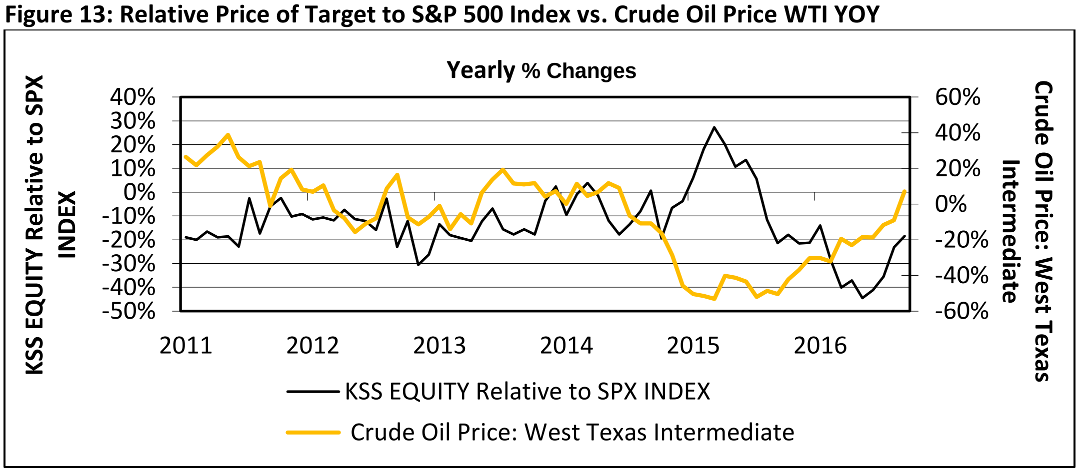


Figure 13: Relative Price of Target to S&P 500 Index vs. Crude Oil Price WTI YOY



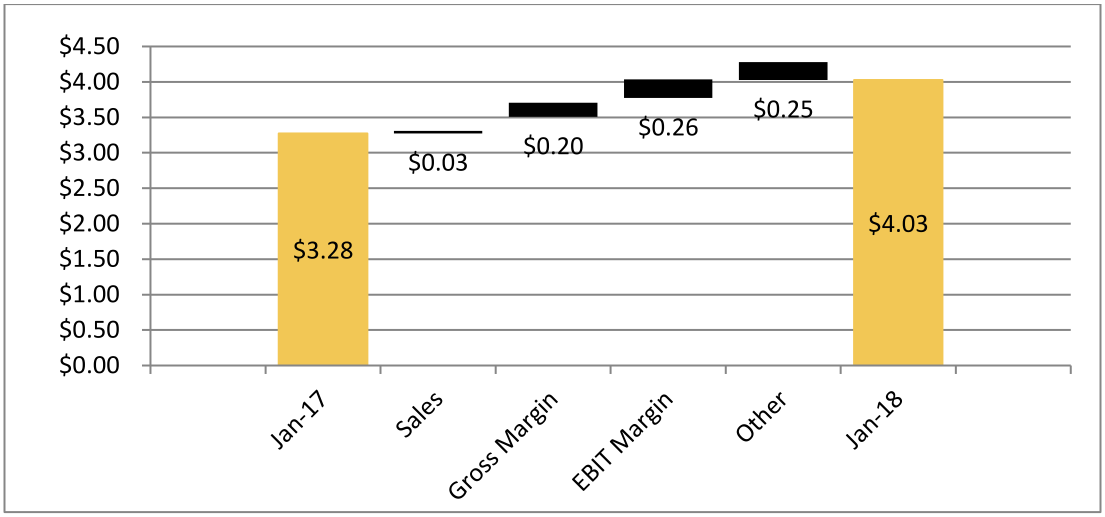
Source: Bloomberg

Figures 12 and 13 show that KSS outperforms when income rises as unemployment declines and oil prices fall. The converse is also true. Kohl's is in a position to benefit from continued low oil prices and high levels of employment

Financial Analysis

I anticipate EPS to grow to $4.03 in FY 2017. A slight growth in sales will increase earnings by $0.03 while gross margin increases modestly from better inventory management, adding $0.20. Further EBIT margin improvement due to declining SG&A/sales should create a gain of $0.26 in earnings. Lastly, I forecast that capital allocations towards share repurchases should add $0.25 to EPS.

Figure 15: Quantification of 2017 EPS drivers



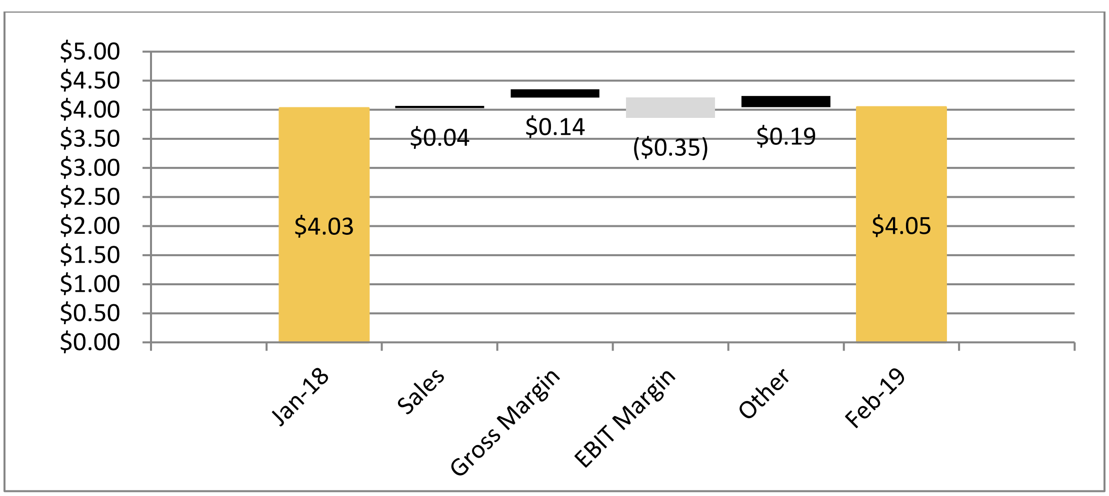
Source: Company Reports, IMCP

<u>Sales – Estimates vs. Consensus</u>
2017: $19,012 vs $18,933 cons.

<u>EPS – Estimates vs. Consensus</u>
2017: $4.03 vs. $4.25 cons.

I expect EPS to increase $0.02 to $4.05 in FY 2018. Kohl's should experience a small gain of $0.04 in earnings from increased sales. I anticipate expansion in gross margin from continued inventory improvement will increase EPS by $0.14. Both gains will be more than offset by a $0.35 decrease in EBIT margin as SG&A/sales rise (SG&A up $142 mil). Finally, capital allocations towards share repurchases should add $0.19.

Figure 16: Quantification of 2018 EPS drivers



Source: Company Reports, IMCP

Sales – Estimates vs. Consensus
2018: $19,170 vs $18,854 cons.

EPS – Estimates vs. Consensus
2018: $4.05 vs. $4.45 cons.

I am more pessimistic than consensus estimates for both 2017 and 2018, particularly due to a difference in EBIT margin estimates. I foresee higher SG&A costs as IT becomes a larger investment in order to create an effective online presence and shipping costs to rise while online sales increase.

Revenues

Kohl's revenue has leveled off significantly since peaking in 2012. I expect this trend to continue in 2017 and 2018 as I believe Kohl's has reached maturity. Kohl's has only added as many stores as it has shut down in recent years; as online sales become a larger part of its business, there is no longer a focus on new locations but adapting to the world of e-commerce. New stores will be smaller formats as a part of the adaption. Kohl's management has even stated that in the long-term, large stores will be downsized as extra space becomes a liability. While these trends are negative, lower capital tied up in stores could increase return on capital.

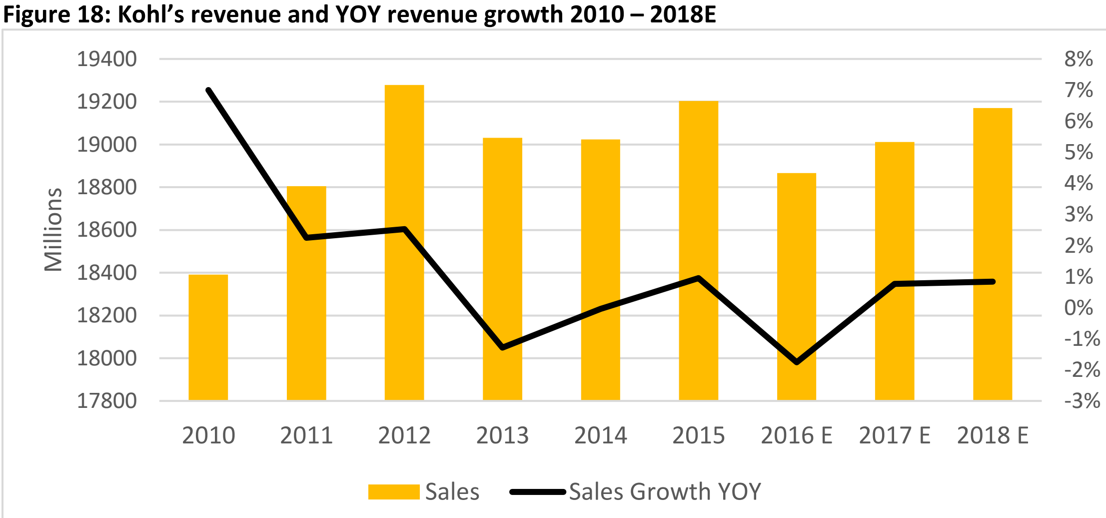
Kohl's is no longer relying on new store locations for revenue growth, but e-commerce instead

Figure 17: Locations and Same Store Sales 2012-2015

Year	2012	2013	2014	2015
Sales	$19,279	$19,031	$19,023	$19,204
Growth		-1%	0%	1%
Stores BOY	1127	1146	1158	1162
New stores	19	12	4	-2
Total stores EOY	1146	1158	1162	1160
Growth		1.0%	0.3%	-0.2%
Sales per store	$16.96	$16.52	$16.40	$16.54
Growth		-3%	-1%	1%
Sales per BOY store	$16.99	$16.53	$16.40	$16.54
SSS Growth		-3%	-1%	1%

Source: Company reports, IMCP

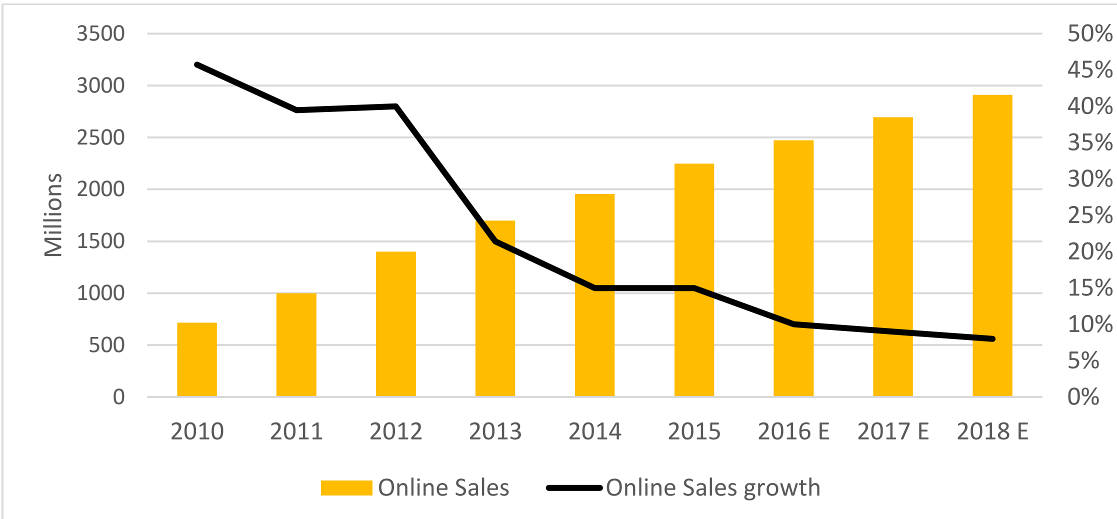
Figure 18: Kohl's revenue and YOY revenue growth 2010 – 2018E



Source: Company reports

While online sales become more prevalent, the rate at which Kohl's has grown them has significantly diminished. Kohl's is treading water; it is not expanding locations and online sales are only covering up declining store sales. I believe that Kohl's stopped recording online sales and store sales separate in 2014 for this reason. I don't think it is as difficult as management states it is to discern between an online and store sale. If Kohl's does not revitalize its online sales growth soon, it may be in grave danger. Many other companies are heavily investing in online presence and achieving superior growth rates.

Figure 19: Online Sales and YOY Online Sales Growth, 2010 – 2018E



Source: Company reports

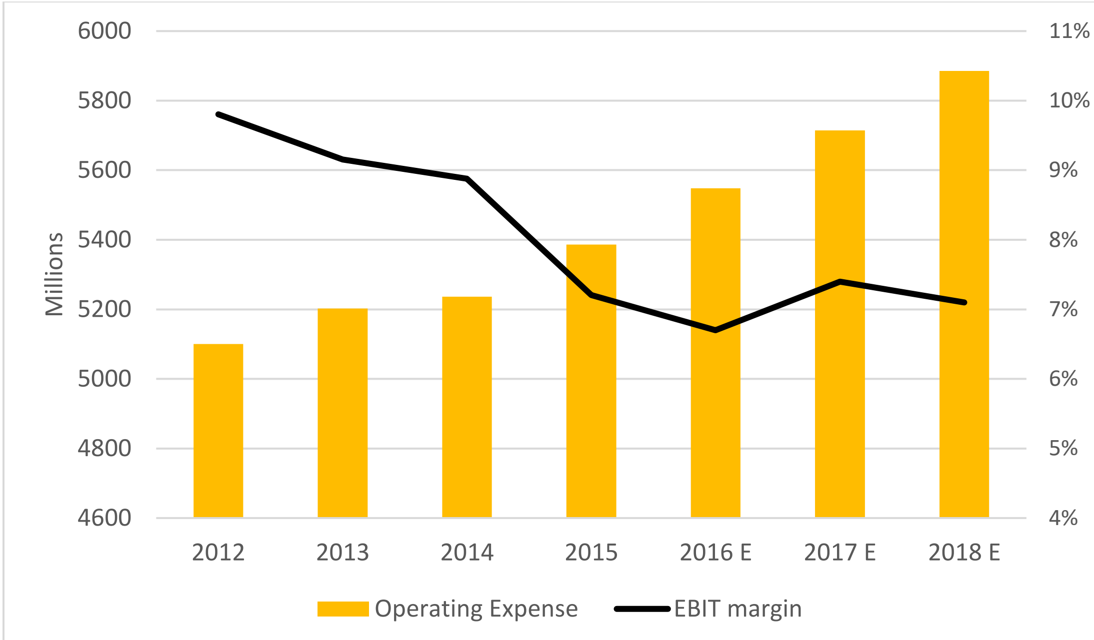
I expect Kohl's to receive a sizeable boost in sales in 2017 and 2018 from its spring release of Under Armour items. This justifies my estimate of men's, women's, and footwear being the highest growing revenue segments in the future (see Appendix 3). Kohl's has stated that men's and women's active and wellness have experienced the greatest growth recently and that national brands are performing better than private and exclusive labels; I see the release of Under Armour a large and effective play given this trend. I expect that the release of Under Armour product in the spring could create a net sales gain of $150 Mil in 2017 and $200 Mil in 2018 when taking into consideration the time of its release and the cannibalization of other products.

The accessories, home, and children's segments have lagged in 2016, and I only expect minimal growth from these segments in the next two years. I believe the lagging categories are due to poor product selection as store remodels, competitive prices, omni-channel offerings, and effective customer service contributes positively to Kohl's store experience.

<u>Operating Income and Margins</u>

Operating expenses are composed of selling, general and administrative expense, depreciation, and amortization. In 2015, there was a large increase in SG&A causing the jump in operating expenses. I do believe, though, that this growth in operating expenses will be the new norm (after a flat 2016) due to larger investments in IT wages as e-commerce continues to become more prevalent. I do not expect there to be large improvements in EBIT margin in years to come for these reasons. I do not see this as a downfall, though, as Kohl's must adapt to the changing environment.

Figures 20: KSS Operating Expense vs. EBIT Margin



Source: Company reports, IMCP

IT wage inflation is expected to hold EBIT margin lower for longer

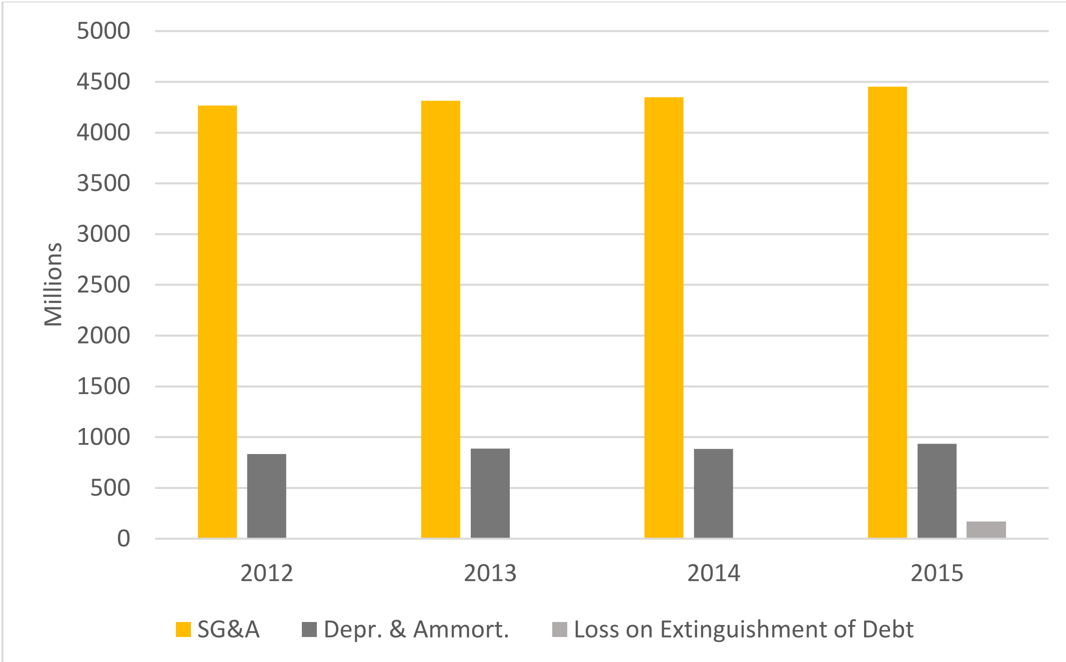
While EBIT margin remains low, I believe the higher operating expenses will be partially offset by higher gross margins. Kohl's has done a much better job managing inventory recently which reduces markdowns. Kohl's has reduced inventory in stores by nine percent over the third quarter and accounts payable to inventory ratio climbed 370 BPs to 44%. I view these numbers as impressive amounts and something that can continue to improve as I believe Kohl's has caught onto an effective process; Kohl's has begun re-fixturing larger 88,000 square feet stores to the same layouts as 66,000 square feet stores and has not experienced any reduction in sales in these locations. This way shelves aren't being filled just to be look full; shelves are filled and inventory is purchased with greater intent.

Figure 22: KSS Operating margins, 2012 – 2018E

	2012	2013	2014	2015	2016 E	2017 E	2018 E
Sales	19279	19031	19023	19204	18867	19012	19170
Direct costs	12289	12087	12098	12265	12056	12091	12154
Gross Income	6990	6944	6925	6939	6811	6920	7016
Gross Margin	36.3%	36.5%	36.4%	36.1%	36.1%	36.4%	36.6%
Operating Expenses	5100	5202	5236	5555	5547	5513	5655
EBIT	1890	1742	1689	1384	1264	1407	1361
EBIT margin	9.8%	9.2%	8.9%	7.2%	6.7%	7.4%	7.1%

Source: Company reports, IMCP

Figure 23: Composition of KSS Operating Expenses, 2012 – 2015



Source: Company Reports

Return on Equity

ROE has declined as margins fell; however, I expect it to rise in 2017 and 2018 back to normal levels as margins begin to recover and asset turnover and leverage rise. Modest sales growth and no net (after depreciation) asset growth will boost asset turns, and FCF is partly being used to buy shares which is boosting leverage.

Kohl's ROE will rise as margins, asset turns, and leverage rise

Figure 24: ROE breakdown, 2013 – 2018E

3-stage DuPont	2013	2014	2015	2016 E	2017 E	2018 E
Net income / sales	4.7%	4.6%	3.5%	3.2%	3.6%	3.5%
Sales / avg assets	1.35	1.33	1.37	1.41	1.46	1.51
ROA	6.3%	6.0%	4.8%	4.5%	5.3%	5.3%
Avg assets / avg equity	2.35	2.40	2.43	2.53	2.63	2.71
ROE	14.8%	14.5%	11.7%	11.3%	14.0%	14.3%

Source: Company reports, IMCP

Free Cash Flow

Figure 25: Free cash flows 2012 – 2018E

Free Cash Flow	2012	2013	2014	2015	2016 E	2017 E	2018 E
NOPAT	$1,194	$1,103	$1,086	$881	$805	$896	$867
Growth		-7.6%	-1.6%	-18.8%	-8.7%	11.3%	-3.3%
NWC*	1,752	1,724	1,424	1,782	1,490	1,407	1,323
Net fixed assets	9,186	9,086	8,753	8,530	8,203	8,090	7,988
Total net operating capital*	$10,938	$10,810	$10,177	$10,312	$9,693	$9,497	$9,310
Growth		-1.2%	-5.9%	1.3%	-6.0%	-2.0%	-2.0%
- Change in NWC*		(28)	(300)	358	(292)	(84)	(84)
- Change in NFA		(100)	(333)	(223)	(327)	(113)	(102)
FCFF*		$1,231	$1,719	$746	1,424	$1,092	$1,053
Growth			39.6%	-56.6%	90.8%	-23.3%	-3.6%
- After-tax interest expense	208	214	219	208	205	203	200
FCFE**		$1,017	$1,500	$538	$1,218	$889	$853
Growth			47.5%	-64.1%	126.4%	-27.0%	-4.0%
FCFF per share		$6.03	$8.81	$3.83	$7.78	$6.35	$6.39
Growth			46.0%	-56.6%	103.3%	-18.4%	0.7%
FCFE per share		$4.99	$7.69	$2.76	$6.66	$5.17	$5.18
Growth			54.3%	-64.1%	141.2%	-22.4%	0.2%

Source: Company reports, IMCP

In 2015, KSS free cash flow was significantly lower than prior years which can be attributed to lower NOPAT as well as an increase in net operating working capital caused by unnecessary inventory levels. I expect free cash flow to return to normal levels in the coming years as Kohl's does a better job managing inventory and experiences a decrease in net fixed assets as the company has slowed store expansion and depreciation takes over. Management has stated a desire to make a $600 Mil share repurchase in 2017 and 2018. I forecast that it will make this repurchase in 2017, but it may have to cut its buyback in 2018 as Kohl's continues to pay down debt and projected free cash flow will fall.

I expect both FCFF and FCFE to increase significantly (over 90%) in 2016 as the result of a 6% decrease in invested capital following a 1.3% gain in 2015. Free cash flow should decrease in proceeding years as I believe change in net fixed assets and net operating working capital will slow.

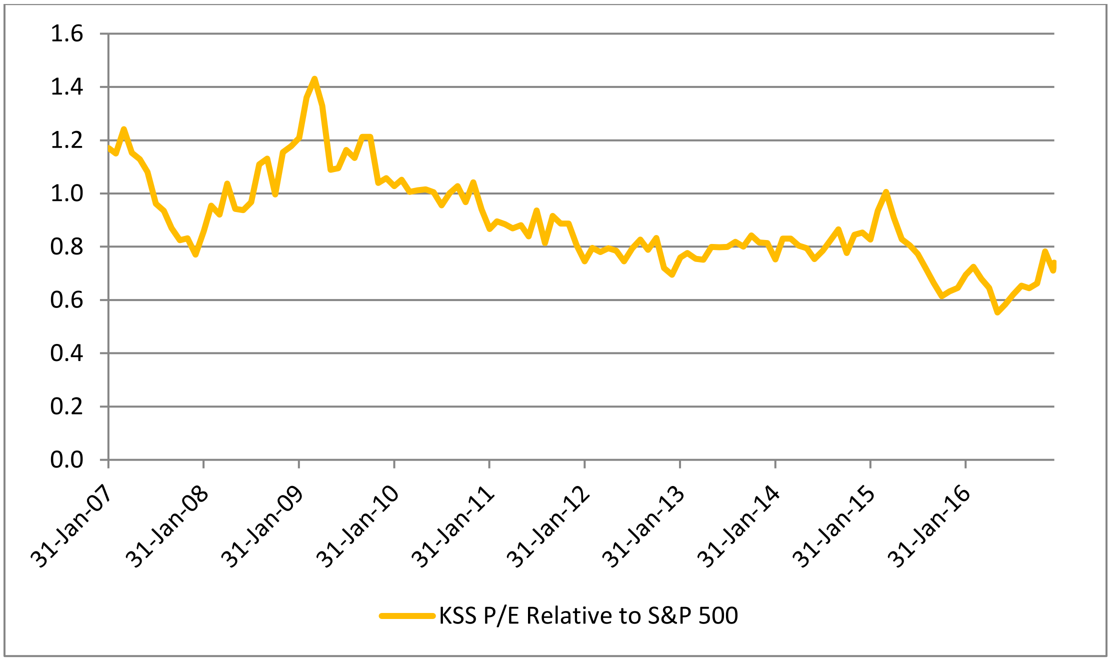
Valuation

Kohl's was valued using multiples and a 3-stage discounting cash flow model. Based on earnings multiples, the stock is slightly undervalued relative to other firms and is worth $48.17. Relative valuation shows Kohl's to be undervalued based on its fundamentals versus those of its department store peers. Price to book valuation yielded a price of $66.57, a seemingly steep number. A detailed DCF analysis values Kohl's at $48.22; I give this value a bit more weight because it incorporates assumptions that reflect Kohl's ongoing business changes. Finally, a probability-weighted scenario analysis yields a price of $47.34. As a result of these valuations, I value the stock at $50.

Trading History

Recently, Kohl's experienced a steep climb in P/E relative to the S&P 500; however, it is currently trading at a lower valuation than it has historically. I believe this is the result of the new optimism towards online retailers, such as Amazon, and the pessimism towards traditional brick-and-mortar retailers. Amazon trades at an astounding 85 times NTM earnings and 173 times TTM earnings.

Figure 26: KSS NTM P/E relative to S&P 500



Source: FactSet

Assuming a slight increase to a 13 NTM P/E at the end of 2017 (up from 11.1), KSS should trade at $52.65 by the end of the year.

- Price = P/E x EPS = 13 x $4.05 = $52.65

Discounting $52.65 back to today at a 9.3% cost of equity (explained in Discounted Cash Flow section) yields a price of $48.17. Given Kohl's potential for EPS to rise, this seems to be fair valuation.

Relative Valuation

Kohl's is currently trading at a NTM P/E slightly lower than its peers, with a NTM P/E of 11.1 compared to an average of 12.1. Investors are only willing to pay a discount P/E for KSS because it has only maintained its sales and earnings in recent years without demonstrating an ability to grow. Companies such as Nordstrom, Target, and TJ Maxx have demonstrated their ability to grow earnings and should continue to do so in the future. I believe Kohl's low P/B of 1.45 compared to the comps group average of 4.23 further demonstrates this point; investors believe Kohl's is only worth a modest amount more than its equity if it does not show consistent earnings growth. Also, KSS has a much lower ROE than its peer group.

Figure 27: KSS comparable companies

Ticker	Name	Current Price	Market Value	Price Change 1 day	1 Mo	3 Mo	6 Mo	52 Wk	YTD	Earnings Growth LTG	NTM	2015	2016	2017	2018	Pst 5yr	Beta	LT Debt/ Equity	S&P Rating	LTM Dividend Yield	Payout
KSS	KOHL'S CORP	$42.01	$7,414	(19.0)	(22.9)	(5.2)	14.3	(15.6)	(14.9)	4.3	17.8%	-18.4%	-11.8%	29.8%	4.5%	-0.9%	1.16	88.0%	B-	4.85%	60.7%
DDS	DILLARDS INC -CL A	$56.49	$1,887	(10.2)	(20.9)	(13.9)	(4.1)	(13.8)	(9.9)	-8.1	1.0%	-11.3%	-19.1%	-0.4%	-10.4%	20.9%	1.07	47.1%	B	0.45%	5.1%
M	MACY'S INC	$30.86	$9,433	(13.9)	(26.4)	(17.4)	(6.8)	(16.5)	(13.8)	6.6	52.0%	-23.7%	-22.7%	36.5%	-0.9%	10.8%	0.70	173.2%	B+	4.17%	69.6%
JWN	NORDSTROM INC	$45.56	$7,897	(6.9)	(20.3)	(14.0)	21.6	(8.8)	(4.9)	7.3	63.7%	-15.3%	-37.1%	58.1%	7.7%	2.9%	0.64	321.7%	A	3.09%	79.7%
JCP	PENNEY (J C) CO	$7.86	$2,423	(7.2)	(20.3)	(12.8)	(9.2)	9.6	(5.4)	-2.0	-155.2%	-33.6%	-101.2%	3100.0%	87.5%		0.86	396.3%	C	0.00%	
TGT	TARGET CORP	$72.56	$40,757	(1.7)	(5.7)	7.1	4.0	(3.0)	0.5	6.9	-2.2%	37.1%	-5.0%	10.6%	5.4%	5.9%	0.56	109.3%	A-	3.21%	41.9%
TJX	TJX COMPANIES INC	$76.15	$49,642	(0.6)	(1.5)	2.6	(0.6)	5.9	1.4	9.4	8.6%	5.7%	4.5%	8.6%	10.3%	15.1%	0.65	51.4%	A+	1.32%	29.0%
SHLD	SEARS HOLDINGS CORP	$10.39	$1,112	0.3	(12.2)	(16.9)	(20.0)	(47.9)	11.8		-26.7%	-32.6%	70.2%	-31.1%	-9.1%		1.41	-111.2%	C	0.00%	
Average			$16,164	(5.7)	(15.3)	(9.3)	(2.1)	(10.7)	(2.9)	3.4	-8.4%	-10.5%	-15.8%	454.6%	12.9%	11.1%	0.84	141.1%		1.75%	45.1%
Median			$7,897	(6.9)	(20.3)	(13.9)	(4.1)	(8.8)	(4.9)	6.8	1.0%	-15.3%	-19.1%	10.6%	5.4%	10.8%	0.70	109.3%		1.32%	41.9%
SPX	S&P 500 INDEX	$2,269		(0.1)	2.9	5.1	8.6	12.5	1.3			1.0%	0.6%	12.0%	11.5%						

Ticker	Website	2016 ROE	P/B	P/E 2014	2015	2016	TTM	NTM	2017	2017E	2016 NPM	2016 P/S	OM	ROIC	EV/ EBIT	P/CF Current	P/CF 5-yr	Sales Growth NTM	STM	Pst 5yr	Book Equity
KSS	http://www.kohls.com	10.5%	1.45	9.9	12.1	13.8	13.1	11.1	10.6	10.1	2.9%	0.40	7.6%	6.5%	8.8	5.2	6.0			0.9%	$29.02
DDS	http://www.dillards.com	10.8%	1.09	7.3	8.2	10.1	10.3	10.2	10.1	11.3	2.9%	0.29	5.5%	9.9%	7.4			-4.7%		2.0%	$51.99
M	http://www.macysinc.com	20.1%	2.49	7.3	9.6	12.4	14.6	9.6	9.1	9.2	2.9%	0.36	7.1%	9.0%	9.4	4.8	6.6	-3.2%	-2.3%	1.6%	$12.40
JWN	http://shop.nordstrom.com	39.9%	9.18	12.2	14.5	23.0	24.5	15.0	14.6	13.5	2.3%	0.53	6.2%	13.0%	10.0	6.1	9.4	4.6%	5.7%	8.3%	$4.97
JCP	http://shop.nordstrom.com/	0.5%	2.12	-3.1	-4.7	393.0	-9.2	16.8	12.3	6.6	0.0%	0.19	1.0%	-7.7%	1021.0	4.7		3.0%	3.1%		$3.70
TGT	http://www.targetcorp.com	25.4%	3.70	18.9	13.8	14.5	13.1	13.4	13.1	12.5	4.0%	0.58	7.3%	12.9%	10.5	8.0	8.4	0.0%	2.4%	1.8%	$19.64
TJX	http://www.tjx.com	52.4%	11.47	24.2	22.9	21.9	22.3	20.6	20.1	18.3	6.8%	1.50	11.8%	38.1%	13.0	15.8	15.2	6.1%	6.2%	7.1%	$6.64
SHLD	http://www.searsholdings.com	71.4%	-0.41	-0.7	-1.0	-0.6	-0.6	-0.8	-0.8	-0.9	-8.7%	0.05	-5.9%	-91.5%	-3.4	-0.5	-3.1	-19.5%		-10.3%	-$25.23
Average		31.5%	4.23	9.5	9.0	67.8	10.7	12.1	11.2	10.1	1.5%	0.50	4.7%	-2.3%	152.6	6.5	7.3	-2.0%	3.0%	1.8%	
Median		25.4%	2.49	7.3	9.6	14.5	13.1	13.4	12.3	11.3	2.9%	0.36	6.2%	9.9%	10.0	5.5	8.4	0.0%	3.1%	1.9%	
spx	S&P 500 INDEX			19.4	19.2	19.1			17.1	15.3											

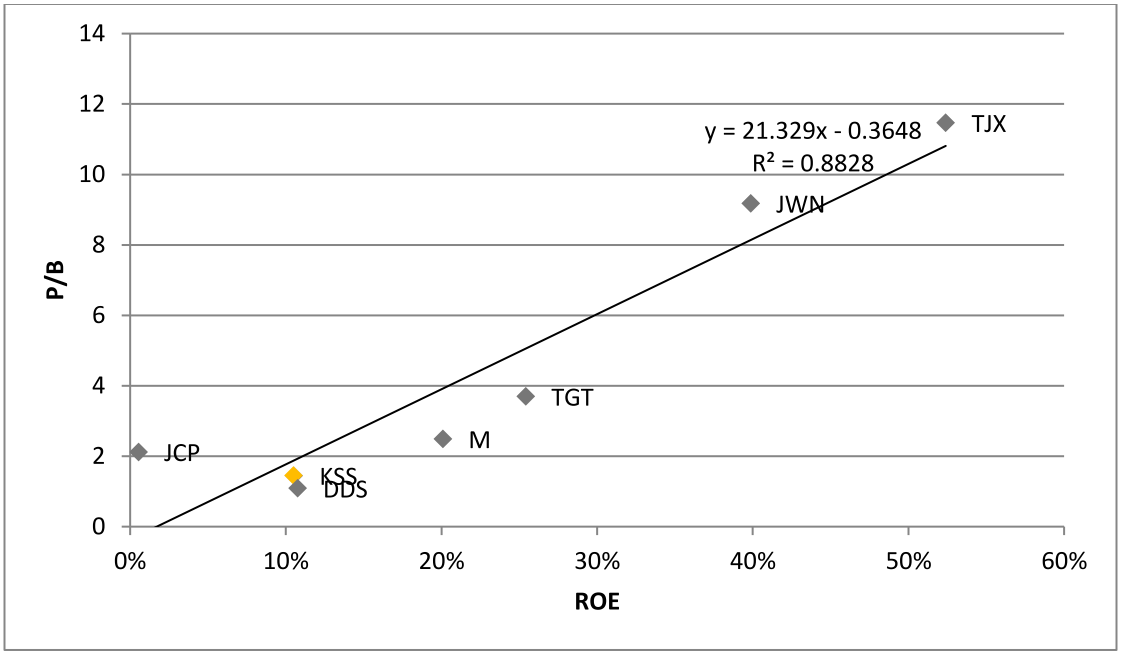
Source:FactSet

A more thorough analysis of P/B and ROE is shown in figure 29. The calculated R-squared of the regression indicates that over 88% of a sampled firm's P/B is explained by its NTM ROE. Note that that Sears is excluded from this regression because of its negative price/book ratio and high ROE. KSS one of the lowest P/B and ROEs of this grouping, and according to this measure is slightly undervalued.

- Estimated P/B = Estimated 2017 ROE (14%) x 21.329 + -0.3648 = 2.621
- Target Price = Estimated P/B (2.621) x 2017E BVPS (27.76) = $72.76

Discounting back to the present at a 9.3% cost of equity leads to a target price of $66.57.

Figure 28: P/B vs ROE



Source: FactSet

For a final comparison, I created a composite ranking of several valuation and fundamental metrics. Since the variables have different scales, each was converted to a percentile of the maximum before calculating the composite score. An 70% weighting of ROE and 30% weighting of NPM was compared to an 100% weighted composite of NTM P/E. After eliminating Sears and JC Penny, extreme outliers, the regression line had an R-squared of .95.

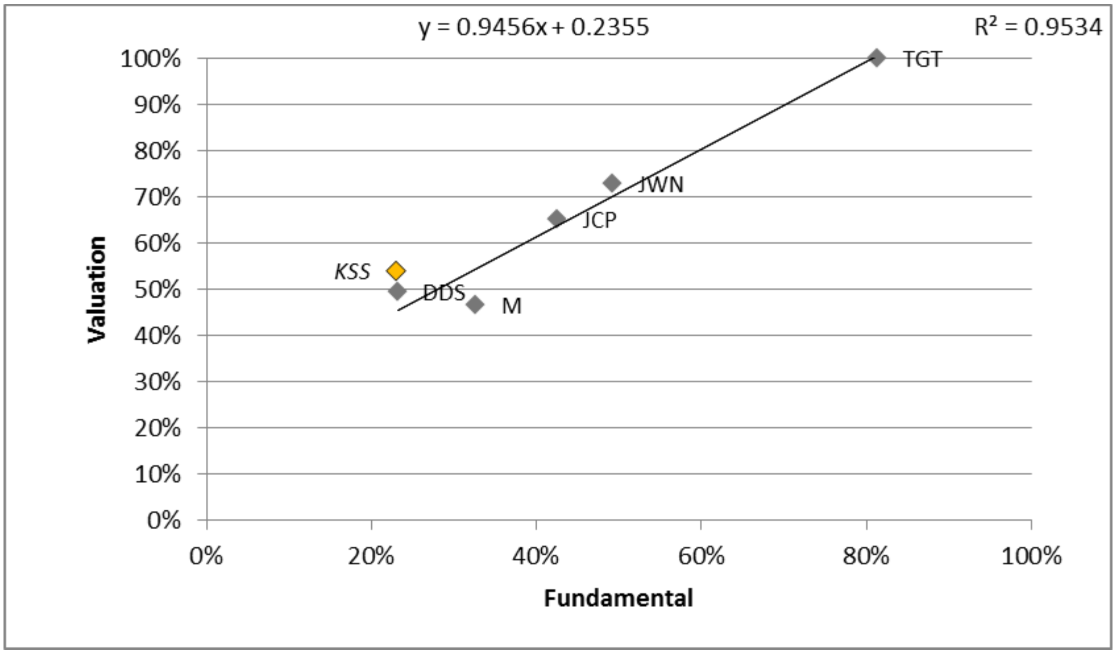
Given this relationship, Kohl's has a suggested target price of 48% of the maximum P/E, or 9.9. Kohl's currently trades at a 11.1 P/E, a slight premium to this target valuation.

Figure 29: Composite valuation, % of range

		Fundamentals			Valuation		
		Weight	70.0%	30.0%	100.0%		
Ticker	Name	Value	2016 ROE	2016 NPM	NTM P/E	Weighted Fund	Target Value
KSS	KOHL'S CORP	54%	15%	42%	54%	23%	48%
DDS	DILLARDS INC	49%	15%	42%	49%	23%	48%
M	MACY'S INC	47%	28%	43%	47%	33%	56%
JWN	NORDSTROM INC	73%	56%	34%	73%	49%	71%
TGT	TARGET CORP	65%	36%	59%	65%	43%	65%
TJX	TJX COMPANIES INC	100%	73%	100%	100%	81%	99%

Source: IMCP, FactSet

Figure 30: Composite relative valuation



Source: FactSet, IMCP

Discounted Cash Flow Analysis

A three stage discounted cash flow model was also used to value KSS.

For the purpose of this analysis, the company's cost of equity was calculated to be 9.3% using the Capital Asset Pricing Model. The underlying assumptions used in calculating this rate are as follows:

- The risk free rate, as represented by the ten-year Treasury bond yield, is 2.43%.
- A beta of 0.9 was utilized as an average of the comps group. While retail is cyclical, KSS is a large firm and has reasonably stable sales.
- A long term market rate of return of 10% was assumed, since historically, the market has generated an annual return of about 10%.

Given the above assumptions, the cost of equity is 9.3% (2.43 + .9 (10.0 – 2.43)).

Stage One - The model's first stage simply discounts fiscal years 2017 and 2018 free cash flow to equity (FCFE). These per share cash flows are forecasted to be $5.17 and $5.18, respectively. Discounting these cash flows, using the cost of equity calculated above, results in a value of $9.07 per share. Thus, stage one of this discounted cash flow analysis contributes $9.07 to value.

Stage Two - Stage two of the model focuses on fiscal years 2019 to 2023. During this period, FCFE is calculated based on revenue growth, NOPAT margin and capital growth assumptions. The resulting cash flows are then discounted using the company's 9.3% cost of equity. I assume 0.5% sales growth in 2019 through 2023. The ratio of NWC to sales will remain at 2018 levels, but NFA turnover will rise from 2.4 in 2018 to 2.6 in 2023 as a result of scaling down locations and store size while online sales become more prevalent. Also, the NOPAT margin is expected to rise to remain at 4.5% from 2018 through 2023 due to high IT wage inflation and shipping costs. After-tax interest is expected to rise 0.5% per year as the result of modest borrowing increases for online expansion. I also assume 1% reduction in shares per year.

Figure 31: FCFE and discounted FCFE, 2015 – 2021

	2017	2018	2019	2020	2021	2022	2023
FCFE	$5.17	$5.18	$4.68	$4.72	$4.77	$4.83	$4.88
Discounted FCFE	$4.73	$4.34	$3.59	$3.32	$3.07	$2.84	$2.63

Source: IMCP

Added together, the second stage discounted cash flows total $15.43.

Stage Three – Net income for the years 2019 – 2023 is calculated based upon the same margin and growth assumptions used to determine FCFE in stage two. EPS is expected to grow from $4.03 in 2017 to $4.41 in 2023.

Figure 32: EPS estimates for 201 – 2023

	2017	2018	2019	2020	2021	2022	2023
EPS	$4.03	$4.05	$4.15	$4.21	$4.28	$4.34	$4.41

Source: IMCP

Stage three of the model requires an assumption regarding the company's terminal price-to-earnings ratio. I believe that Kohl's has reached maturity and will slowly enter the life cycle phase of decline. a P/E ratio of 10 is assumed at the end of Kohl's terminal year. This is below the comp group's historical average multiple of 15.

Given the assumed terminal earnings per share of $4.41 and a price to earnings ratio of 10, a terminal value of $44.07 per share is calculated. Using the 9.3% cost of equity, this number is discounted back to a present value of $23.72.

Total Present Value – given the above assumptions and utilizing a three stage discounted cash flow model, an intrinsic value of $48.22 is calculated (9.07 + 15.43 + 23.72). Given Kohl's current price of $42.01, this model indicates that the stock is moderately undervalued.

<u>Scenario Analysis</u>

Kohl's is difficult to value with certainty because of cyclicality, a shift towards e-commerce, and inability to predict consumers' reactions to brand identity. The firm has stated its desire to improve its omnichannel offerings and brand identity, but sales have not shown improvement. Given the uncertainty of what is to come, I have valued KSS under six scenarios by changing combinations of two key factors. More detailed numbers can be found in Appendix 8.

Sales Growth – High growth assumes that Kohl's new identity is able to draw in more customers and reverse the declining sales trend by 2017. I give this outcome a 20% probability because of the competitive online retail environment. Modest growth is the base assumption used in the prior DCF analysis, and is given a 50% probability. Poor growth assumes that many of Kohl's loyal customers are turned off by the company's development, and the firm is unable to attract enough new customers to grow revenues strongly. I give this outcome a 30% probability, once again, due to competitive online retail.

Cost Savings – Scenario one, moderate operating margin, assumes that Kohl's is able to maintain its operating efficiency even as it grows its online presence. In order to do this, the brand will have to effectively develop its online presence with fewer IT personnel. Scenario two, weak operating margin, assumes that Kohl's is forced to spend a significant amount on IT wages in order to keep up with online retail competition. I have assigned a 50% probability of Kohl's maintaining its current operating margin and a 50% probability of a decline in operating margin.

Figure 33: Scenario analysis

Sales	Cost Savings	DCF Value
High Growth (p=.2)	Moderate (p=0.5)	51.59
	Weak (p=0.5)	46.28
Moderate Growth (p=.5)	Moderate (p=0.5)	48.22
	Weak (p=0.5)	45.85
Weak Growth (p=.3)	Moderate (p=0.5)	47.72
	Weak (p=0.5)	45.85

Source: IMCP

A valuation of Kohl's stock was reached using the same discounted cash flow method outlined in the previous section. Each scenario's value was then multiplied by the scenario's probability to yield a probability-weighted value; the sum of these values is the likely price. This technique results in a target price of $47.34.

Business Risks

Although I have many reasons to be optimistic about Kohl's, there are several good reasons why I find the stock to be fairly priced.

Weather:

Kohl's, being primarily apparel-based, is subject to the whims of the weather. Disruptive weather can result in excess inventory and further markdowns; and on the other hand, it can lead to a shortage of in-demand inventory.

Competitive marketplace:

Retail competition has become especially fierce since the Great Recession. Discount merchandisers and online retailers have stolen market share in recent years as consumers' preferences for how they make purchases has changed and they have become more value-conscious.

Labor issues:

Kohl's relies upon low-wage part time workers to staff its stores. The inability to create a desirable working environment could result in increased turnover expenses or wage inflation. Recent moves to increase the minimum wage in several US states could also hurt operating margins.

Inability to properly adapt omni-channel offerings:

Technology, especially the internet and mobile devices, has changed the way consumers shop. The inability to invest in omni-channel offerings, create a desirable online and mobile experience, and maintain an effective relationship with consumers on social media will cause Kohl's to be swept away by other fast-growing online competitors.

Loss of brand identity:

Creating a desirable shopping experience with great product, service, merchandising, and methods of shopping is key to attracting and retaining both customers and employees. If Kohl's loses its reputation, it will quickly lose business.

Appendix 1: Income Statement

Income Statement (in millions)	2012	2013	2014	2015	2016 E	2017 E	2018 E
Sales	$19,279	$19,031	$19,023	$19,204	$18,867	$19,012	$19,170
Direct costs	12,289	12,087	12,098	12,265	12,056	12,091	12,154
Gross Margin	6,990	6,944	6,925	6,939	6,811	6,920	7,016
SG&A, R&D, and other	5,100	5,202	5,236	5,555	5,547	5,513	5,655
Earnings before interest and tax	1,890	1,742	1,689	1,384	1,264	1,407	1,361
Interest	329	338	340	327	323	319	314
Earnings before tax	1,561	1,404	1,349	1,057	941	1,088	1,047
Taxes	575	515	482	384	342	395	380
Net income	986	889	867	673	599	693	667
Basic Shares	220.0	204.0	195.0	195.0	183.0	172.1	164.8
EPS	$4.48	$4.36	$4.45	$3.45	$3.28	$4.03	$4.05
DPS	$1.36	$1.48	$1.63	$1.79	$2.10	$2.45	$2.82

Appendix 2: Balance Sheet

Balance Sheet (in millions)	2012	2013	2014	2015	2016 E	2017 E	2018 E
Assets							
Cash	537	971	1,407	707	908	705	624
Operating assets ex cash	4,182	4,321	4,173	4,369	4,056	3,992	3,930
Operating assets	4,719	5,292	5,580	5,076	4,964	4,698	4,554
Operating liabilities	2,430	2,597	2,749	2,587	2,566	2,586	2,607
NOWC	2,289	2,695	2,831	2,489	2,399	2,112	1,947
NOWC ex cash (NWC)	1,752	1,724	1,424	1,782	1,490	1,407	1,323
NFA	9,186	9,086	8,753	8,530	8,203	8,090	7,988
Invested capital	$11,475	$11,781	$11,584	$11,019	$10,601	$10,202	$9,934
Total assets	$13,905	$14,378	$14,333	$13,606	$13,167	$12,788	$12,542
Liabilities and Shareholder Equity							
Short-term and long-term debt	$4,915	$5,243	$5,046	$4,965	$4,915	$4,840	$4,765
Other liabilities	512	560	547	563	580	585	590
Equity	6,048	5,978	5,991	5,491	5,106	4,777	4,579
Total supplied capital	$11,475	$11,781	$11,584	$11,019	$10,601	$10,202	$9,934
Total liabilities and equity	$13,905	$14,378	$14,333	$13,606	$13,167	$12,788	$12,542

Appendix 3: Sales Forecast by Segment

Sales (in millions)	2012	2013	2014	2015	2016 E	2017 E	2018 E
Sales	19,279	19,031	19,023	19,204	18,867	19,012	19,170
Growth		-1.3%	0.0%	1.0%	-1.8%	0.8%	0.8%
Women's	5,977	5,900	5,707	5,761	5,646	5,722	5,779
Growth		-1.3%	-3.3%	1.0%	-2.0%	1.4%	1.0%
% of sales	31.0%	31.0%	30.0%	30.0%	29.9%	30.1%	30.1%
Men's	3,663	3,616	3,805	3,841	3,764	3,839	3,889
Growth		-1.3%	5.2%	1.0%	-2.0%	2.0%	1.3%
% of sales	19.0%	19.0%	20.0%	20.0%	20.0%	2.0%	20.3%
Children's	2,506	2,474	2,473	2,497	2,447	2,422	2,446
Growth		-1.3%	0.0%	1.0%	-2.0%	-1.0%	1.0%
% of sales	13.0%	13.0%	13.0%	13.0%	13.0%	12.7%	6.0%
Home	3,470	3,426	3,424	3,457	3,422	3,422	3,422
Growth		-1.3%	0.0%	1.0%	-1.0%	0.0%	0.0%
% of sales	18.0%	18.0%	18.0%	18.0%	18.1%	18.0%	17.9%
Accessories	1,928	1,903	1,902	1,920	1,882	1,891	1,910
Growth		-1.3%	0.0%	1.0%	-2.0%	0.5%	1.0%
% of sales	10.0%	10.0%	10.0%	10.0%	10.0%	9.9%	10.0%
Footwear	1,735	1,713	1,712	1,728	1,706	1,714	1,723
Growth		-1.3%	0.0%	1.0%	-1.3%	0.5%	0.5%
% of sales	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%

Appendix 4: Ratios

Ratios	2012	2013	2014	2015	2016 E	2017 E	2018 E
Profitability							
Gross margin	36.3%	36.5%	36.4%	36.1%	36.1%	36.4%	36.6%
Operating (EBIT) margin	9.8%	9.2%	8.9%	7.2%	6.7%	7.4%	7.1%
Net profit margin	5.1%	4.7%	4.6%	3.5%	3.2%	3.6%	3.5%
Activity							
NFA (gross) turnover		2.08	2.13	2.22	2.26	2.33	2.38
Total asset turnover		1.35	1.33	1.37	1.41	1.46	1.51
Liquidity							
Op asset / op liab	1.94	2.04	2.03	1.96	1.93	1.82	1.75
NOWC Percent of sales		13.1%	14.5%	13.9%	13.0%	11.9%	10.6%
Solvency							
Debt to assets	35.3%	36.5%	35.2%	36.5%	37.3%	37.8%	38.0%
Debt to equity	81.3%	87.7%	84.2%	90.4%	96.3%	101.3%	104.1%
Other liab to assets	3.7%	3.9%	3.8%	4.1%	4.4%	4.6%	4.7%
Total debt to assets	39.0%	40.4%	39.0%	40.6%	41.7%	42.4%	42.7%
Total liabilities to assets	56.5%	58.4%	58.2%	59.6%	61.2%	62.6%	63.5%
Debt to EBIT	2.60	3.01	2.99	3.59	3.89	3.44	3.50
EBIT/interest	5.74	5.15	4.97	4.23	3.92	4.42	4.34
Debt to total net op capital	42.8%	44.5%	43.6%	45.1%	46.4%	47.4%	48.0%
ROIC							
NOPAT to sales		5.8%	5.7%	4.6%	4.3%	4.7%	4.5%
Sales to IC		1.64	1.63	1.70	1.75	1.83	1.90
Total		9.5%	9.3%	7.8%	7.4%	8.6%	8.6%
Total using EOY IC	10.4%	9.4%	9.4%	8.0%	7.6%	8.8%	8.7%
ROE							
5-stage							
EBIT / sales		9.2%	8.9%	7.2%	6.7%	7.4%	7.1%
Sales / avg assets		1.35	1.33	1.37	1.41	1.46	1.51
EBT / EBIT		80.6%	79.9%	76.4%	74.5%	77.4%	76.9%
Net income /EBT		63.3%	64.3%	63.7%	63.7%	63.7%	63.7%
ROA		6.3%	6.0%	4.8%	4.5%	5.3%	5.3%
Avg assets / avg equity		2.35	2.40	2.43	2.53	2.63	2.71
ROE		14.8%	14.5%	11.7%	11.3%	14.0%	14.3%
3-stage							
Net income / sales		4.7%	4.6%	3.5%	3.2%	3.6%	3.5%
Sales / avg assets		1.35	1.33	1.37	1.41	1.46	1.51
ROA		6.3%	6.0%	4.8%	4.5%	5.3%	5.3%
Avg assets / avg equity		2.35	2.40	2.43	2.53	2.63	2.71
ROE		14.8%	14.5%	11.7%	11.3%	14.0%	14.3%
Payout Ratio		34.0%	36.6%	51.9%	64.1%	60.9%	69.7%
Retention Ratio		66.0%	63.4%	48.1%	35.9%	39.1%	30.3%
Sustainable Growth Rate		9.8%	9.2%	5.6%	4.1%	5.5%	4.3%

Appendix 5: 3-stage DCF Model

	Year						
	1	2	3	4	5	6	7
	First Stage		Second Stage				
Cash flows	2017	2018	2019	2020	2021	2022	2387
Sales Growth	*0.8%*	*0.8%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*
NOPAT / S	*4.7%*	*4.5%*	*4.5%*	*4.5%*	*4.5%*	*4.5%*	*4.5%*
S / NWC	*13.51*	*14.49*	*14.49*	*14.49*	*14.49*	*14.49*	*14.49*
S / NFA (EOY)	*2.35*	*2.40*	*2.44*	*2.48*	*2.52*	*2.56*	*2.60*
S / IC (EOY)	*2.00*	*2.06*	*2.09*	*2.12*	*2.15*	*2.18*	*2.20*
ROIC (EOY)	*9.4%*	*9.3%*	*9.4%*	*9.6%*	*9.7%*	*9.8%*	*10.0%*
ROIC (BOY)		*9.1%*	*9.4%*	*9.5%*	*9.6%*	*9.8%*	*9.9%*
Share Growth		*-4.2%*	*-2.0%*	*-1.0%*	*-1.0%*	*-1.0%*	*-1.0%*
Sales	$19,012	$19,170	$19,266	$19,363	$19,459	$19,557	$19,654
NOPAT	$896	$867	$871	$875	$880	$884	$889
Growth		*-3.3%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*
- Change in NWC	-84	-84	7	7	7	7	7
NWC EOY	*1407*	*1323*	*1329*	*1336*	*1343*	*1349*	*1356*
Growth NWC		*-6.0%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*
- Chg NFA	-113	-102	-92	-89	-86	-83	-80
NFA EOY	*8,090*	*7,988*	*7,896*	*7,807*	*7,722*	*7,639*	*7,559*
Growth NFA		*-1.3%*	*-1.1%*	*-1.1%*	*-1.1%*	*-1.1%*	*-1.0%*
Total inv in op cap	-196	-186	-85	-82	-79	-76	-73
Total net op cap	9497	9310	9225	9144	9065	8989	8916
FCFF	$1,092	$1,053	$956	$957	$959	$960	$962
% of sales	*5.7%*	*5.5%*	*5.0%*	*4.9%*	*4.9%*	*4.9%*	*4.9%*
Growth		*-3.6%*	*-9.2%*	*0.1%*	*0.1%*	*0.2%*	*0.2%*
- Interest (1-tax rate)	203	200	201	202	203	204	205
Growth		*-1.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*	*0.5%*
FCFE w/o debt	$889	$853	$755	$755	$756	$756	$757
% of sales	*4.7%*	*4.5%*	*3.9%*	*3.9%*	*3.9%*	*3.9%*	*3.9%*
Growth		*-4.0%*	*-11.5%*	*0.0%*	*0.0%*	*0.1%*	*0.1%*
/ No Shares	172.1	164.8	161.5	159.9	158.3	156.7	155.2
FCFE	$5.17	$5.18	$4.68	$4.72	$4.77	$4.83	$4.88
Growth		*0.2%*	*-9.7%*	*1.0%*	*1.1%*	*1.1%*	*1.1%*
* Discount factor	0.92	0.84	0.77	0.70	0.64	0.59	0.54
Discounted FCFE	$4.73	$4.34	$3.59	$3.32	$3.07	$2.84	$2.63
			Third Stage				
Terminal value P/E							
Net income	$693	$667	$670	$674	$677	$680	$684
% of sales	*3.6%*	*3.5%*	*3.5%*	*3.5%*	*3.5%*	*3.5%*	*3.5%*
EPS	$4.03	$4.05	$4.15	$4.21	$4.28	$4.34	$4.41
Growth		*0.5%*	*2.6%*	*1.5%*	*1.5%*	*1.5%*	*1.5%*
Terminal P/E							10.00
* Terminal EPS							$4.41
Terminal value							$44.07
* Discount factor							0.54
Discounted terminal value							$23.72

Summary		
First stage	$9.07	Present value of first 2 year cash flow
Second stage	$15.43	Present value of year 3-7 cash flow
Third stage	$23.72	Present value of terminal value P/E
Value (P/E)	**$48.22**	= value at beg of fiscal yr 1905

Appendix 6: Scenario Analysis Assumptions

Sales Growth	2017	2018	2019	2020	2021	2022	2023
High Growth	0.8%	0.8%	2.5%	2.5%	2.5%	2.5%	2.5%
Moderate Growth	0.8%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%
Weak Growth	0.8%	0.8%	-1.5%	-1.5%	-1.5%	-1.5%	-1.5%

NOPAT/S	2017	2018	2019	2020	2021	2022	2023
Moderate	4.7%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Weak	4.7%	4.5%	3.0%	3.0%	3.0%	3.0%	3.0%

Appendix 7: Online Sales Data

Year	Online Sales (Millions)	Online Sales growth	Total Sales (Millions)	Online Sales as % of Total Sales	Selling Sq. Ft. (Millions)	Net Sales Per Selling Sq. Ft.	Net Sales Per Selling Sq. Ft. Without Online
2010	$717	46%	$18,391	4%	80.139	$231	$221
2011	$1,000	39%	$18,804	5%	82.226	$232	$217
2012	$1,400	40%	$19,279	7%	83.098	$231	$215
2013	$1,700	21%	$19,031	9%	83.671	$227	$207
2014 E	$1,955	15%	$19,023	10%	83.750	$226	$204
2015 E	$2,248	15%	$19,204	12%	83.810	$228	$202
2016 E	$2,473	10%	$18,867	13%	83.800	$225	$196
2017 E	$2,696	9%	$19,012	14%	83.700	$227	$195
2018 E	$2,911	8%	$19,170	15%	83.500	$230	$195

Appendix 8: Porter's 5 Forces

Threat of New Entrants – Moderate

While the barriers to entry into the department store sub-industry are not extensive, it would require substantial amounts of cash for real estate or online presence to cause a major disruption in the industry. The largest threat would be an already established business.

Threat of Substitutes - High

Kohl's largest threat is losing customers to lower-cost retailers. Kohl's relies on brand identity to convince customers to pay more for products that have huge numbers of potential lower-cost substitutes.

Supplier Power - Low

Kohl's carries a broad assortment of items; however, it is primarily apparel-based. Since there are many suppliers of clothing, it is very easy to change suppliers with little effort.

Buyer Power – Very High

Consumers of retail apparel goods have a great degree of power over retailers. Consumers are able to switch brands with ease and at no cost. Consumers also have the ability to wait for markdowns as there typically is no urgency to purchase apparel items.

Intensity of Competition – Very High

There are numerous national and international retail companies that occupy space in the same shopping centers, as well as online-only retailers that are growing at astounding rates. As foot traffic in malls has decreased, Kohl's traditional competitors are fighting even harder to obtain market share. Discounting by one will usually cause others to follow suit, hurting profit margins for all participants.

Appendix 9: SWOT Analysis

Strengths	Weaknesses
High gross margins	Low operating margin
Large domestic presence	Stagnating growth
Opportunities	**Threats**
Expand online presence	Rising labor costs
Additional fulfillment centers	Competitive prices