Macy's Inc. (M) – Long/Short

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INVESTMENT SUMMARY

Macy's Inc. is an undervalued retail company that has tremendous value locked away in legacy retail locations. As the company moves to a more e-Commerce-focused business, that uses retail locations for Omni-channel connectivity, there will be an opportunity to not only unlock the value of real estate, but see growth opportunities in their core business. Macy's has been shunned by investors as the poster-child of a decline in the retail industry, however, management is making efficient decisions that should normalize the share price to it's true value in the next 12-18 months.

COMPANY DESCRIPTION

Macy's Inc. is an American based department store chain. It is currently operating under three brand names, Macy's, Bloomingdales, and Bluemercury across the United States. The company sells apparel, accessories, home goods, and furniture. The company currently operates in several business segments within Macy's, Bloomingdales, Blue Mercury, and associated online businesses of the three listed brands. The company's ticker is M and has a market capitalization under 10 Billion.

INDUSTRY ANALYSIS

SWOT Analysis

- **Strengths**
    - Macy's Inc. is among the largest retail businesses in the United States. Macy's sells a variety of products that range from apparel/accessories to household appliances. Macy's has a portfolio of prime real estate assets across the United States with varying levels of value. Some of their flagship properties are very valuable, particularly the ones in large cities. The brand appeal of the company's various retail lines like Blue Mercury, Macy's, and Bloomingdales have significant value and are easily recognized as leading retailer brands within the United States market. Macy's is one of the leading e-Commerce destinations in U.S. markets
- **Weaknesses**
    - Macy's Inc. is a retailer. The retail industry faces significant headwinds moving forward. There is a high investment related to opening a new store and a new store can only bring in so much business in a declining industry. The company faces political risks within the United States. They sell brands owned by the current President, which have proved to create a lose-lose situation. The industry is seeing a tectonic shift with many investors beginning to shun the retail sector. Macy's Omni-channel initiatives can only do so much for the business due to the large storefront that is required for the business.
- **Opportunities**
    - Macy's can take advantage of the e-Commerce trend and focus on increasing online sales. Macy's can also further bridge the gap between retail and digital with and increased focus on their omnichannel connection between mobile, online, and operations within retail locations. Similar to other companies in the sector, Macy's can develop a discount e-Commerce website that can sell unsold inventory at a lower ASP. Macy's can take advantage of developing trends in the retail segment to halt the decline in comp sales. There is also significant opportunity beginning to be realized within the real estate portfolio for investors.
- **Threats**
    - Macy's faces threats from all directions when looking at the retail business. They need to compete on price (since their customers tend to be middle class) and they need to compete on value. Macy's in-house brands will face competition from the better marketed mainstream brands that are sold in many of its stores. Macy's competitors have already seen some financial turmoil; Macy's has so far been able to avoid a similar fate. Developing distribution channels, a brand, the high capital requirement are all factors that favor Macy's Inc. Their business has medium barriers to entry, it is not impossible to start a department store, but it is not easy.

Retail Industry Analysis (A Bear Theme)

- The retail industry has a negative outlook. Investors are aware of the challenges associate with increasing foot traffic and cost afflictions facing the brick and mortar business. There is little terminal value in most retail business that focuses on brick and mortar retail. Retail investors have switched a cyclical focus with themes such as weather patterns, fashion trends, and labor arbitrage opportunities. Strong retail segments are also developing in the lower discount stores and the higher end luxury stores. Middle market retail stores need to adapt to the changing environment. It is increasingly more important to identify retail names that are moving into Omni-channel opportunities. Some e-Commerce players like Amazon have made investments into increased a physical presence. Other brick and mortar players have invested in online sales channels (like Macy's). There is a business model convergence occurring in the retail industry.

- **E-Commerce risk**: Not all brick and mortar businesses are facing the same degree of ecommerce pressure because of the varying degree of necessity associated with buying goods online. Macy's Inc. household non-durable market is not under threat—yet as only 2% of those types of goods are sold online.

- **Unit Economics**: Brick and Mortar businesses that have a small footprint have great unit economics, which creates some insulation from e-Commerce pressures. Macy's has moved into this category of the market by acquiring Bluemercury.

- Macy's has to deal with retail industry risks moving forward, the company is positioned well to capture the convergence cycle as retailers move to become e-commerce businesses. Below we discuss exactly how Macy's is combatting its e-Commerce risk and generating value from it's large footprint across the United States.

Business Model

- **Overview**: Macy's is a traditional department store retail business that has adapted to modern business customs to stay competitive. Generally, the process starts at the suppliers segment where various suppliers and designers create products for Macy's to sell at their stores. Macy's also has a few in-house labels that produce higher margins for the company. Next Macy's procurement team looks at the different options available and selects products to place on the floor. The products then get sent to stores or get placed in storage warehouses. Now there are two paths for any product that gets the product into a customer's hands. On method, the e-commerce method would be a simple online sale. Buy the product and then it gets delivered to the customer. The other method, is buying from the store. A customer simply selects an item from the store and purchases it. Auxiliary business processes include marketing and customer service. These services are used to increase sales and supplement the sales process for customers.

- **Operations**: Macy's Inc. leases, owns, and operates its properties. Macy's has a very valuable real estate portfolio that is discussed below. Macy's and its other brands use these properties to showcase their products and conduct a brick and mortar operations.

- **Management**: Macy's management has a good history. Jeff Gennette is scheduled to take over from past CEO, Terry Lundgren, before the end of the first quarter in 2017. Joining the company in 1983, Gennette has risen through the ranks and was formerly CEO of Macy's West in 2009 and then President in 2014. Gennette has a long history and extensive experience in the merchandising and operations side. This uniquely positions Gennette to guide Macy's through a tough retail market. The CFO, Karen Hoguet, does not make claims that indicate the management is only thinking about shareholder value, which is a good sign, as claims like that tend to lead to short-term efforts to boost the share price. The management has a history of making smart business decisions to grow the company, however, these ideas worked in a different sector landscape. It will be difficult to say whether their strategy will work moving forward.

Thesis & Key Points

Macy's Retail Segment

- **Macy's is innovating to adapt to an ever changing retail market**

- Macy's has been losing business to discount chains and luxury retailers' who have both attracted Millennials**.** With a retail market growing at 3% annually, Macy's has been quickly rolling out strategic initiatives that are proving to be successful in recapturing customers.
- Macy's Backstage – To combat discount retailers, Macy's has begun to roll out its Backstage store. Currently in over 75 locations, both freestanding and in stores, these small "in store outlets" average 30,000 square feet and sell an assortment of discount women's, men's and children's apparel, shoes, fashion accessories, housewares, and jewelry. Backstage sells a mixture of clearance goods from Macy's 800 department stores, along with merchandise from top brands made specifically for the Backstage stores (though at a fraction of their typical price) including items that are not in typical Macy's stores. The PR and marketing used is modern, the signage encourages discount shopping and thriftiness, and the layout of the showroom is appealing. Storefronts look very similar to discount stores including Marshalls and T.J. Maxx. Since the recession, off-price chains have been one of retail's fastest growing areas. While the appeal of T.J. Maxx is that they offer substantial deals no matter when you shop, Macy's full-line stores tend to rely on coupons, and one-day sales to drive customer traffic. The availability of 40%-50% discounts in the Macy's Backstage could add a new customer base and keep customers from going to T.J. Maxx or Marshalls.
- MyStylist - Recently released, Mystylist is a "complimentary personal shopping service" that allows consumers to quickly book an appointment with a stylist via a mobile app or online. The initiative aims to create a more personalized experience for customers by providing a personal shopper with fashion expertise on current clothing trends. This allows Macy's to differentiate itself among the middle market to compete with more trendy and higher end competitors like Nordstroms who offer this service.
- Increased wedding presence - Macy's has for some time lost out on the potential of the wedding market, which has grown 20% in the last five years. After discount and specialty retailers continued to capitalize, Macy's is now going full force into this crucial market. The internal strategy is coined "all things wedding" starting much earlier in the wedding process and offering all wedding services from beginning to end. With a TAM of $60 billion and target market of $15 billion including jewelry, dresses, and registry etc., there's plenty of room for Macy's to grow. To personalize the experience, Macy's MyStylists have focused training on bridal dresses and suits. Macy's will also leverage Bluemercury products and a younger customer base to expand the segment. With a focus on higher quality and larger engagement rings they have partnered with Men's Warehouse while also offering exclusive tuxes by Ryan Seacrest and Ralph Lauren to differentiate themselves. The initiative started with 55 stores but will be expanded to 150 stores later this year.
- New Licensing and vendor shops - In stores, Macy's will be adding new vendor shops and bringing new businesses, for example a Louis Vuitton store in the San Francisco location, onto the sales floors through additional license agreements. New high traffic businesses included inside, and adjacent, to retail locations have and will improve foot traffic in stores.
- Innovative loyalty programs – In 2015 Macy's was a key partner in the country's first-ever cross-brand loyalty program for shoppers. The program is not affiliated with any one credit card and there is no fee to sign up. Shoppers will accumulate rewards across a variety of consumer brands to be used in Macy's locations.
- Expansion of Bluemercury – To combat decreased sales in the middle market, Macy's acquired Bluemercury in 2015, a luxury beauty product and spa retailer, now with 138 locations. Macy's is focusing on expanding freestanding locations into suburban markets and incorporating select products and boutiques into Macy's locations. Since the acquisition, a further 19 stores have opened to expand the brands reach.
- Shift in merchandise sourcing – Previously using a historical, backward looking approach to merchandise buying, Macy's wasn't keeping up with developing trends. With a new open selling approach, Macy's is using real time inventory tracking, improving assortment, and putting an emphasis on trendy products to boost sales. Recent examples include a pilot initiative in their shoe segment where there has been improved selection and assortment. Macy's has also been focusing on their growing product segments of fine jewelry, watches and now a focus to strengthen cosmetics. Fragrance has been a strong point within cosmetics, Macy's is making headway into this space.

Reduction in locations and consolidated stores

- Selling retail locations where real estate values eclipsed still positive cash flows in the 100 closed retail locations. This smaller real estate portfolio will allow for better allocation of resources to top locations.

- Top Door Strategy - Focusing investments and associates on top 150 retail locations. Focus is placed on transforming existing locations into destination stores through stronger merchandise presentation in key departments, additional licensed departments (store-within-a-store), enhanced staffing for stronger customer service, and increased local marketing. To attract new customers and target key demographics, Macy's is adding sought after vendors, increasing licensing agreements in stores, and adding Bluemercury locations within the top preforming stores. In addition, with top associates concentrated in Macy's best locations, the customer experience will improve to increase foot traffic.
- Macy's locations tend to be one of the largest in the industry and are facing headwinds from smaller stores. Consolidating storeroom space is proving to be a successful first step. They can use the excess space for new vender relationships, to sell the space for cash, or repurpose space for restaurants or small shops that may bring in a new customer. Nordstrom successfully implemented a similar strategy of placing cafes and restaurants in stores in recent years, which improved foot traffic.

➢ **Economic Trends and Market Conditions**

- Economics for consumer spending are positive for 2017. A strong labor market, increases in disposable income, and income growth, will increase household wealth, leading to higher consumer spending.
- Weather - Macy's CEO Terry Lundgen stated that 2015 warm winter was responsible for 80 percent of the holiday season's lost sales. Normal or cold winter weather results in increased sales of winter outerwear, which take up the bulk of the shelf space and sales during winter months. However with uncharacteristically high temperatures, Macy's has been left with excess inventory and lower sales in the past two holiday seasons. This resulted in the beginning of a retail sell-off. The unusually warm winter was due to El Nino, or the periodic warming of the Pacific Ocean that takes place every two to seven years. In addition, the jet stream was much higher north last year, which prevented the high cold winds from being pushed down to the lower latitudes. As temperatures normalize and without a severe El Nino in the coming years, holiday sales should not be depressed as severely.

➢ **Brand Value and competitive advantage**

- Customers will continue to flock to retail stores for the personalized service, touch, feel, and uniqueness that retail locations offer. In the recent EquiTrend Brand Equity Index, Macy's ranked first among department stores as a result of familiarity, quality, and purchase consideration. A difficult return process, quality of customer service, and costs of shipping has created difficulties for pure online retailers. Macy's will continue to utilize experienced store associates to provide a one of a kind experience for customers that can't be replicated on any online site.
- Macy's is uniquely differentiated by their best in class store locations. Macy's is still maintaining a significant brick-and-mortar presence in 49 of the top 50 U.S. markets. The large presence in class A and B malls, which more easily adapt to a changing customer landscape, will prove to contribute to Macy's longevity. Although there will be consolidation within the space, the strongest competitors that have been able to adapt and connect retail and ecommerce segments will survive.
- Macy's strong Omni-channel model, discussed later, is countering online and discount stores by leveraging retail locations to pick up and return online purchases. The buy online, pick up in store model in addition to in store returns will ensure a defensible retail market that online retails won't be able to match.

Macy's E-Commerce Segment

➢ **Macy's Omni-channel shopping platform provides further connectivity**

- Macy's Omni-channel strategy allows customers to shop seamlessly through a variety of channels including in store and online via laptop or mobile device.
- Macy has successfully executed this Omni-channel strategy by leveraging their expansive store network to serve as online distribution centers, which simultaneously maximizes inventory management and the customer experience. Through these channels, they have the ability to move inventory between online and in-store orders as associates in every retail location can sell a product that may be unavailable locally, by shipping merchandise from nearby customer fulfillment centers.
- One of Macy's larger initiatives was a $400 million renovation of their flagship store in Herald Square to increase the digital presence in-store and improve the Omni-channel shopping experience.
- Macy's has adopted RFID technology to increase tracking precision of a product within a store or the supply chain to help them fulfill their "ship from store" and "buy online, pick up in-store" programs.

➢ **Macy's is well positioned in the fast growing e-retail sector**

- Retail ecommerce has undergone exponential growth with ecommerce sales growing more than 15% YoY for the past 6 years, reaching a current market of $350 billion.
- Macy's captures a large position in this TAM, ranking 5th amongst the US's top e-commerce retailers and their online business has grown at a compounded double-digit rate in each of the past 15 years.

➢ **Macy's is restructuring to maximize its e-commerce profits**
- With e-commerce representing only 17.5% of Macy's total sales, moving forward into 2017, Macy's undertook prioritizing online sales by focusing resources and strategy to expanding digital business.
- Of the $550 million in annual expense savings from store closings $250 million will be invested in growing the digital business. With this, Macy's will have surpassed their $500 million e-commerce investment goal a year ahead of schedule.

➢ **Macy's is utilizing Big Data to create a more personalized retail experience**
- 70% of Americans visit Macy's throughout the year, thus they can adeptly draw on Big Data to create customer-centric assortments.
- Macy's analyzes a variety of data points including sell-through rates, price promotions and discounts, and out-of-stock rates. They combine it with SKU data from each product at retail locations and online to optimize in-store inventory assortments and fulfillment center inventory.
- Macy's further enhances the individual customer experience by using data to create targeted direct emails and customized incentives at checkouts.
- These incentives have worked to increase online conversion rates and create stronger engagement to improve retention rates, which have risen 10% over the last years

➢ **Macy's is helping pioneer the virtual assistant market**
- The intelligent virtual assistant market is forecasted to grow from 390 million in 2015 to 12 billion by 2024. Through their recent partnership with IBM Watson Artificial Intelligence Macy's is positioned at the forefront of this expanding market.
- Macy's On Call app launched its pilot phase last fall, this app allows customers to input any range of questions regarding specific products, departments, brands, or services and receive a customized response.
- This initiative will boost sales as consumers increasingly turn to their smartphones for help while freeing up employees to focus on more complicated customer requests, as well as creating more personalized relationships with every customer.

➢ **Expanding into untapped Chinese e-commerce market**
- China represents a large, unexploited $4.9 trillion retail market, representing 47% of digital retail sales worldwide and Macy's is planning to expand their e-commerce site into China this year.
- Macy's has successfully begun to tap into the Chinese e-commerce market when they began selling online last November on Alibaba's Tmall Global. Alibaba reported that Macy's quickly became one of their most popular sellers on Tmall and has gained over 300,000 daily followers.
- Macy's explored multiple avenues to connect with young Chinese customers, including live broadcasts that explain their history and product offerings. These methods proved successful, as recent online broadcasts resulted in 150 million posts to Chinese social network Weibo.

Macy's Real Estate Portfolio

➢ **Macy's real estate portfolio is vast.**
- With 782 stores and 100 of the least profitable closing, they have a massive commercial footprint. Though this is essential for a prominent retailer, Macy's has more property than necessary and is in the process of redeveloping some and selling others. This sale seems like a result of retail pressures. Though it may be in a sense, the sales are entirely beneficial for Macy's.

➢ **Examining just their flagship stores alone shows tremendous value**
- In January 2017, Macy's sold their store in the Nicollet Mall in Minneapolis, one of the premier shopping locations in the U.S. This shows Macy's is not afraid to shutter the large flagships in order to make a profit. Though the sale price was undisclosed, retail space in the area commands very high price per square foot, and the large store of 360,000 square feet most likely sold for around **40 million** USD.

- They also recently sold their men's store in Union Square San Francisco for 250 million, assigning 960 dollars of value per square foot. Using that metric and applying it to their larger union square store across the street, it would be easy to find about **890 million** in value there (as it is a 937,000 sq. ft. location).

- Macy's most interesting flagship, however, is a block of property in New York City, the Herald Square store. This location is 2.2 million square feet and in prime retail position. The flagship Saks Fifth Avenue store (of 650,000 square feet) was recently appraised in a mortgage to be worth 3.7 Billion. Though the rents on Fifth Avenue are higher than those on 34th street, we can use this information to price Herald Square. The price per sq. ft. assigned to Saks was 5,700 while rent in that area is around 3,500. I used this ratio, multiplied by the average commercial rent by Herald Square of 890, and found a purchase price of around 1450 per square foot. This results in a roughly **3.2 billion** value, which is quite frankly conservative.

- Their flagship on State Street in Chicago is 1.3 million square footage and evaluating recent transactions in the area shows a price per square foot of at least 450 dollars-valuing the building at **585 million.** Looking at their three most prominent locations there seems to be around 4.6 billion at a minimum (assuming no drastic real estate crisis in urban areas).

- **The entire real estate portfolio is valued between $18-21 billion by analysts**
  - Though it would be quite difficult for us to look into every one of the remaining 700 locations, many analysts have done the work. Activist hedge fund Starboard Value sees 21 Billion worth of real estate in Macy's name. Using a third-party real estate valuation firm, they went property by property assessing values and summing the pieces. Though their estimates for Herald Square store outpace mine by about 20%, even discounting their assumptions yields **17 billion in real estate value**, right around a recent estimate by a Citi analyst who proposed 18 billion.
  - Clearly these numbers (though variable) show a tremendous amount of monetary value in real estate for Macy's, and even the lowest estimate is nearly double their current Market capitalization. Though activist investors have been calling for a REIT spinoff for years, Macy's finally seems close to giving in to such pressures as they shop themselves. Even if purchased by another retailer such as HBC, the worth of the property and storefronts will surely push the acquisition value up to nearly twice their current share price.

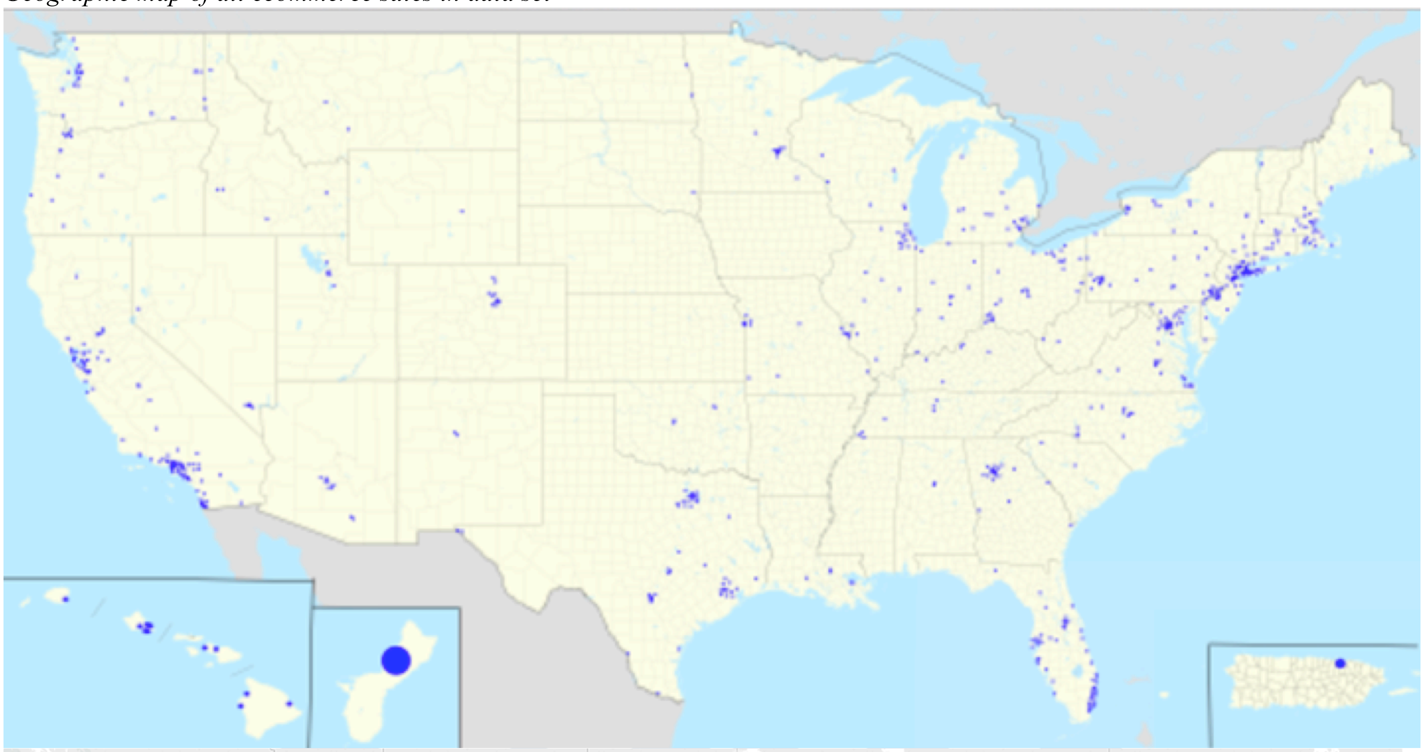
- **Macy's appears poised to capture real estate value**
  - Encouraging for the move towards realizing real estate value, a Macy's press release explained the closing of their least profitable stores "In a number of cases, stores will be closed as the value of the real estate exceeds their value to Macy's as a retail store". Even in their most recent earnings call, the CFO continually stressed the exciting moves the company is making with their real estate portfolio, teaming up with an asset manager (Brookfield) to improve the properties. If Macy's decides to pass on redevelopment, however, the partnership allows Macy's to sell properties to Brookfield, essentially guaranteeing demand for 50 properties, with the option to add more to the deal.
  - In addition to the partnership with Brookfield, Macy's has and will redevelop some assets including a combination of stores; portions of stores; outparcels; and surplus land or through improvements alongside an existing store. The redevelopment will increase the property value of locations that may be sold, or will create more effective retail environments for those maintained. In fact, more time was dedicated to their real estate in comparison to their retail business. This illustrates the desire to finally realize the value hidden beneath them.

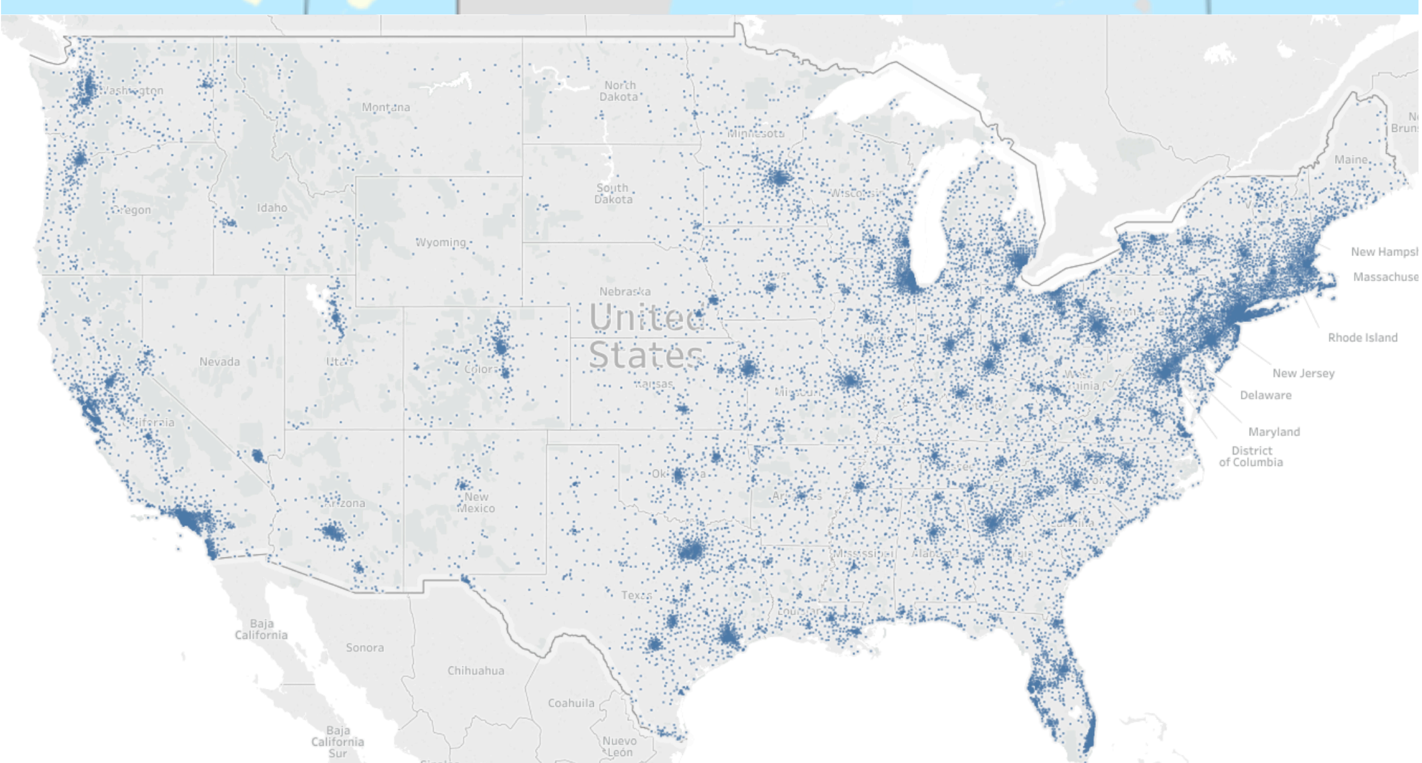
- **This year alone, Macy's will realize large capital inflows from store sales**
  - This year, Macy's will be realizing their 250 million USD sale of the Men's store in Union Square, close to 975 million from the sale of the 100 store closures, 40 Million from their Nicollet Mall sale, and around 95 Million from another San Francisco location and Portland location. This indicates over 1.3 billion in proceeds from this year's sales alone.

Data Analysis

With Macy's closing a significant portion of retail locations in recent years, we analyzed data provided by Point72 on ecommerce sales to explore the possibility of Macy's recapturing lost retail sales online. The below chart is a representation of all of the transactions in the sample data set (assuming the presence of a ship to zip indicates an online sale). The resulting map correlates highly with the plot of Macy's physical retail locations. This indicates many have already begun shifting from in store purchases to online purchases and have the Macy's brand salient in their mind. Due to these factors, online sales are likely to continue at previous growth rates, in addition to recapturing lost sales from store closure areas.

Geographic map of all ecommerce sales in data set





Geographic map of all ecommerce sales in data set

PERCEPTIONS

The market is replete with Macy's misperceptions.

1. Across retail comps, Macy's is assigned one of the lowest market multiples because of recent headwinds the company has faced
   - Though they are a retailer, they have launched many initiatives to combat headwinds
2. The market ignores Macy's e-commerce dominance
   - Their online sales presence is far stronger than most realize
3. The market ignores the fair market value of Macy's most valuable asset, their real estate
   - Macy's real estate portfolio is worth nearly twice their market capitalization

INVESTMENT TIMELINE

We recommend initiating a long position in Macy's immediately. Rumors of a buyout are swirling as Macy's is already in talks with Hudson Bay Company (HBC) owner of Saks Fifth Avenue and Lord & Taylor. In addition, activist hedge funds are calling for a REIT spinoff of their real estate, and may finally be successful. Regardless, Macy's is finally focusing more on their real estate portfolio through strategic closures, redevelopments, and most significantly sales. Macy's will more than likely divest another 100 or so stores over the next five years, and will most likely start to sell off their remaining flagships in the coming years as well. It is important to enter the position before such sales occur, as they represent massive capital inflows from cash proceeds.

SIGNPOSTS

- Moving forward it will be important to follow-up on Macy's real estate divesture strategy and if it is being implemented to the benefit of shareholder's. Sears formed a REIT using its real estate holdings, an action which has faced some scrutiny due to the conflict of interest of the CEO, its lender, and the largest shareholder who are the same person. We believe that Macy's is looking in the right direction moving forward, however, it is something to pay attention to. Big box retail at its core is simply monetizing land to the highest yield possible. Brands come and go, but demand for an irreplaceable location never dies.
- Another signpost to look out for is if Macy's Omni-channel initiatives yield sales accretive results. Omni-channel retail works when there are many retail locations for customer interaction left and right to all parts of the value chain.
- Taking a look every quarter at Starboard Value's stake in Macy's is also important. If the Hedge Fund begins to size down it's investment, then the real estate strategy may no longer be in the spotlight.

RISKS

Inability to control costs
According to an economist interviewed by Ernst and Young, "Low margins mean that costs [have] major effects on profitability." SG&A is the largest lever to adjust, however that would also impact future sales growth.

Bad price image
Price image is an important way to determine sales and ASP's. Creating a price portfolio is especially difficult for middle of market brand, as it has to compete on two fronts, fighting off low-cost retailers, but retaining higher-income customers.

General tail risk: Supply chain disruptions
Every retailer has to price in black swan risk associated with difficult and rare situations. Macy's needs to ensure it isn't cutting costs, so that when a black swan event occurs they won't be in a worse position.

Volatility in CRE markets
Boston Federal Reserve President Eric Rosengren is one of many economists to indicate that there is a bubble in commercial real estate markets. This is a result of low interest rates for the last several years. A significant change in the CRE market and the U.S. credit market could lower the value of real estate.

VALUATION

Base Case – Doesn't take any real estate value into consideration and solely focuses on the current business model and decisions that have been executed

Terminal Value-Base Case

Perpetuity	
Final Year Free Cash Flow	$1,033.3
Terminal Growth Rate	0.0%
Final Year Terminal Value	$16,044.8
Present Terminal Value	$11,743.7

WACC-Base Case

Cost of Equity	
Risk-Free Rate	2.8%
Beta	0.96
Equity Risk Premium	6.5%
Cost of Equity	9.01%

Cost of Debt	
Debt Interest Rate	4.9%
Tax Rate	36.2%
Cost of Debt	3.1%

WACC	
Equity Weight	56.5%
Debt Weight	43.5%
WACC	6.44%

Valuation Output- Base Case

(In USD $MM except per share data)

Firm	
Enterprise Value	$18,149
Debt	$7,473
Cash	$1,125
Equity Value	$11,801
Terminal Value Type	Perpetuity

Per Share	
Number of Shares	305.000
Target Share Price	$38.69
Current Share Price	$31.80
Upside/Downside	21.7%

Operating Model- Base Case

	2015A	2016E	2017E	2018E	2019E	2020E
Total Revenue	$27,091.0	$26,667.1	$25,296.5	$24,946.4	$24,618.6	$24,327.6
Growth		*-1.6%*	*-5.1%*	*-1.4%*	*-1.3%*	*-1.2%*
Retail Revenue	*$22,485.53*	$21,601.1	$19,723.8	$18,816.5	$17,875.7	$16,910.4
Growth		*-3.8%*	*-4.2%*	*-4.6%*	*-5.0%*	*-5.4%*
Loss of Revenue from Store Sales		$30.0	$970.0			
E commerce	*$4,605.47*	*$ 5,066.02*	*$ 5,572.62*	*$ 6,129.88*	*$ 6,742.87*	*$ 7,417.16*
Growth		10%	10%	10%	10%	10%
COGS	(16,508.0)	(16,249.7)	(15,414.5)	(15,201.2)	(15,001.4)	(14,824.1)
Gross Profit	**10,583.0**	**10,417.4**	**9,882.0**	**9,745.2**	**9,617.2**	**9,503.5**
Margin	*39.1%*	*39.1%*	*39.1%*	*39.1%*	*39.1%*	*39.1%*
SG&A	(8,544.0)	(8,410.3)	(7,914.8)	(7,742.9)	(7,579.6)	(7,429.2)
Operating Profit (EBIT)	**2,039.0**	**2,007.1**	**1,967.2**	**2,002.3**	**2,037.6**	**2,074.3**
Margin	*7.5%*	*7.5%*	*7.8%*	*8.0%*	*8.3%*	*8.5%*
Cash Taxes	(608.0)	(726.4)	(711.9)	(724.6)	(737.4)	(750.7)
NOPAT	1,431.0	1,280.7	1,255.3	1,277.7	1,300.2	1,323.6
D&A	1,349.0	1,327.9	1,133.2	992.7	856.6	724.8
D&A Margin	*5.0%*	*5.0%*	*4.5%*	*4.0%*	*3.5%*	*3.0%*
Total Capex		(1,066.3)	320.7	(1,024.9)	(1,011.4)	(999.5)
Proceeds from Store Sales		29.3	1,360.0			
Operational Capex	(1,113.0)	(1,095.6)	(1,039.3)	(1,024.9)	(1,011.4)	(999.5)
Capex Margin	*(4.1%)*	*(4.1%)*	*(4.1%)*	*(4.1%)*	*(4.1%)*	*(4.1%)*
Net Working Capital	1,457.0	1,434.2	1,360.5	1,341.7	1,324.0	1,308.4
NWC Margin	*5.4%*	*5.4%*	*5.4%*	*5.4%*	*5.4%*	*5.4%*
Δ NWC	-	(22.8)	(73.7)	(18.8)	(17.6)	(15.7)
Unlevered Free Cash Flow	**1,667.0**	**1,519.5**	**2,635.4**	**1,226.7**	**1,127.7**	**1,033.3**
Margin	*6.2%*	*5.7%*	*10.4%*	*4.9%*	*4.6%*	*4.2%*
Growth		(8.8%)	73.4%	(53.5%)	(8.1%)	(8.4%)
Discounted Free Cash Flow		**$1,427.5**	**$2,326.2**	**$1,017.2**	**$878.6**	**$756.3**
Discount Factor		0.94x	0.88x	0.83x	0.78x	0.73x

Case 2 DCF: Forecasts realistic gradual sales of real estate holdings based off assumptions made in operation model (see comments in text box below). We believe this scenario is the most likely of the lot as Macy's management has made significant moves to sell off real estate holdings with a focus on flagship stores

Terminal Value-Real Estate Sale Scenario

Perpetuity	
Final Year Free Cash Flow	$1,370.0
Terminal Growth Rate	(1.0%)
Final Year Terminal Value	$23,038.3
Terminal Property Value	$ 4,808.50
Present Terminal Value	$16,862.4

WACC- Real Estate Sale Scenario

Cost of Equity	
Risk-Free Rate	2.8%
Beta	0.96
Equity Risk Premium	6.5%
Cost of Equity	9.01%

Cost of Debt	
Debt Interest Rate	4.9%
Tax Rate	36.2%
Cost of Debt	3.1%

WACC	
Equity Weight	56.5%
Debt Weight	43.5%
WACC	6.44%

Valuation Output- Real Estate Sale Scenario

(In USD $MM except per share data)

Firm	
Enterprise Value	$27,717
Debt	$7,473
Cash	$1,125
Equity Value	$21,369
Terminal Value Type	Perpetuity

Per Share	
Number of Shares	305.000
Target Share Price	$70.06
Current Share Price	$31.80
Upside/Downside	120.3%

Operating Model-Real Estate Sale Scenario

	2015A	2016E	2017E	2018E	2019E	2020E
Total Revenue	$27,091.0	$26,667.1	$25,296.5	$23,446.4	$21,917.6	$21,272.4
Growth		-1.6%	-5.1%	-7.3%	-6.5%	-2.9%
Retail Revenue	$22,485.53	$21,601.1	$19,723.8	$17,316.5	$15,174.7	$13,855.3
Growth		-3.8%	-4.2%	-4.6%	-5.0%	-5.4%
Loss of Revenue from Store Sales		($30.0)	($970.0)	($1,500.0)	($1,276.0)	($500.0)
E commerce	$4,605.47	$ 5,066.02	$ 5,572.62	$ 6,129.88	$ 6,742.87	$ 7,417.16
Growth		10%	10%	10%	10%	10%
COGS	(16,508.0)	(16,249.7)	(15,414.5)	(14,287.2)	(13,355.6)	(12,962.4)
Gross Profit	**10,583.0**	**10,417.4**	**9,882.0**	**9,159.3**	**8,562.0**	**8,310.0**
Margin	39.1%	39.1%	39.1%	39.1%	39.1%	39.1%
SG&A	(8,544.0)	(8,410.3)	(7,914.8)	(7,277.3)	(6,748.0)	(6,496.2)
Operating Profit (EBIT)	**2,039.0**	**2,007.1**	**1,967.2**	**1,881.9**	**1,814.0**	**1,813.8**
Margin	7.5%	7.5%	7.8%	8.0%	8.3%	8.5%
Cash Taxes	(608.0)	(726.4)	(711.9)	(681.1)	(656.5)	(656.4)
NOPAT	1,431.0	1,280.7	1,255.3	1,200.9	1,157.5	1,157.4
D&A	1,349.0	1,327.9	1,133.2	933.1	762.6	633.8
D&A Margin	5.0%	5.0%	4.5%	4.0%	3.5%	3.0%
Total Capex		(1,066.3)	320.7	2,824.2	818.3	(386.5)
Proceeds from Store Sales		29.3	1,360.0	3,787.5	1,718.8	487.5
Operational Capex	(1,113.0)	(1,095.6)	(1,039.3)	(963.3)	(900.5)	(874.0)
Capex Margin	(4.1%)	(4.1%)	(4.1%)	(4.1%)	(4.1%)	(4.1%)
Net Working Capital	1,457.0	1,434.2	1,360.5	1,261.0	1,178.8	1,144.1
NWC Margin	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%
Δ NWC	-	(22.8)	(73.7)	(99.5)	(82.2)	(34.7)
Unlevered Free Cash Flow	**1,667.0**	**1,519.5**	**2,635.4**	**4,858.6**	**2,656.2**	**1,370.0**
Margin	6.2%	5.7%	10.4%	20.7%	12.1%	6.4%
Growth		(8.8%)	73.4%	84.4%	(45.3%)	(48.4%)
Discounted Free Cash Flow		**$1,427.5**	**$2,326.2**	**$4,029.0**	**$2,069.4**	**$1,002.8**
Discount Factor		0.94x	0.88x	0.83x	0.78x	0.73x

In order to estimate the loss of revenue from store closures, we separated the large flagships from the lower quality mass closings. For the large closings, Macy's announced 1 billion in revenue would be lost from 100 closures, thus we assumed a constant 10 million revenue loss per store for locations of that quality (those which would be closed first). The flagship Herald Square store does a little over a billion in revenue per year. For the other two flagships in similarly iconic and urban areas we used a ratio of square footage (comparing the store to the Herald Sqaure size) multiplying by the Herald Square revenue which yields 600 million revenue loss from Chicago closing and 426 mil loss from San Francisco Union Square.

The proceeds from sales and loss of revenue from sales reflects the 100 store closures in 2016 and 2017, along with the sales of the Nicollet Mall property (40 mil), Union square men's store in SF (250 mil), and another SF and Portland, Or location (95 mil). It is assumed that Herald Square would be sold in 2018 along with 50 properties, 2019 assumes the other two flagships (Union Square and States Street) are sold along with 25 additional properties, and in 2020 we assumed another 50 closings. Though we cannot predict exact sale dates, this schedule is a reasonable one to follow based on Macy's priorities and the desirability of the locations. The sale value of Herald Square was calculated to be 3.3 Billion, while State Street Chicago was 585 million and Union Square in San Francisco is 890 million.

In the long run, we assumed they would sell roughly half of their remaining real estate portfolio, and factored this into their terminal value.

$ 17,000.00	Total real estate value
$ 7,383.00	Real estate value realized in 5 years
$ 9,617.00	Residual
$ 4,808.50	Assume half is sold

Case 3 DCF: Very conservative model assuming sales of 25% of real estate holdings in terminal years

Valuation Output- 1/4th Real Estate Sold in Terminal Years

(In USD $MM except per share data)

Firm		Per Share	
Enterprise Value	$25,469	Number of Shares	305.000
Debt	$7,473	Target Share Price	$62.69
Cash	$1,125		
Equity Value	$19,120	Current Share Price	$31.80
Terminal Value Type	Perpetuity	Upside/Downside	97.1%