RH: Climbing the elusive luxury mountain

"History has proven that men and women work for a dollar but die for what they believe in. We say inside our organization that this is not our company; it's our cause. Some people say don't take it personal. Those people are not our people. This is very personal for us."- Gary Friedman, CEO of RH

After reading that quote, you could be forgiven if you thought RH's "cause" is solving climate crisis or world hunger; in reality, all it is trying to sell is luxury furniture. At first glance, that may seem too trivial a "cause", but anyone who knows the challenge of transforming a bland brand such as "Restoration Hardware" to climb through the luxury mountain will perhaps admit it is indeed a very challenging cause. This very unlikely and still somewhat emerging ascent to luxury is the central theme that encapsulates the story of RH.

As part of this deep dive, I have spoken with two shareholders of RH, both of whom would like to remain anonymous. As always, my engagement, discussion, and debates with analysts/investors who have been following the company for a while makes this deep dive more enriching than it would otherwise be, so I thank them for their time. Here's the outline for this month's deep dive:

Section 1 Understanding the elusive world of luxury: This deep dive started with some basics on the luxury brands, how it differs from premium brands, and why luxury status is hard to attain.

Section 2 Furniture industry dynamics: Following the basics of luxury, I discussed furniture industry dynamics, profitability, and whether RH is truly "peerless".

Section 3 RH Business Model: This section outlines the business model, how it was transformed over the last decade, the shift in RH's real estate strategy, and the RH membership program.

Section 4 The ambition of a global luxury platform: RH's ambition to go beyond North America, as well as luxury furniture was highlighted in this section.

Section 5 Valuation and model assumptions: Implied expectations in the current stock price was discussed.

Section 6 Management and incentives: RH used to be battleground stock back in 2017. Gary Friedman inflicted maximum pain on the short sellers through excellent execution on the business as well as his bag of capital allocation tricks and thanks to his stock incentive plan, he currently owns ~28% of outstanding shares of RH. Current incentive plan for Friedman was also mentioned in this section.

Section 7 Final words: Concluding remarks on RH, and a very brief discussion on my overall portfolio.

Section 1: Understanding the elusive world of luxury

Luxury is inherently somewhat elusive. In the book "The Luxury Strategy" (a book that comes highly recommended if you want to explore the luxury industry), the authors mentioned how luxury and mere marketing are at odds with each other:

"The reason why marketing – the child of the industrial society and the father of consumer power – doesn't seem to work with luxury goods the same way it does with everyday consumer goods, even top-of-the-range consumer goods, is because the two are fundamentally quite different.

Luxury purchase needs time and effort to be deserved, true price and no discounts on excessive prices, one-to-one relationships with the salespeople and not with a machine, feeling of belonging to a 'club' of selected people and not being part of an anonymous crowd."

While I did not get enough time to read the whole book, I have come across an interesting twitter thread as well as Bill Brewster's presentation on RH, both of which did a good job of summarizing important concepts from the book which I will borrow a lot to form my understanding of the world of luxury. How is a luxury product different from everyday products and other branded products?

"The basic product corresponds to a need. The need must be met as quickly as possible. The role of the product is to do this at the lowest cost possible. The branded product corresponds to a desire or wish. Desire is artificial so doesn't need to be immediately sated. Since desire can both fade and is substitutable, it must be maintained with advertising. The luxury product corresponds to a dream. Dreams are an integral part of human beings. They don't need to be satisfied, sometimes their existence alone makes us happy. So at its core luxury is a dream, a promise.

Luxury is 'superlative' and not 'comparative'. Luxury products are the opposite of traditional products, not only do we not listen to our customers wishes, we actually want to keep most potential customers out."

Because of these deep-seated differences between luxury and non-luxury products, advertising or marketing play very different functions:

"The role of advertising isn't to sell but to make the customer dream. The question isn't whether the product is good enough but whether you are good enough… And because it's about making the customer dream, its critical to communicate to those whom you are not targeting."

Luxury products can violate basic demand-supply laws of economics. When LVMH CEO was asked recently about price elasticity for their products, he said this: *"with regards to price elasticity, it's a difficult question. But traditionally, there is no such thing as price elasticity…when we do price increases, we don't see a particular response from the client base in terms of volumes"*

"The Luxury Strategy" also alluded to this feature in luxury pricing:

"Falling prices do not increase demand. In fact, when it comes to luxury, price is a technical detail. To be a luxury product is to be unreasonable, to be above reason."

As many of us are perhaps searching for answers how "JPEG images" of rocks or bored apes are selling for hundreds of thousands (or even millions) of dollars, perhaps a potential answer can be found through the lens of luxury. Of course, there are plenty of people in the world who are mostly operating in the "self-actualization" stage of [Maslow's hierarchy](#) of needs. I wondered at times whether money or even worldly possessions have mostly lost its meaning in certain circles in terms of social signaling tool and hence these "JPEGs" with no apparent utilities are selling for exorbitant prices. Since I have not studied NFTs closely, I have no firm opinion and I am just sharing my observations. Please do not assume my opinion on NFT based on these few sentences as it may be more mixed than you may think.

I wonder whether NFTs can just be seen through the luxury lens as the primary function of luxury products is just social signaling. From the abovementioned twitter thread:

"Watch those businesses who are growing their luxury brand. It's a huge intangible asset you won't see right away but provides the company with tremendous and hidden pricing power in a world where social signaling will become more important."

One thing should be obvious already; it can be exceptionally hard to reach the luxury status and what complicates it even further is to scale your luxury business without diluting the status or appeal. Gary Friedman, CEO of RH, mentioned this in an earnings call:

"We believe there are those with taste and no scale, and those with scale and no taste. And the idea, just the idea of scaling taste, we believe, is very large and far-reaching.

…great brands don't chase customers; customers chase great brands. Great brands are vision, not customer led. The customer can give you feedback, and you can do a lot of things better, okay? But the iPhone, Tesla, Instagram, Disneyland or any great brand did not come from a focus group, okay? Did not come from a focus group. And Henry Ford said this: "If I asked my customers what they wanted, they would have told me a faster horse."

For RH, the path to luxury status was even more unlikely since they started their journey in 1979 as "Restoration Hardware", which used to sell niche antique furniture. Friedman only joined as Co-CEO of RH in 2001 after being passed over for the CEO role of Williams-Sonoma. While we don't have much details, RH suffered during GFC resulting in a transaction with Home Holdings, which was owned by private equity firms: Catteron, Tower Three, and Glenhill. In 2011, Friedman was appointed both President and CEO of the then Restoration Hardware. The company became public in 2012 and rebranded as "RH". As part of the rebranding, RH also started focusing on building its luxury brand. Even if you had the vision of a luxury brand from day 1, it still is difficult to reach that status. It is perhaps doubly difficult if you had to shed your past and then build a luxury brand. Friedman understands this profound complexity:

"If you want to think about this idea of climbing the luxury mountain when I say we have to create a forced reconsideration of our brand. We are not from the neighborhood. We are not invited to their parties. They don't really want us to make that climb. You have to do work that is so extraordinary, and so remarkable that you force the people at the top of the mountain to tip their hat.

…We're going to continue to go up. I think we'll continue to shed consumers at the bottom, and then we'll grow consumers at the top of the funnel, where there's exponential spending. And by doing that, I think all of a sudden, long term, will pull people up because the brand will be more aspirational, people will save to buy our sofa. There's a demographic that will be younger and

less affluent, but they'll have great taste and style, and they'd rather have a few good pieces, than a whole bunch of crap."

Now that we understand the basics of luxury, and the elevated challenge that RH had to face, let me delve into the furniture industry dynamics (both luxury and non-luxury).

Section 2: Furniture industry dynamics

Gary Friedman considers RH to be "peerless". While that may sound a little over the top statement, there is, as strange as it may seem, some truth to it as I would like to expand on this topic in this section. Let me start the discussion with furniture industry first, and then will touch on the luxury furniture industry. Please note that while I almost entirely focus on furniture industry while talking about RH, ~32% of its last year's revenue came from non-furniture sales, defined as lighting, textiles, fittings, fixtures, surfaces, accessories and home décor.

The broader furniture industry can be segmented into two sub-sectors: business/corporate, and residential/retail. While the size of furniture industry is ~$170 Bn, residential sector is 7-8x of the business segment. "Return on Capital" explained how the business segment is structured:

"The business side can further be deconstructed into contract sales and supply-driven sales, and this market is much smaller that the residential side (~$20bn vs. ~$150bn). The contract sale market primarily represents large companies looking to furnish a large retail footprint (think Hilton refurnishing its North American hotels). Revenues from these contracts are recurring and easy visible over a period of 3-5 years. The supply-driven market represents the furnishing needs of small and medium-sized companies. This market is served by players such as HNI Corporation (HNI), Herman Miller (HMI), Haworth (private), Kimball International Inc. (KBAL) and Knoll Inc. (KNL). While all these companies compete in these two submarkets, HNI, HMI and Haworth are more skewed towards the contract market while Kimball and Knoll towards the supply-driven side. Besides manufacturing efficiency, there really is no competitive advantage between these players; they compete on the usual things like quality, design, price and customer service. All these firms have incorporated lean manufacturing initiatives (although HMI was the pioneer in this effort) and they all ebb and flow with the general industry. KBAL is by far the most efficient and profitable but Herman Miller has the best brand recognition and not too far behind in terms of profitability itself.

These companies I've described are primarily manufacturers. They vary between having an in-house design team or outsourcing their designs. This is important because it has a direct effect on their brand perception. Designers are, by far, usually independent freelancers or run their own design business, although some work for these larger firms. A company like Kimball will have its own design team while a company like Herman Miller will have a mix of in-house designers and outsourced designs, in which contracted designers are paid a royalty based on the sales of their designs. After the manufacturing process, most of this furniture is sold through independent dealerships (i.e. ~70% of Herman Miller's sales are through independent dealerships). Because the market is so fragmented (the top 10 firms control ~20% of the market), there really is no brand power of these firms and no dealer allegiance. The customers are usually businesses but oftentimes inventory will flow through another intermediary: design firms who consult for companies/consumers although this is a smaller distribution channel."

While RH is vertically integrated in the furniture value chain, most of the companies active in business segment are not. Except for Herman Miller, almost none of them have retail presence. Even for Herman Miller, their revenue from North America and international contract business was $1.86 Bn in FY'21, almost 3x their retail revenue of $602 Mn. While Herman Miller's overall gross margin is in high 30s and operating margin is in mid-single digit, they posted ~49% gross margin and ~20% operating margin for their retail segment last year. As you can see below, MLHR's retail margins are very comparable to RH's LTM numbers even at a lot lower scale. My first glance to furniture industry's margins and luxury industry's margins made me think RH is clearly closer to luxury than its furniture "peers". But after looking at MLHR's retail segment margins, I wonder whether RH's margins are more function of their vertically integrated retail strategy vs their elevated luxury brand status that many bulls seem to believe. In any case, it is nothing short of extraordinary that RH transformed its business from low 30s gross margin and mid-single digit operating margin business five years ago to mid-20s operating margin last year, a metric that's closer to the luxury legends such as LVMH and EL.

Company	Ticker	LTM Sales (USD Mn)	Gross Margin (LTM)	Operating Margin (LTM)
Herman Miller	MLHR	2,628	37.2%	6.1%
HNI Corporation	HNI	2,144	36.0%	5.3%
Kimball International	KBAL	578	31.0%	-1.3%
Wayfair	W	14,127	28.9%	1.5%
LVMH	LVMH	63,161	67.3%	25.9%
Estee Lauder	EL	17,045	76.2%	19.2%
RH	RH	3,506	48.1%	24.6%
RH (2016)	RH	2,135	32.6%	4.7%

Source: Tikr

So, is RH really "peerless" in retail luxury furniture? There is certainly a lot of white space in retail luxury furniture as most companies seem to be happy with playing the game on easy mode i.e. contract sales in the business segment. While that is an easier game, it comes in the package of highly competitive intensity, more fragile, and lower margin business. Building a brand and creating a connection with retail customers involves lot more work and is fraught with different types of risks that very few somewhat scaled furniture players are willing to engage with. Retail customers buy home furniture from large retailers (e.g. Ikea or Bed Bath & Beyond) or they can order online (e.g. Wayfair). If you are selling to independent dealers or retailers, you accept lower margins but also take lower inventory risks. Moreover, the margins can also vary based on what type of furniture sells more in your stores. Margins for chair/table vs rugs are not quite comparable although technically they are both "home furniture". Besides, even though we all have chairs/tables in our homes, most of us buy these items for mere utility whereas wealthy people look beyond utility and focus on aspects such as fashion, uniqueness etc. Therefore, companies that cater to someone like me will have lot less pricing power than companies such as RH who are catering to mostly price insensitive demography. Remember, price is mostly a technical detail in luxury items.

MLHR shows that building both business and retail brand can be done, but I also wonder to what extent the recent surge in sales and margin are just function of macro factors for MLHR and RH. The macro factors such as the rush to buy first and second homes during Covid, the move to suburbs, low interest rates, the need to re-imagine or furnish your WFH setup, all-time high stock market, frenzy in the crypto markets and the resultant wealth effect etc are certainly playing a huge (although not easy to measure) role, but it can be particularly difficult to assess the underlying "normalized" growth and margins for retail luxury furniture segment. Perhaps we may get a better sense in two-three years down the line once at least some of the current macro forces settle down a bit. As I was discussing this with Rishi Gosalia, he made some interesting observations: *"true luxury is insensitive to macro climate. Why? Because they follow the golden rule of luxury -keeping demand curve far above supply. So in an economic shock, demand curve shifts down but never close to supply- maintaining exclusivity and its desirability."* Perhaps a central question for investors is to what extent RH fits the description, a question that may not be easy to answer without experiencing an economic recession. If RH is just a premium brand camouflaged as luxury brand during the good times, demand curve may shift a lot lower than a luxury brand during difficult times.

FY	2018	2019	2020	2021
Sales	356.9	388.5	385.6	602.1
Growth		8.9%	-0.7%	56.1%
Gross Profit	163.3	170.7	161.6	296.9
Gross Margin	45.8%	43.9%	41.9%	49.3%
Operating Profit	13.9	5.3	-148.3	117.2
Operating Margin	3.9%	1.4%	-38.5%	19.5%

Source: Public filings of MLHR

Even though MLHR's recent numbers in retail segment resembles RH's which somewhat dilutes the bull thesis that RH has elevated its brand to a luxury status that will let them sustain the high margins, qualitatively speaking, I believe RH's margins may prove to be more sustainable than MLHR's. It is likely to prove to be more difficult to build both business and retail luxury segment and maintain the luxury status. RH seems much more focused on this and their approach to employ designers to control the brand tightly seems more durable to me. Unlike many others in the industry, RH employs designers who are paid by the hours (or salaried employees) by RH and it appears they do not receive any royalty payments from the sales.

RH indicates that anyone making $250k or more annual income is potential customers for them. One thing I wondered and asked a few people but didn't quite have satisfactory answers is whether there is some upper ceiling at which wealthy people start thinking RH as too "mainstream" for their liking. I wonder if your net worth is, say $100 mn or more, do you still want to buy RH furniture, or do you want to just hire interior designers and furnish your home with truly unique items that your other rich friends may not be able to find in RH's showrooms?

As it turns out, if you are RH member (will expand later on membership), you can get free design consultation services from RH. RH's strategy to tightly control the design aspects of its furniture is perhaps not appreciated by its competitors which can prove to be a huge advantage for RH over the long term. The interior designers receive greater scale and get more customers through RH, and customers can choose from multiple designers that suit their taste. In one sense, one could argue RH is trying to both aggregate demand and aggregate supply in the luxury retail segment in a way others are not trying to emulate. Today, customers talk to one or two interior designers and the designers then coordinate with manufacturers to help the customer furnish their homes. The lack of transparency (customers may not know how much the designers are keeping the economics to themselves). Once the liquidity of luxury buyers and interior designers reach some critical threshold, it may be more and more tempting for new designers to design exclusively for RH. While this flywheel concepts generally pertain to internet scaled businesses, I am just trying to think from first principles perspective and it seems to me that if the strategy is successful, there is a potential scenario in which RH is leaps and bounds ahead of anyone else in establishing their luxury brand in retail furniture segment.

Friedman explains RH's strategy:

"And what I realized, with all the best developers in the world were developing apps for Apple. Why? Apple built the best platform. They amplified, right, and scaled those developers. And what happened over time, what happened to BlackBerry? What happened to Nokia? What happened to so many of those brands, they kind of went away because the talent really controls the business environment, right? So we are building a platform that is attracting the best talent in the world because we have the best platform in the world, and we'll continue to do so.

[A few things that's] important to know is this level of design was only available behind the iron curtain -- to the trade design centers. It's a highly fragmented market with a lack of accessibility, transparency, and scale. Let me say that again: a lack of accessibility, transparency, and scale. Name another retailer where their competitive market has a lack of accessibility? Customers can't go to the design showrooms without an interior designer, without a resale license, right? And that's one of the huge, huge opportunities for us. If you can get in, try to figure out how much something costs, try to understand the pricing structure. And then, none of the competitors at that level of the market have any scale."

Section 3 RH Business Model

While for a typical physical retail store, you go to the store, look around to see what you like or want to buy, and then just pay for the products and take them with you, that's not how it works at a RH store. Well, the store is somewhat of a misnomer in this case; while you can order furniture in the store, you cannot go out of the store with the said furniture since RH stores do not carry inventory. Hence, these physical stores are appropriately called "Showrooms". You can roam around, see, and order what you like which will get delivered in a few weeks' time.

In the last 10 years, RH's real estate footprint went through a transformation. Their showrooms can be broadly aggregated in two segments: legacy galleries, and design galleries. Design galleries typically consist multiple floors and ~30-50k sqft big, almost 3-5x in size of a typical legacy galleries. The idea of the design galleries is to elevate the luxury status and blur the utility nature of the products RH is selling. These new format galleries include restaurants, bars, gardens etc. which create a sense of luxury house rather than a retail store. I have checked out the restaurant menu; the food price seems reasonable. The inclusion of restaurants/bars within the store is more of a strategy to increase foot traffic and maintain a lively environment. The increased foot traffic is an important barometer to get good deals for its real estate which I will discuss later. As per this article, Chicago RH was the 7th most instagrammed café in the US in 2017 and RH West Palm beach location was trending 35% ahead of Chicago's first year numbers (interestingly, RH, the brand itself, has no IG presence). I encourage my readers to watch some YouTube videos (see here, and here) of RH galleries to get a feel of how it is different from other physical retail stores.

The first design gallery was launched in 2011 in Los Angeles and Houston. In its S-1, RH mentioned that "*in the Los Angeles market, we have increased store demand by 85% and direct demand by 30% and in the Houston market, we have increased store demand by over 60% and direct demand by over 50%, in each case from the date of opening our new full line Design Gallery in that market to May 19, 2012.*"

Why did Friedman shift their strategy from legacy galleries to design galleries in 2011? I am not sure what prompted this change, but after the initial success of the first two full-format design galleries, RH decided to lean onto this new format and radically change its store footprint by gradually closing legacy galleries and launching these new, very posh looking design galleries. In its S-1, RH identified 50 metropolitan markets where they would open design galleries and predicted in 2012 that their selling square footage in North America would double over the next 7-10 years. As you can see below, that prediction turned out to be a bit too optimistic, but even then I think we wouldn't find too many physical retailers in North America in the last 10 years at RH's scale which increased their sqft footprint by almost 50% when Amazon was wrecking a havoc on the entire retail industry. This shift in strategy is evident in the store footprint numbers; in 2012, design galleries was only ~18% of total selling sqft which increased to ~72% in 2020 whereas legacy galleries share went down from ~80% to ~25% during the same time. Despite opening these ~3-5x sized galleries compared to legacy ones, sales per sqft increased by ~10% (not CAGR) over the last 8 years. But the business enjoyed impressive operating leverage as it increased gross margin from 36.6% in 2012 to 46.5% in 2020, decreased SG&A as % of revenue from 42.4% in 2012 to 24.1% in 2020, and hence significantly improved operating margin from -5.8% in 2012 to 21.8% in 2020. Friedman shared bit of a funny story in 2017 Goldman conference how they decided not to pay for ads on Google:

"We had a marketing meeting in the company several years ago. And the online marketing team was pitching to double their budget, right? And at the time, saying, "Look, nobody in the company is doubling their budget, but tell me why you believe that's the right thing to do." And they said, "Well, look, our customer acquisition costs and our ad cost is the lowest in the company." And I said, "Well, tell me about the data. Show me how." And they said, "Well, people who click through the words that we buy on Google, the ad cost was the lowest." And I said, "How do you know that they're clicking on the word and going to the website because of the word you bought, versus they saw a store or they received a Source Book?" They said, "Oh, we know." I said, "Well, how many words did you buy?" And they said, "3,200." 3,200 words. I said, "Well, what are the top words? How are they ranked?" Yes, they ranked into the words that, "Oh, we don't have that," right?

And I was getting the look at like oh, Gary's kind of one of these old brick-and-mortar guys. He just doesn't get it. I said, "Well, what are the top 10 words?" And they didn't have the information. I said, "Why don't we cancel the meeting and come back next week when you have the data? I'm sure the Google sales representatives who are taking you to the expensive lunches and selling you the 3,200 words have that data. So why don't we get the data and then let's review the data."

And they came back the next week and we sat in a meeting, and all of a sudden, I can tell there's a little change in the faces. The heads were kind of down, everybody kind of came in. I said, "So what did we find out?" And they said, "Well, we found out that 98% of our business was coming from 22 words." I said, "Wait, we're buying 3,200 words and 98% of the business is coming from 22 words? What are the 22 words?" And they said, "Well, it's the word Restoration Hardware, and the 21 ways to spell it wrong." Okay? Immediately, the next day -- okay, immediately the next day, *we canceled all the words, including our own name. By the way, we were paying for the little shaded box above our words, and they said, "Well, no, we have to hang on to that because Pottery Barn might squat on top of us." And I said, "Excuse me?" I said, "If someone goes to a mall or a shopping center, and they're going to Restoration Hardware and there's a Pottery Barn there, they're already squatting, okay? It doesn't mean they're going to go into their store." If somebody wants -- Tiffany's was just here. If somebody wanted to buy a diamond from Tiffany, and just because Zales is sitting on top of them in a shaded box doesn't mean they're going to go to Zales and buy a diamond."*

Amount in USD Mn, except %	**2012A**	**2013A**	**2014A**	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**2020A**
Store base, in absolute number									
Design Galleries	3	5	7	10	14	16	20	22	24
Legacy Galleries	65	62	57	53	50	47	43	40	38
Modern Galleries	-	-	-	1	1	1	2	2	2
Baby & Child and TEEN Galleries	3	3	3	5	5	4	6	4	4
Total Galleries	71	70	67	69	70	68	71	68	68
Waterworks Showrooms	-	-	-	-	15	15	15	15	14
Outlets	13	17	17	17	28	32	39	38	38
Avg leased selling sqft, thousands									
Design Galleries	50.0	50.0	50.0	41.5	30.0	32.3	33.0	33.1	33.0
Legacy Galleries	10.0	8.2	7.6	7.8	8.0	8.0	8.0	7.3	7.3
Modern Galleries				13.0	13.0	13.0	11.0	8.3	8.3
Baby & Child and TEEN Galleries	3.8	3.8	3.8	3.8	4.0	4.0	4.0	3.9	3.9
Total Galleries	11.4	11.0	11.9	12.5	12.2	13.6	14.8	15.5	16.2
Waterworks Showrooms					4.0	4.0	4.0	4.0	4.1
Outlets									
Total Selling Sqft by retail location, thousands									
Design Galleries	150	250	350	415	420	517	660	728	792
Legacy Galleries	650	508	433	413	400	376	344	292	277
Modern Galleries	-	-	-	13	13	13	22	17	17
Baby & Child and TEEN Galleries	11	11	11	19	20	16	24	16	16
Total Galleries	811	770	795	860	853	922	1,050	1,052	1,102
Waterworks Showrooms	-	-	-	-	60	60	60	60	57
Outlets									
Total Selling Sqft mix									
Design Galleries	18%	32%	44%	48%	49%	56%	63%	69%	72%
Legacy Galleries	80%	66%	55%	48%	47%	41%	33%	28%	25%
Modern Galleries	0%	0%	0%	2%	2%	1%	2%	2%	2%
Baby & Child and TEEN Galleries	1%	1%	1%	2%	2%	2%	2%	1%	1%
Total Galleries	100%	100%	100%	100%	100%	100%	100%	100%	100%
Calculated selling sqft	*811*	*770*	*795*	*860*	*913*	*982*	*1,110*	*1,112*	*1,159*
Growth %		*-5.1%*	*3.2%*	*8.3%*	*6.1%*	*7.5%*	*13.1%*	*0.2%*	*4.2%*
Total reported Selling Sqft	808	768	798	861	912	981	1,089	1,111	1,162
Sales per sqft									
RH		2,015	2,350	2,451	2,246	2,293	2,092	2,139	2,268
Growth %			*16.6%*	*4.3%*	*-8.4%*	*2.1%*	*-8.8%*	*2.3%*	*6.0%*

Given the shift to larger size store format, one might wonder about the capital intensity of this new format. RH leveraged its ability to drive foot traffic and since it has effectively become one of the anchor tenants, it modified its real estate strategy over the years to ensure ROIC remains attractive. In the past, a typical RH store had contracts with landlord that included minimum rent, and then escalating rent based on % of sales after minimum thresholds are reached. As RH moved to design gallery format, they had opportunistically pursued either of the following three strategies (more details can be found in 2018 Investor Day):

a) Capital light leasing deals: While in the past landlords contributed 35-50% of the capital, RH mentioned landlords now contribute anywhere between 65-100% of capital. With their rooftop hospitality/restaurant experience attached to each showroom, RH managed to become a key driver of foot traffic which gave them leverage to get sweetheart deals in recent years for the design galleries.

b) real estate development model: In this model, RH develops the showroom and enters into a sale leaseback with the landlord. Friedman explained the rationale in 2018 Investor Day:

"*So the key benefits, it gives us the opportunity to buy and develop unique retail locations, the ability to structure the sale-leasebacks with significantly lower rents. The key is we're cutting out the middleman. We don't need the capital of the developer. And frankly, they don't add a lot of value when we're a key driver of great customer -- high-income customer traffic, and we have this beautifully integrated experience like this. Going to having a developer in the middle of it really adds no value. Their capital is more expensive than ours is. They're generating their own profits, and we're able to cut that out. We can eliminate percentage rent we -- and expensive triple nets and pass-throughs, and we're also minimizing depreciation and amortization. Of course, if we have money left in a development, we have to depreciate and amortize that, so that's an earnings drag."*

c) Joint venture projects: Let me again quote Friedman from the 2018 Investor Day to explain this model:

"This is a situation where we're able to value -- to really leverage the value of RH lease to create a joint venture or profits opportunity with minimal capital investment by RH…this is typically where we can't buy it. Someone owns it, they want to do a lease with us. We come to them and say, we're not going to do a lease, but if you want to participate in some of the upside and we participate as well, we'll structure a joint venture. This is one where we contribute the value of our lease in exchange for the joint venture profits interest in the project, and our profits interest is paid upon a sale or refinancing of a project within 5 years or less, typically."

Apart from real estate deals, RH also made significant changes in its supply chain. In its 2015 10-K, RH mentioned they had 6 distribution/fulfilment centers spanning 6.2 mn sqft. RH streamlined its fulfilment centers and reported only 3 fulfilment centers spanning 3.9 mn sqft in 2020 (planned to open another one in 2021 whose size is 1 mn sqft; also had one fulfilment center for Waterworks which was acquired in 2016). They also had 6 home delivery center locations and they even used 3 DCs for some home delivery. Instead of 6 smaller sized home delivery centers, RH now has just one large home delivery centers. If you want to return furniture, it goes to one of the 38 RH outlets where RH sells these products at a significant (up to ~70%) discount. While design galleries and outlets are different concept, the mere existence of these outlets can potentially put a dent on RH's ambition as Rishi explained to me: *"true luxury almost never sells at a discount. They will burn inventory but almost never sell at a discount. It may not qualify for true luxury (Ferrari, Hermes, LVMH) just based on this. Maybe better to call it a brand"*

Because of the expanded store size of design galleries and the fact that it operates as showrooms and hence no huge inventory, it can accommodate ~30% of SKUs per gallery vs only ~10% SKUs in legacy galleries. Once a customer orders either online, in store, or by phone, the delivery can take weeks depending on product or availability. For larger merchandise and furniture categories, RH delivers the products by its own delivery professionals, but they also use third parties such as UPS to deliver some products. The delivery fee is dependent upon how far the nearest gallery is from your location (see delivery schedule below). These supply chain and logistics changes are important part of the RH's transformation in the last 5 years. Days of inventory on-hand decreased from ~146 days in 2017 to ~118 days in 2020.

U.S. UNLIMITED FURNITURE DELIVERY RATES

DELIVERY AREA (DISTANCE FROM THE NEAREST U.S. GALLERY*)	FLAT RATE FOR DELIVERIES
Within 50 miles	$249
Between 51 and 100 miles	$379
Between 101 and 150 miles	$499
Between 151 and 200 miles	$629
Over 200 miles	$749

ALASKA / HAWAII The flat rate for delivery to Alaska or Hawaii is $1,499.

*Excluding Outlets and Warehouse locations.

As alluded earlier, you can also order online, in fact, almost half of the sales come from online/sourcebook/trade contracts (B2B sales) although I do not know further sales mix among these channels. If I had to guess, it would probably rank in this order: online, sourcebook, trade contracts. While e-commerce has been a secular force, RH understood the inherent difficulty of building a luxury brand online. Friedman explained how the economics in online can potentially be far more ruthless than in the physical world and if only a brand has a significant cognitive recall can it have a chance of profitably scale online:

"The other thing we believe is that the web is the most democratic channel. It is the most democratic channel. It is the most difficult to differentiate. Holly's Home Store looks as big as Restoration Hardware online, right? So we all have the same size storefront online. And in many ways, it's an invisible storefront. You don't walk by it. You don't see it. But a consumer would have to click on our website 10,000 times to understand the real difference. So we believe it's the most democratic channel.

The other thing we believe is the web is not the most profitable channel, and I think we've been saying that for 10 years and what's funny as I've read so many reports and had so many people talk about their growth in online sales, and the fact is most retailers that have increased their online sales have decreased their operating margins. And I would challenge anybody to name an online-only retail brand that has reached $1 billion profitably. And when I ask that question I usually say, "Anybody? Anybody?" Because there hasn't been one, right? There hasn't been one. And I think it's been one of the fallacies and one of the kind of simplifying assumptions that people have made that if you don't have brick-and-mortar, you don't have a cost structure that you don't need, and therefore, online will be more profitable. And they overlook the fact that an online store is an invisible store. You don't see it. The cost to acquire a customer for an online business is significantly higher than a retail business.

For brands not selling commodities and it will be the most capital efficient way to scale in a physical world, we still live in a physical world. A lot of people talk about the age of Amazon, and *the death of the department stores, and we believe that Amazon falsely accused. The fact is department stores have been dying of old age and a lack of innovation for years. This is nothing new. It's not just because of Amazon. If I asked everybody here to raise their hand of who likes to go into a department store today? I wouldn't get a lot of hands, right? You kind of have to go there. It's not like you want to go there. But I think that, that point has confused people and has gotten people to kind of believe that physical stores are liabilities."*

One other sales channel is RH's sourcebook which is ~2,500-page catalog of RH products that is sent to RH members. Even if you are not a member, you can order it to be delivered to your address or you can just browse the whole catalog online.

One of the important elements of RH's transformation over the last few years is RH membership program. What exactly is it? Friedman was inspired by Amazon Prime's success. I have a lot of sympathy to the way Friedman views the fickle behavior of customers online. Very few retailers online actually own the customers; almost all of them own mere transactions as customers mostly start their journey on Google, Amazon, or via Facebook/Instagram ads. It is these companies that own most of the customers that shop online and the rest of the world is mostly competing against each other to mostly share lucrative economics to those big tech companies. I suspect even Bezos understood this fickle nature online and I wonder whether he too felt Amazon just owned millions of transactions and not nearly as many customers. Perhaps this prompted Bezos to launch Prime which certainly let Amazon "own" the customers. Friedman too understood how unfair the fight is if you have to compete for the same customer again and again till eternity. In 2016, RH launched this membership program that let customers sign up for just $100 and enjoy 25% savings on all full-priced items and additional 20% savings on all sale items. Given that almost every single item that RH sells costs more than a thousand dollars, it is very tempting to sign up for the membership program since the discount you receive pays more than what it costs to be annual member. What it does for RH though is create a significant cognitive recall from their members whenever they are in the market for new furniture. As per its latest 10-k, RH had 434,000 members and 97% of its sales come from its members. Recently, RH increased the membership fees to $150, implying some pricing power here as well. This is also lucrative from profitability perspective as all the revenue from membership program has 100% gross margin. Unfortunately, there is not much disclosure around the membership program, and I don't know frequency of purchase and churn/retention of the members.

Finally, while RH today is primarily confined in the US (just four galleries in Canada), Friedman has his eyes on Europe. He also does not want to stop at luxury furniture as he appears to have much bigger ambitions with the "RH" brand with plans to launch RH Guesthouse and many other initiatives going forward.

Section 4 The ambition of a global luxury platform

Gary Friedman used to mention that he estimates North America to be $4-5 Bn opportunity for luxury home furniture market (e.g. see Goldman conference in November 2017). Considering RH is expected to post $3.7-3.8 Bn revenue in 2021, Friedman's estimates already appear conservative. In the most recent 10-K, RH mentioned the size of North America opportunity to be $5-6 Bn. At the same time, 10-K also mentioned they expect to open 5-7 new galleries per year over time; Friedman estimates 60-70 (vs 24 in 2020) design galleries in North America in the long term. If we assume 60-70 design galleries to be closer to reality in North America over the next 10 years, it still seems $5-6 Bn market opportunity to be on the more conservative side. One interesting aspect about Friedman is although he appears a bit "promotional" at times, the numbers he or RH guided in the past generally proved to be conservative. I don't quite suspect that they are likely to reach saturation anytime soon. There are ~1.5 mn households in the US with more than $10 million net worth and 3.5-4.5 mn households with $4-5 million net worth. I imagine households with such wealth could afford to buy furniture from RH. Given RH reported just 434,000 members in 2020, there is likely to be headroom for RH to continue to grow in the future. Overall, it does seem the $5-6 Bn topline opportunity in North America likely understates long-term potential.

As mentioned earlier, RH has also set its eyes on Europe. RH has already signed leases in several locations in the UK, France, and Germany. UK and France locations are set to open in 2022. RH identified the global opportunity to be $20-25 Bn and they estimate the design gallery capacity to be ~20 in Europe; so if we add both North America and European design gallery capacity, it is around ~80-90 as per management's estimates.

In the most recent earnings call, Friedman gave analysts a range of $50-250 mn first year sales in the UK: *"I really don't know if first year sales in the U.K. will be $50 million or $250 million. That's our range. I know directionally what we have to spend, but I'm just trying to be honest with everybody here."*

Friedman also seems to think RH will face less competition in Europe than they do in the US in the luxury furniture market: "*when we look at Europe, just to kind of talk about that for a second, the competitive landscape in Europe is significantly weaker than it is in the U.S. So I think we'll be even more disruptive and differentiated in Europe, and that's why we're very confident about it."*

I don't know enough about European luxury furniture market to assess the validity of such claims. It's also unclear to me how the distribution system will work. Friedman indicated it might be possible to serve the UK market from their Maryland distribution center. I am not sure how credible or feasible that is. Is it feasible to serve UK, France, and Germany from their current distribution centers? That sounds very unlikely and they may need a couple of distribution centers in Europe. The wide range of first year sales perhaps indicates RH's own inability to assess the demand in those markets and it's very difficult to build out a full-fledged supply chain without having some clues about the demand situation. It is, therefore, possible that RH may face bit of a rocky start and the sales may underperform typical galleries in the US.

A concern I have is whether "American luxury" can travel well to "European luxury" since these two luxuries aren't quite synonymous with each other. From "The Luxury Strategy" book:

"For Europeans and many Chinese too, there is no authenticity without [history]...A brand that has a true history draws an absolute prestige from it, which does not mean that it communicates only in a passéiste, traditional form…However, young people and most Americans do not have the same relationship with time: the authentic, for them, does not require vintage or historicity. It is enough to tell exciting stories, to make us dream, to give status through the people who testify to the brand's rank."

If anything, history is perhaps a liability for RH. Without the foundation and prestige that comes with history, will Europeans be allured by the RH brand as much as Americans did? My guess is we may not have a better alternative than patience to find the answer in 2022 and 2023.

While management hasn't quite mentioned about China, China is usually a big market for some other legends in the luxury world (e.g. LVMH). If RH can be successful in Europe, it is not hard to imagine Friedman will eventually venture into the East. Again, it is very hard to know the likelihood of success in those markets, but a bull scenario may incorporate such call options that can extend the reinvestment runway by years.

Friedman also wants to go beyond furniture and wants to build RH brand in a way that creates a ready association with all things luxury. To meet this height of ambition, Friedman is launching "RH Guesthouse". He repeatedly mentioned "privacy" and "luxury" in the latest earnings call to describe the value proposition of Guesthouse. The first guesthouses are expected to have 9-10 rooms. The one in New York will have 6 rooms, 3 suites, and a residence i.e. top floor. Initially, many investors and analysts thought the guesthouses are perhaps an extension of the design galleries. In the recent call, Friedman explain the furniture business is separate from his plans for guesthouse:

"…the idea of the Guesthouse is, again, first and foremost, to elevate the brand and position RH as a kind of thought leader, taste and place maker in the industry. People ask me, you are opening a hotel. I say, no. What are you doing, I say guesthouse. They go, what's a guesthouse, I say we are trying to create a new market for guest travelers seeking privacy and luxury. And then they go, oh, I get it. It's going to be a showroom for your furniture. And I say, no, why would we do that. We have 90,000 square foot showroom 20 steps away. Then I say the thing that kind of like this glazed look, I would say in fact it's not going to have any of our furniture. And then they say, whose furniture is it going to have. And then I say it's not really going to have any furniture. It's not about furniture. It's about a completely different experience. It's about a completely integrated, singular-design point of view that no one has ever done before."

It's not only just guesthouses, Friedman also mentioned RH luxury jets and yachts as part of his plan to build a luxury ecosystem. If I were a shareholder of RH, I would perhaps be equally thrilled and scared with Friedman's relentless ambition:

"Our plan to expand the RH ecosystem globally, multiplies the market opportunity to $7 trillion to $10 trillion, one of the largest and most valuable addressed by any brand in the world today. A 1% share of the global market represents a $70 billion to $100 billion opportunity. Taste can be elusive, and we believe no one is better positioned than RH to create an ecosystem that makes taste inclusive"

I personally don't like cavalier math such as "only if we get just 1% of X market, we would be so big", but Friedman and RH have executed so well in the last few years, it is perhaps not hard to ignore this transgression.

Section 5: Valuation and model assumptions

If you are reading my deep dive for the first time, I encourage you to read my piece on "approach to valuation". I follow an "expectations investing" or reverse DCF approach as I try to figure out what I need to assume to generate a decent IRR from an investment which in this case to be

~7%. Then I glance through the model and ask myself how comfortable I am with these assumptions. As always, I encourage you to download the model and build your own narrative and forecast as you see fit to come to your own conclusion. None of us have the crystal ball to forecast 5-10 years down the line, but it's always helpful to figure out what we need to assume to generate decent return.

Model assumptions: Let me explain the revenue model first. I started with RH's store base by format. In the excel file, you will see more expanded historical data from 2012 (just unhide the cells when you open your excel file) but I have shown a bit abridged version here. As discussed earlier, RH closed its legacy galleries and opened larger format design galleries since it became public in 2012. Since 2012, it generally opened 2-4 design galleries each year and simultaneously closed 2-5 legacy galleries every year. Although RH outlined 5-7 new design galleries in its 2020 10-K, I am skeptical that such cadence of new design galleries can be maintained for a long time. I have assumed 4 new design galleries every year from 2022 to 2030 which is higher than the average of 2.6 in 2012-2020. Correspondingly, I assumed 3 legacy galleries closure each year going forward. By 2030, total design galleries reached 63. As mentioned earlier, management thinks North America market has capacity for 60-70 galleries. Since RH is also opening couple of galleries in Europe next year, it is possible that they may continue to open one or two galleries each year in international markets going forward. By that measure, even after 2030, North America market can still have capacity left for 10-20 new galleries.

In terms of size of these galleries, I kept the size constant for each of the format which has indeed been the case in the recent years. Multiplying the average size by number of galleries gives you total selling square ft. In 2012, design galleries was just 18% of RH's total selling sqft which has since then increased to 72% in 2020 and by 2030, I assumed design galleries to be 95% of RH's total selling sqft. Before calculating sales per sqft, I made some adjustments such as deducting revenue from membership, and sales in RH outlets to just calculate sales/sqft for the galleries.

Finally, I tried to estimate sales/sqft per store format. Given RH's primary focus on design galleries and the importance of this store format going forward, I assumed constant sales/sqft in 2012-2020 for all other store formats except for design galleries. Constant sales/sqft is, of course, not a realistic assumption, but I still made this assumption so that I can just change sales/sqft for design galleries to equate the sales/sqft for the aggregated RH store base and understand how sales/sqft for design galleries has evolved over the years. While this constant sales/sqft for other store formats admittedly has its limitations, it allows us to infer interesting observation about design galleries. Based on the historical sales/sqft for design galleries, I think it is highly likely that RH's sales/sqft hasn't been growing much and was a bit spotty. Since they are opening 2-4 new galleries every year, topline can still grow based on growth in selling sqft, but sales/sqft didn't quite experience much growth. 2021 changed all that as based on my assumption, sales/sqft may have exceeded $3,000 in this year (assumptions are made to approximate RH's guidance provided in last quarter's call). In the next couple of years, I slightly decreased sales/sqft for design galleries because RH is planning to open couple of galleries in Europe in 2022 which may not perform as well as some of the established market does/did in the US for RH. The international is truly a big unknown here. I have concerns about reinvestment runway for RH which can put downward pressure on terminal multiples. But if RH brand can travel well to Europe (and China?), the concern about reinvestment runway can prove to be unfounded.

Of course, bulls can further point out all other call options such as RH guesthouse, luxury jets/yachts etc, but I have no idea whether any of these will be successful. Perhaps they can be, but those could also prove to be mostly waste of capital.

In terms of margins, what RH pulled off in the last 5 years is just incredible. In 2013, average SG&A per sqft was $635. To perhaps everyone's surprise, RH was able to keep SG&A per sqft more or less flat in the last 7 years. In 2020, SG&A per sqft was $621. However, it can be difficult to continue to expand margins as they enter new markets which can take some time to reach the level of profitability and efficiency of the US galleries. While I have kept SG&A as % of revenue constant going forward, I have expanded gross margin a little over the next 10 years since luxury products may enjoy bit of pricing power. The real and harder question is to what extent the recent surge in topline is just macro tailwinds and wealth effect, the absence or weakness of which can make life difficult for RH.

Amount in USD Mn, except %	2016A	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Store base, in absolute number															
Design Galleries	14	16	20	22	24	27	31	35	39	43	47	51	55	59	63
Legacy Galleries	50	47	43	40	38	36	33	30	27	24	21	19	17	15	13
Modern Galleries	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1
Baby & Child and TEEN Galleries	5	4	6	4	4	3	3	3	3	3	3	3	3	3	3
Total Galleries	70	68	71	68	68	67	68	69	70	71	72	74	76	78	80
Waterworks Showrooms	15	15	15	15	14	14	14	14	14	14	14	14	14	14	14
Outlets	28	32	39	38	38	38	38	38	39	39	39	40	40	41	42
Avg leased selling sqft, thousands															
Design Galleries	30.0	32.3	33.0	33.1	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
Legacy Galleries	8.0	8.0	8.0	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Modern Galleries	13.0	13.0	11.0	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
Baby & Child and TEEN Galleries	4.0	4.0	4.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Total Galleries	12.2	13.6	14.8	15.5	16.2	17.5	18.9	20.2	21.5	22.7	23.9	24.9	25.8	26.6	27.4
Waterworks Showrooms	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Outlets															
Total Selling Sqft by retail location, thousands															
Design Galleries	420	517	660	728	792	891	1,023	1,155	1,287	1,419	1,551	1,683	1,815	1,947	2,079
Legacy Galleries	400	376	344	292	277	263	241	219	197	175	153	139	124	110	95
Modern Galleries	13	13	22	17	17	8	8	8	8	8	8	8	8	8	8
Baby & Child and TEEN Galleries	20	16	24	16	16	12	12	12	12	12	12	12	12	12	12
Total Galleries	853	922	1,050	1,052	1,102	1,174	1,284	1,394	1,504	1,614	1,724	1,842	1,959	2,077	2,194
Waterworks Showrooms	60	60	60	60	57	57	57	57	57	57	57	57	57	57	57
Outlets															
Total Selling Sqft mix															
Design Galleries	49%	56%	63%	69%	72%	76%	80%	83%	86%	88%	90%	91%	93%	94%	95%
Legacy Galleries	47%	41%	33%	28%	25%	22%	19%	16%	13%	11%	9%	8%	6%	5%	4%
Modern Galleries	2%	1%	2%	2%	2%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%
Baby & Child and TEEN Galleries	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Total Galleries	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Calculated selling sqft	*913*	*982*	*1,110*	*1,112*	*1,159*	*1,231*	*1,341*	*1,451*	*1,562*	*1,672*	*1,782*	*1,899*	*2,017*	*2,134*	*2,251*
Growth %	*6.1%*	*7.5%*	*13.1%*	*0.2%*	*4.2%*	*6.2%*	*8.9%*	*8.2%*	*7.6%*	*7.1%*	*6.6%*	*6.6%*	*6.2%*	*5.8%*	*5.5%*
Total reported Selling Sqft	912	981	1,089	1,111	1,162										
Sales per sqft															
RH, excl. membership and outlet	2,236	2,339	2,187	2,141	2,320	2,817	2,780	2,815	2,928	2,956	3,069	3,089	3,105	3,120	3,132
Growth %	-12.3%	4.6%	-6.5%	-2.1%	8.3%	21.4%	-1.3%	1.2%	4.0%	0.9%	3.8%	0.7%	0.5%	0.5%	0.4%
Assumed sales/sqft per store format															
Design Galleries	2,700	2,830	2,450	2,310	2,530	3,100	3,000	3,000	3,100	3,100	3,200	3,200	3,200	3,200	3,200
Legacy Galleries	1,800	1,800	1,800	1,800	1,800	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Modern Galleries	2,200	2,200	2,200	2,200	2,200	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Baby & Child and TEEN Galleries	1,500	1,500	1,500	1,500	1,500	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Total Galleries	2,238	2,343	2,189	2,138	2,317	2,817	2,780	2,815	2,928	2,956	3,069	3,089	3,105	3,120	3,132
Membership program (in thousands)		380	400	418	434	449	464	479	494	509	524	539	554	569	584
Revenue from membership		38	40	42	43	67	70	72	74	76	105	108	111	114	146
Outlet sales	145	206	179	221	188	190	190	190	195	195	195	200	200	205	210
Sales per outlet	5.2	6.4	4.6	5.8	4.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Waterworks	1,888	2,014	2,170	2,219	2,031	2,640	2,719	2,801	2,885	2,971	3,060	3,152	3,247	3,344	3,445
Growth %		6.6%	7.7%	2.3%	-8.5%	30.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Overall															
Net revenues	**2,135**	**2,440**	**2,506**	**2,647**	**2,849**	**3,775**	**3,992**	**4,353**	**4,846**	**5,220**	**5,774**	**6,174**	**6,577**	**6,984**	**7,421**
Growth %	1.2%	14.3%	2.7%	5.7%	7.6%	32.5%	5.7%	9.0%	11.3%	7.7%	10.6%	6.9%	6.5%	6.2%	6.3%
RH	2,060	2,319	2,375	2,514	2,729	3,624	3,836	4,192	4,680	5,049	5,598	5,993	6,390	6,792	7,224
Waterworks	75	121	130	133	119	152	156	161	166	171	176	181	186	192	198
Cost of Goods Sold	**1,455**	**1,601**	**1,520**	**1,552**	**1,523**	**1,933**	**2,036**	**2,211**	**2,451**	**2,629**	**2,896**	**3,084**	**3,271**	**3,460**	**3,661**
RH	1,404	1,528	1,442	1,476	1,455	2,105	2,208	2,383	2,628	2,806	3,099	3,292	3,480	3,674	3,910
Waterworks	51	73	78	77	68	85	87	89	92	94	97	99	102	104	107
Gross Profit	**680**	**839**	**986**	**1,095**	**1,326**	**1,842**	**1,956**	**2,142**	**2,395**	**2,591**	**2,878**	**3,090**	**3,305**	**3,525**	**3,760**
RH	656	792	934	1,039	1,274	1,776	1,887	2,071	2,321	2,515	2,799	3,009	3,221	3,437	3,670
Waterworks	24	48	52	56	51	67	69	71	74	76	79	82	85	88	91
Gross Margin	31.8%	34.4%	39.3%	41.4%	46.5%	48.8%	49.0%	49.2%	49.4%	49.6%	49.8%	50.1%	50.3%	50.5%	50.7%
RH	31.9%	34.1%	39.3%	41.3%	46.7%	49.0%	49.2%	49.4%	49.6%	49.8%	50.0%	50.2%	50.4%	50.6%	50.8%
Waterworks	31.5%	39.4%	39.8%	42.3%	43.1%	44.0%	44.2%	44.4%	44.6%	44.8%	45.0%	45.2%	45.4%	45.6%	45.8%
SG&A	**577**	**680**	**698**	**716**	**705**	**891**	**940**	**1,022**	**1,134**	**1,219**	**1,346**	**1,436**	**1,528**	**1,620**	**1,721**
RH	551	631	646	663	658	833	882	964	1,076	1,161	1,288	1,378	1,470	1,562	1,661
As % of related revenue	26.7%	27.2%	27.2%	26.4%	24.1%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%
SG&A per sqft	651	718	668	644	621	746	731	732	753	754	779	780	780	781	785
Waterworks	26	49	53	53	47	58	58	58	58	58	58	58	58	58	59
As % of related revenue	34.7%	40.7%	40.5%	39.4%	39.7%	38.0%	37.0%	36.0%	35.0%	34.0%	33.0%	32.0%	31.0%	30.0%	30.0%
Operating Income (loss)	**103**	**159**	**287**	**379**	**621**	**951**	**1,016**	**1,120**	**1,261**	**1,372**	**1,533**	**1,654**	**1,778**	**1,905**	**2,039**
Margin	4.8%	6.5%	11.5%	14.3%	21.8%	25.2%	25.5%	25.7%	26.0%	26.3%	26.5%	26.8%	27.0%	27.3%	27.5%
RH	105	161	288	375	617	942	1,005	1,107	1,245	1,353	1,512	1,630	1,751	1,875	2,008
Waterworks	(2)	(2)	(1)	4	4	9	11	14	16	18	21	24	27	30	31

Valuation: To generate ~7% IRR, I had to assume 24x terminal FCF multiple. If we assume FCF projections are more or less on the ballpark, the question then becomes whether we should be willing to pay ~25x FCF multiple for RH in 2030. One of my concerns is the reinvestment runway. If RH becomes successful in Europe, they are likely to venture into China perhaps in a few years which would assuage my concerns. But I don't have visibility or conviction how successful RH can/will be in Europe. In the scenario RH faces lukewarm reception in Europe and hence decides to focus on North America, it is possible by 2030 they may reach near saturation in terms of selling sqft growth in the North America. If that happens, it can be challenging to receive ~25x FCF terminal in 2030 even if interest rate remains low.

Items		2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
OCF		501	893	923	1,035	1,152	1,256	1,376	1,483	1,592	1,704	1,824
Capex		(111)	(125)	(139)	(155)	(173)	(193)	(206)	(222)	(240)	(258)	(278)
FCF		**390**	**768**	**784**	**879**	**979**	**1,063**	**1,170**	**1,261**	**1,352**	**1,446**	**1,546**
FCF/share		14.3	24.8	23.3	25.6	28.7	31.7	35.4	38.6	41.9	45.5	49.6
Terminal FCF multiple												**24.0x**
Terminal Stock price												**1,190**
Current price*	**643.1**											
Dividend/share		-	-	-	-	-	-	-	-	-	-	-
Cash flow			(643)	-	-	-	-	-	-	-	-	1,190
IRR	**7.1%**											
#diluted shares outstanding		27	31	34	34	34	34	33	33	32	32	31
**Closing price of November 18, 2021*												

Please note that while buybacks were taken into consideration in my model, it is possible RH may be more aggressive in buying back shares, especially if Friedman feels RH is undervalued. If history is any guide (will be discussed shortly), he will not hesitate to lever the RH balance sheet and go on a buyback spree much more aggressively than it is modeled here.

Amount in USD Mn, except %	**2016A**	**2017A**	**2018A**	**2019A**	**2020A**	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**
weighted avg # of diluted outstanding	40.9	27.1	26.5	24.3	27.3	31.0	33.7	34.3	34.0	33.5	33.0	32.6	32.3	31.7	31.2
# of shares issued		6.3	1.6	(0.1)	3.0	4.1	3.1	1.7	1.0	0.7	0.7	0.7	0.7	0.6	0.6
As % of outstanding shares		15.5%	5.8%	-0.3%	12.4%	*15.0%*	*10.0%*	*5.0%*	*3.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*
Shares repurchases		(1,000)	(250)	(250)	-	(300)	(300)	(800)	(1,100)	(1,100)	(1,100)	(1,100)	(1,100)	(1,400)	(1,500)
# of shares repurchased		20	2	2	-	(0.4)	(0.4)	(1.0)	(1.3)	(1.2)	(1.1)	(1.1)	(1.0)	(1.2)	(1.2)
As % of outstanding shares		*49.4%*	*7.7%*	*8.2%*	*0.0%*	*1.6%*	*1.3%*	*3.0%*	*3.8%*	*3.6%*	*3.4%*	*3.2%*	*3.1%*	*3.7%*	*3.7%*

Section 6: Management and Incentives

RH is not a founder led company, but for all intents and purposes, its success is perhaps more dependent on its CEO Gary Friedman than most founder led companies out there. Similarly, I don't quite expect Friedman to leave RH to pursue any other opportunities, and even though he's in his mid-60s, I won't be surprised if he remains CEO of RH ten years from now.

Friedman started his career as a stock-boy at a GAP store. He was at GAP for 11 years and ended up being Regional Manager overseeing 63 stores in Southern California. In 1988, he joined Williams-Sonoma as Senior Vice Presidents of Store and Operations. He became Chief Operating Officer at Williams Sonoma and after being passed over for CEO role there, he joined RH in 2001 as Co-CEO. Just before RH becoming public in 2012, Friedman stepped down from the CEO role in RH. RH then said Friedman would be starting a new incubator company with ties to RH and would remain as non-executive chairman emeritus. The actual reason for such abrupt change in leadership right before the IPO was Friedman's alleged "inappropriate relationship" with a female employee at RH. Apparently, the ex-boyfriend of the female employee brought this to RH board's attention. By that time, the said employee already left RH and the woman later confirmed the relationship was "consensual and ongoing". The woman was single at that time, and Friedman himself was divorced. In retrospect, the only issue in this relationship was Friedman's lack of disclosure of the relationship and the conflict of having a romantic relationship with your subordinate (I'm not sure whether Friedman had direct supervisory capacity, but since he was CEO, romantic relationship with any employee should be a cause for concern). Interestingly, Friedman came back to RH as CEO in less than a year of being ousted from the CEO role. While this episode has been behind us, it is likely to have noticeable impact on RH's success in the future.

As per 2017 proxy statement, Friedman used to own 16.7% shares of RH. The stock was trading in the $20s (vs ~$650 today) and there were quite a few people skeptical of Friedman's strategy of doubling down on expansive galleries in an age Amazon was wreaking havoc on almost every retailer out there. You can see some short thesis on VIC here and here. In the Goldman Sachs retailing conference, Friedman showed up and said the following:

"52% of our shares were short, for God's sake, okay? Honestly. And the shorts, and those of you in the room, listen, I don't care, everybody can gamble the way they want to gamble, honestly. Again, I care about our long-term investors."

Even though Friedman promised he didn't care about the shorts, the reality is anyone who was lazy to cover their short probably lost their shirt. At the end of 2016, RH had ~41 mn diluted shares outstanding. Friedman raised debt to spend $1 Bn in repurchasing 20 mn shares in 2017. The board also awarded him following stock incentive plan in May 2017 to award 1 mn shares if the stock price hits the following targets. Even though RH was trading at ~$50 when this was granted, it crossed $150, the maximum target in the plan, by just one year. Following this plan, Friedman now owns 27.9% of the outstanding shares as per the latest proxy statement.

	PRICE TARGET ($)	PREMIUM TO GRANT DATE STOCK PRICE (%)
Exercise Price	$ 50	2.8%
Performance Targets	$ 100	105.7%
	$ 125	157.1%
	$ 150	208.5%

Other notable shareholders in RH include Berkshire Hathaway (8.2% shares), D1 Capital (5.4% shares), Miller Value Partners (4.7% shares), and Eri Chaya who is Chief Creative and Merchandising Officer of RH (2.0% shares). Moreover, it is likely Friedman's ownership is highly likely to continue to increase as the board recently awarded him another stock incentive plan in 2020 that would allow him to receive another 700k shares if the stock price hits the following targets. Even though the plan is active till 2025, the stock price is already headed in the right direction for Friedman to increase his control and ownership of the company. Interestingly, RH hadn't bought back any shares in 2020 and 2021 so far. When Friedman pulled off the buyback trick, net debt to EBITDA exceeded 5x which came down to below 3x in 2020 and is expected to continue to go down. If there is one takeaway I would like to highlight from this deep dive, please think long and hard before shorting RH no matter how unlikely, nonsensical their strategy may seem to you. Friedman is not only good at operating the retail business, but also very fluent on capital allocation tricks, and more importantly has ample nerve to inflict pain on the naysayers much more than any short seller may have imagined in their worst nightmares. Nothing here is, of course, investing advice, but this one is perhaps as close as I will ever get to suggest you not to do something.

	PRICE TARGET ($)	PREMIUM TO GRANT DATE STOCK PRICE (%)
Exercise Price	$385.30	0.0%
Performance Target	$ 500	29.8%
Performance Target	$ 650	68.7%
Performance Target	$ 800	107.6%

For annual incentives, RH tracks "Adjusted net income" which they define as consolidated net income before taxes, adjusted for the impact of certain non-recurring events and other items that is not considered representative of ongoing operating performance. Notably, this metric isn't adjusted for depreciation/amortization. Looking at the past data, it does seem their target is not materially sandbagged as historically RH did have a couple of years where they noticeably underperformed their target adjusted net income.

	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019	Fiscal 2020
Achievement level	30%	0%	90%	170%	175%	200%

Section 7: Final words

While there is a lot to like about Gary Friedman and how he has transformed RH over the last 5-7 years, I do think investing on RH at current level would somewhat feel like a "leveraged" bet on the current stock/crypto/real estate bull market to continue. I don't try to time the market and have no opinion on whether the market is overvalued or undervalued, but I believe it is particularly difficult to assess to what extent the macro factors are driving the recent impressive results for RH. If the tides turn (no idea when), RH's performance may look worse than it actually is as these cycles can magnify or exaggerate the results in both directions. Moreover, considering the extra risks of RH's recent adventure into Europe, guesthouses, and who knows what else Friedman has in his mind, I consider RH to be somewhat risky bet, especially at current level. Of course, if the current bull markets can continue for another 5 years, RH becomes a smashing hit in Europe, and Friedman may decide to export the luxury brand of RH to China to continue to make the naysayers wrong, the stock can continue to rocket higher. One interesting metric that I would like to pay attention to is when RH starts buying back stocks. Friedman doesn't buyback stocks on an autopilot mode; he usually does when he feels market doesn't appreciate and understand what he is trying to accomplish. Overall, I would just like to follow RH from a distance for now.

Portfolio Discussion: Please note that these are NOT my recommendation to buy/sell these securities, but just disclosure from my end so that you can assess potential biases that I may have because of my own personal portfolio holdings. Always consider my write-up as my personal investing journal and never forget my objectives, risk tolerance, and constraints may have no resemblance to yours.

Since last month's deep dive, I have added to GOOG, FB, AMZN, and BRK. I have covered recent quarterly earnings of IAC/ANGI, FB, GOOG, AMZN, TRUP, and SQ. You can always explore all the past earnings-related thread on my website here.

While there is not much to say for GOOG, AMZN, or BRK, I would like to spare a few words on FB/MVRS here. Admittedly, I added to FB before the earnings. Since I heard about the massive spending plan on AR/VR and the radical shift to Metaverse which is still somewhat nascent and speculative area, it did give me a pause more than any negative press coverage or scandal ever did in my more than three-year holding period of FB.

Why did Zuckerberg make such a shift now? I could identify at least four things: a benign market environment for speculative bets, an aggressive political/media scrutiny, a potent competitive threat from companies such as TikTok, a confirmation of vulnerability due to dependence on someone else's (Apple to be specific) OS.

Everyone is big on "optionality" these days. Very few people (if any) perhaps have any clue about probability of Metaverse being a large enough opportunity (will it be "inhabited" by 100 mn or 1 Bn?), how long it will take for the technology to get there, how long it will take to scale, and FB's probability of success. However, the current market is exceptionally gullible to big and bold ideas and tends to assign high probability of success to such ideas almost by default. Zuck may have taken the lax market environment into consideration and decided to pursue something that he thinks will let Meta lean onto the future. Even if we don't have the details, just based on Occam's razor principle, we can be somewhat confident that social media in 2030 will not look the same as it is today. Instead of waiting to see how the changes unfold, Meta wants to control the disruption in its own terms, and it seems to me Zuck almost never minds being early.

Following the Meta presentation, I think it is highly likely that shareholder base of the former Facebook will change in the next few quarters/years. Meta's undemanding multiples and the expectation of the end of hyper capex and opex cycle attracted a certain kind of shareholders (myself included), but now that we know that hyper-capex and opex cycle may have no end in sight, at least some part of the investing thesis has been put in serious question.

In many ways, Facebook was always bit of a bet on the jockey as Zuck proved himself time and again as an exceptional operator and given his age, shareholders hoped to get his services for a couple of decades. That thesis remains firmly intact and perhaps has become the dominant thesis today. Nonetheless, the current shift feels nothing like I have seen or studied before in Meta's history. When FB acquired Instagram or WhatsApp, it didn't abruptly shift the whole company to Instagram or WhatsApp's future; therefore, it does feel a little different this time.

In light of these events, I seriously considered trimming FB as it is one of my largest positions in portfolio. However, I finally decided against doing so; I wanted to take a wait-and-see approach on FB's metaverse ambition. The valuation remains undemanding (although that may not save us if company loses its focus on core business and sinks capital in speculative, especially if eventually unsuccessful bets). I admire Zuck's willingness to disrupt his own business and to pursue "Zero to One" even after building a trillion-dollar company. I admit the range of outcomes has widened for FB which typically calls for lower weight in the portfolio. However, since I believe some of the other large-weighted stocks in my portfolio (BRK, IAC, GOOG, AMZN) are not as risky, I decided to underwrite/keep FB's "known unknown" risks. I am unlikely to add to FB going forward unless I gain a better conviction and understanding of the metaverse.

My current portfolio is disclosed below:

Ticker	Avg. Cost	Current Weight*	Unrealized Gain %	First Bought	First Buy Price	Last Bought	Last Buy Price
BRK.B	204.0	14.4%	37.6%	Aug'19	199.7	Nov'21	285.2
FB	238.7	13.2%	41.9%	Aug'18	172.8	Oct'21	321.7
ADSK	289.4	12.6%	11.3%	Feb'21	301.3	Sep'21	288.1
IAC	106.2	11.8%	22.6%	Jul'20	83.0	Aug'21	129.7
AMZN	3,040.4	10.3%	21.6%	Feb'20	1,820.0	Oct'21	3,438.2
GOOG	2,226.3	10.1%	35.4%	May'19	1,150.2	Oct'21	2,753.2
TRUP	80.0	8.2%	64.5%	Oct'21	80.0	Oct'21	80.0
SQ	253.4	4.9%	-9.1%	Sep'21	271.3	Oct'21	225.8
LULU	342.5	4.5%	38.2%	Jun'21	337.9	Jun'21	347.6
ANSS	364.0	2.2%	9.5%	Dec'20	364.0	Dec'20	364.0
ANGI	11.7	1.8%	-9.9%	Nov'20	11.7	Nov'20	11.7
Cash		6.1%					
Total		100%					

**Based on prices as of November 18, 2021 (time-weighted YTD: +25.6%); Since inception (August 24, 2018) time-weighted annualized return +25.4%*

*The next deep dive is on **Spotify** which is the final deep dive in 2021. I encourage you to subscribe for the annual plan; annual subscribers will participate in a poll to select deep dives for 2022. If you are a monthly subscriber, you can login and upgrade your membership to annual. It will mean a lot if you encourage your colleagues/acquaintances to subscribe to my work. Your support is deeply appreciated. Thank you so much.*

Recommended readings

1. Bill Brewster on RH at MOI Global (January 2020)
2. Return on Capital on RH (June 2020)
3. Ahmed H's twitter thread on "The Luxury Strategy"
4. The Luxury Strategy Book

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