

Resideo Holdings: Ticker (REZI) Long, Short? Maybe Both?

Porter Street Research

By Alex Jones alex.jones@porterstreetresearch.com

Executive Summary

Resideo Holdings (Ticker: Rezi) is a \$2.5bn enterprise value company that was spun out of Honeywell in October of 2018. The business has two divisions:

1. Products and Solutions: Design and manufacture products for residential heating, HVAC, cooling, security and home monitoring. Products include thermostats, leak detectors, heating controls and security systems. (45% TTM Rev., 65% Adj EBITDA)

2. ADI Global Distribution: Largest global wholesale distributor of security and low voltage products. 15% market share in a fragmented market. (55% of TTM Rev, 35% Adj EBITDA)

- Rezi shares are down 56% in 15 months since being spun out from Honeywell. Guidance has been cut three times and in Q3 2019, the company announced it was hiring consultants to help optimize its cost base and re-set its global operations. Rezi has nearly \$5bn in revenue and currently:
 - 1. Has no full-time CEO. CEO hired for the spin is leaving once a replacement is found.
 - 2. Has no full time CFO but did hire an interim CFO.
 - 3. Recently amended debt covenants to allow for covenant Adj. EBITDA to decline 30% from 2019's already reduced guidance of \$340mn (from \$500mn at start of year). The covenant amendment includes language that gives Rezi the ability to adjust for and add back charges, including losses from write downs and any restructuring initiatives the company may undertake.
 - 4. Hired a restructuring and outsourced board member from FTI, a global restructuring advisor and consulting firm. The board member's experience is as an outsourced board member for bankrupt or near bankrupt companies that are going through large restructuring efforts.
- The biggest misconception investors have is that the Products and Solutions division was one cohesive business unit at Honeywell. That is not the case. Gross margins are down over 400bps in two years and prior management failed to grasp the challenge of pulling the division's together.
- With the potential for a new CFO and CEO in 2020, it would not be a surprise if guidance is halted or cut as new management resets expectations for 2020 and beyond. Rezi's interim CFO has all but guaranteed there are significant restructuring initiatives set to be announced in Q1 2020. Debt/Adj EBITDA is set to rise to 3.7X by year end 2019 from 2.4X at the end of 2018. The covenant amendments imply management thinks Adj. EBITDA could fall below \$300mn in the next 3-18 months.
- The fundamental issue at Rezi is that the business doesn't generate cash. So far in 2019 the business has consumed \$133mn in cash and borrowed \$60mn on its revolver. 62% of the \$132mn of cash on Rezi's balance sheet is held by overseas subsidiaries and not immediately available for debt pay down or to help finance operations in the US. Previous and interim management guided that the business would generate positive cash from operations in 2019 – before cap-ex. However, when including cash for investing, the business will likely end 2019 consuming cash.
- The bull case for Rezi today lies in the value of the ADI distribution business. To retain the tax benefits from the Honeywell spin-off, the earliest ADI could be spun off is October 2020. However, Honeywell must approve any transaction. Gross margins at ADI are less than half the products division and any further weakness in the products division or cyclical weakness at ADI will stress the entire enterprise.

In summary, Rezi has been a complete disaster of a public company since the spin-off. There is value and potential in some parts of Rezi's business. We believe it may take longer and cost more to re-structure and return to positive free cash flow growth than the market anticipates.

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Resideo		Cap-IQ Estimates 12/31/2018 TTM 9/30/2019 12/31/2019 12/31/2020 12/31/2021				
Price	\$ 11.4	2018	9/30/2019	2019	2020	2021
Shares	\$ 123					
Mkt Cap	\$ 1,400					
Cash	\$ 132	Revenue	\$ 4,827	\$ 4,950	\$ 4,969	\$ 5,142
Debt	\$ 1,251	Gross Profit	\$ 229	\$ 1,228	\$ 25.9%	\$ 26.1%
EV	\$ 2,519	Adj EBITDA	\$ 193	\$ 391	\$ 431	\$ 486
		EBIT	\$ 193	\$ 307	\$ 233	\$ 276
		Net Income			\$ 87	\$ 150
		Diluted EPS			\$ 0.71	\$ 1.21
					\$ 1.10	
		Margins	12/31/2018 TTM	9/30/2019	12/31/2019	12/31/2020
		EBITDA	4.0%	7.9%	8.7%	9.5%
		NET	0.0%	0.0%	1.8%	2.9%
		Valuation	12/31/2018 TTM	9/30/2019	12/31/2019	12/31/2020
		EV/EBITDA		6.4	5.8	5.2
		EV/EBITDA (PSR)			7.4	6.9
		PE			16.0	9.4
		Growth	12/31/2018 TTM	9/30/2019	12/31/2019	12/31/2020
		Revenue			2.9%	3.5%
		EPS				70.4%
		FCF	12/31/2018 TTM	9/30/2019	12/31/2019	12/31/2020
		Using PSR Estimates				
		Adj EBITDA w/Honeywell	\$ 391	\$ 340	\$ 364	\$ 366
		Interest		\$ (69)	\$ (70)	\$ (70)
		Cash Tax		\$ (75)	\$ (61)	\$ (62)
		FCF pre WC		\$ 196	\$ 232	\$ 235
		Working Capital		\$ (100)	\$ (75)	\$ (75)
		Cap-Ex		\$ (90)	\$ (75)	\$ (75)
		FCF		\$ 6	\$ 82	\$ 85
		FCF Equity		0.4%	5.9%	6.0%
		FCF Firm		0.2%	3.3%	3.4%
		Credit				
		Debt		\$ 1,251	\$ 1,251	\$ 1,251
		Debt/Adj EBITDA		3.68	3.44	3.41
		Covenant Max Leverage		5.25	4.75	4.25
		Adj EBITDA to Breach		\$ 238	\$ 263	\$ 294

Sources: Resideo Holdings and CapitalIQ.

- Consensus estimates make Rezi shares appear as if they trade at 6X EBITDA. On our numbers, which exclude some add backs to reconcile to Adjusted EBITDA, we have Rezi trading at close to 8X EBITDA. This is more than fair value for a business that despite generating over \$350mn in Adjusted EBITDA generates almost zero free cash flow.

Long or Short?

- Rezi represents a unique opportunity. We believe there is a compelling case to short shares over the next 3-9 months for a 30-50%+ return on the back of the recent rally from \$9.5 to over \$12. At the same time, we believe the business may be a compelling activist long investment – at some point.
- The way we see it, Rezi is two distinct businesses and neither one on its own or combined needs to be a public company. Each division can be better managed and create more value within a large company or in the hands of a private owner. At some point ADI can be sold for over \$1.0bn in after tax proceeds. With the right management, the Products and Solutions business can return to growth. We think the division is better off being sold to a large OEM, taken private to become a consolidator or broken back up into pieces. The wild card and big unknown surrounding any take private and break-up plan involves what happens to the \$140mn/year liability payable to Honeywell.

This overview is structured to lay out the facts as we see them today. The evidence in the near term is biased to the downside and most of the report will focus on the negatives at Rezi. As a way of structuring our research process, we proactively looked at the merits of a long investment in Rezi and find there are many. The key risk to a long investment today is restructuring Rezi's Products and Solutions division could take longer and cost more than the market expects. Things can get a lot worse before they get better.

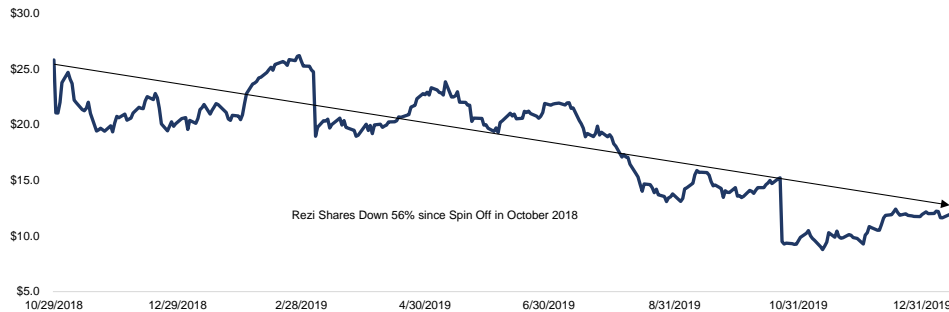
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What is Creating an Opportunity: Weakness in Product Division Weighs on Overall Profitability

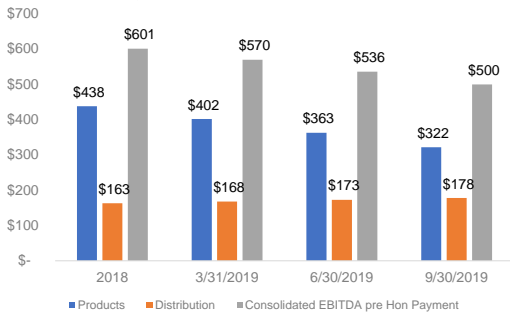
Resideo Technologies Share Price: October 2018 - Present



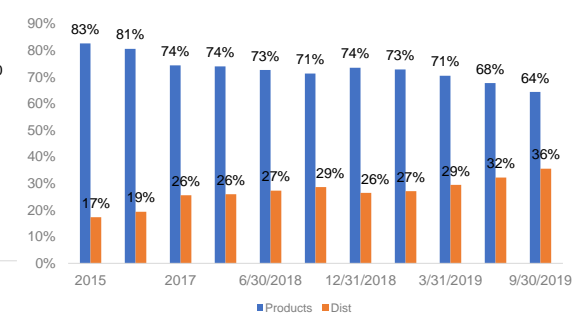
Source: Yahoo Finance

- The revenue mix shift from Products and Solutions to faster growing, low margin distribution has led to a collapse in gross profit margins and absolute gross profit dollars. The distribution business, ADI, went from contributing 17% of Adjusted EBITDA in 2015 to 36% on a TTM basis.

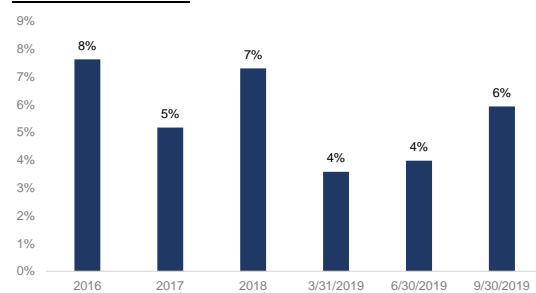
TTM Adj. EBITDA by Division



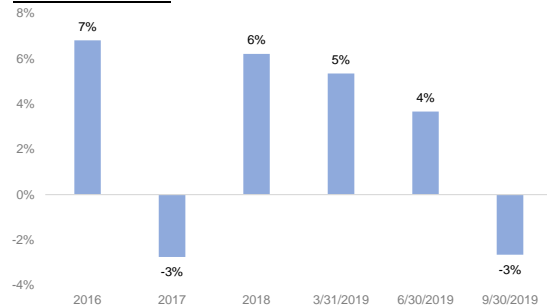
Contribution to Adjusted EBITDA



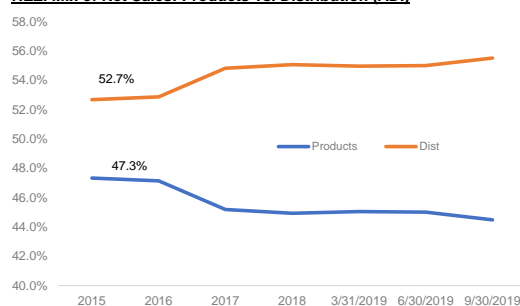
Y/Y Growth Distribution



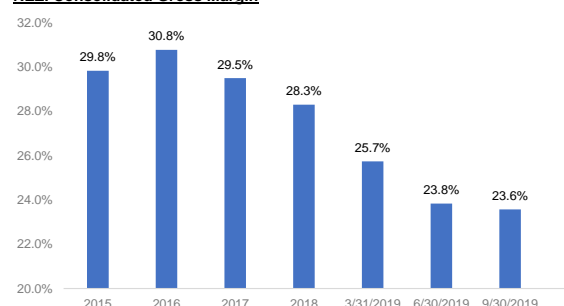
Y/Y Growth Products



REZI Mix of Net Sales: Products vs. Distribution (ADI)



REZI Consolidated Gross Margin



Source: Resideo Holdings

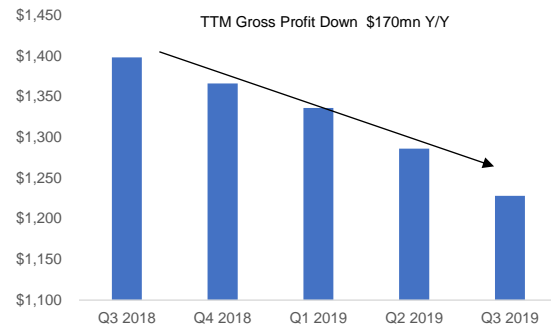
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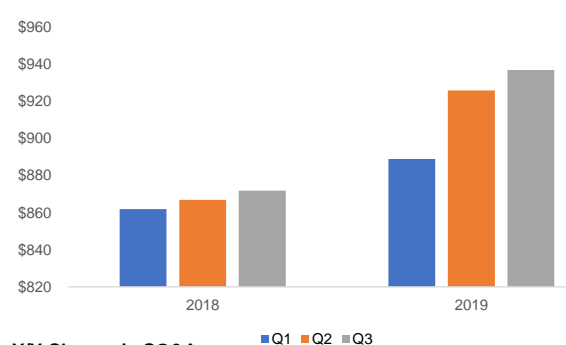
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- The absolute dollar decline in gross profit compared to the rise in SG&A is the key driver in overall weakness. Y/Y gross profit dollars are down \$170mn while SG&A is up \$60mn

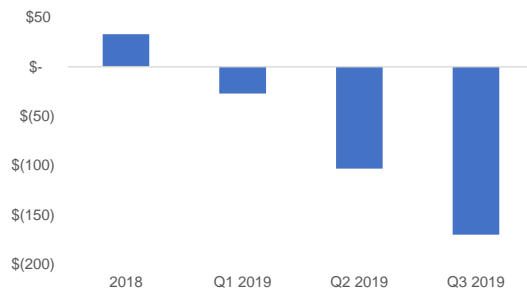
TTM Gross Profit



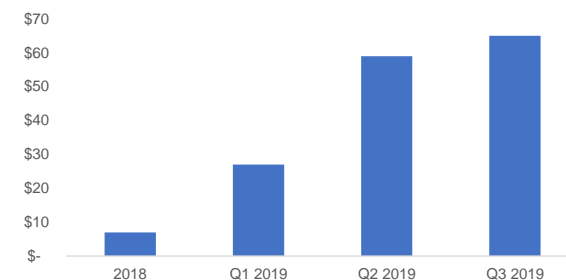
SG&A Comparison By Quarter: 2018 - 2019



Y/Y Change in Gross Profit



Y/Y Change in SG&A



Source: Resideo Holdings

Products and Solutions Division Challenges

- All the weakness at Rezi so far has been in its Products and Solutions division. The biggest misconception about the division is that before the spin it was managed as one common business unit. This is not the case. Prior Honeywell spin-offs, including Advansix and Garrett Motion were in fact managed as separate units within Honeywell. With Rezi, Honeywell effectively threw together a few different divisions and product lines related to residential homes and called them the Products and Solutions divisions. Honeywell then combined it with ADI and called it Resideo. The effects of this lack of cohesion and integration are just now becoming clear.
- Spin-offs are difficult for new management. Rezi needed to be stood up on its own which required investing in common IT, legal, HR and other back office functions as a standalone company. These costs combined with the fact that the legacy Products division's were truly separate businesses with many redundant costs led management to vastly underestimate the challenges of pulling together the business units. Further stressing the Products Division was each segment has distinct customer bases, product cycles, sales patterns and margin profiles not to mention product and brand names. The outright collapse in profitability without clear answers from management as to what the root causes are leads us to believe there are many more ticking time bombs within the products division.

Specific Drivers of Weakness Include:

- A 6% Y/Y decline in revenue in Q3 2019
 - The security business grew 8% Y/Y but has much lower margins than other segments and was also hurt from unfavorable pricing due to rebates on a line of security products where sales are just ramping

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- Comfort and RTS businesses were down 6% each. The RTS (HVAC/Water Systems) issues were due to a problem with a large OEM customers. Due to a regulatory change, distributors favored an older generation, lower quality product in the buying period over Rezi's higher quality, higher margin system led to obsolete inventory and expensive carrying costs.
- The recent sales weakness was also a function of poor sell through of products introduced over the last few years. In the midst of the spin off and under new management, new product launches have failed and new management's focus on connected thermostats and devices, which have lower margins, took away from the division's legacy, non-connected, high margin thermostats. Feedback from key customers and distributors is that Rezi's recent product upgrades have fallen flat at the same time many other key product lines have been under-invested in. In our experience, these are all issues that are fixable. However, they are not quick fixes and the increased mix of long cycle products adds another layer of risk.
- The product segment has over 3,000 SKUS and there is a real risk many are outdated and slow moving. From 2016-2018 average inventory written off each year was between \$5-10mn. Year to date, Rezi has already written off \$22mn and expects another \$20m in Q4 bringing 2019 total to over \$40mn.
- Prior to the spin, gross margins for the Products and Solutions business were between 43-46% and fell 300bps from 2016-2018. Assuming the same percent of SG&A allocated to the division holds today, we estimate that as a result of mix shift to lower margin, but faster growth security and connected thermostats, gross margins are now close to sub 40% with zero overhead de-leverage.

Products & Solutions	2015	2016	2017	2018	3/31/2019	6/30/2019	9/30/2019
Products & Solutions	\$ 2,338	\$ 2,471	\$ 2,379	\$ 2,474	\$ 622	\$ 611	\$ 595
Intersegment Sales	\$ (372)	\$ (371)	\$ (337)	\$ (305)	\$ (71)	\$ (74)	\$ (83)
Net Revenue	\$ 1,966	\$ 2,100	\$ 2,042	\$ 2,169	\$ 551	\$ 537	\$ 512
COGS	\$ 1,109	\$ 1,145	\$ 1,149	\$ 1,248			
Gross Profit	\$ 857	\$ 955	\$ 893	\$ 921			
Gross Margin (%)	43.6%	45.5%	43.7%	42.5%			
SG&A	\$ 490	\$ 529	\$ 540	\$ 540			
% of Sales	25%	25%	26.4%	24.9%			
Adj EBITDA	\$ 415	\$ 479	\$ 410	\$ 438			
TTM Adj EBITDA	\$ 415	\$ 479	\$ 410	\$ 438	\$ 402	\$ 363	\$ 322
Cap-Ex	\$ (60)	\$ (60)	\$ (44)	\$ (73)	\$ (12)	\$ (12)	\$ (12)
Simple Operating Cash Flow	\$ 355	\$ 419	\$ 366	\$ 365	\$ 69	\$ 58	\$ 54
TTM Revenue	\$ 2,338	\$ 2,471	\$ 2,379	\$ 2,169	\$ 2,197	\$ 2,216	\$ 2,202
TTM Adj EBITDA	\$ 415	\$ 479	\$ 410	\$ 438	\$ 402	\$ 363	\$ 322
Margin (%)	17.8%	19.4%	17.2%	20.2%	18.3%	16.4%	14.6%
Growth	2015	2016	2017	2018	3/31/2019	6/30/2019	9/30/2019
Gross Sales Y/Y		5.7%	-3.7%	4.0%	3.3%	2.2%	-1.3%
ADI Sales Y/Y			-9.2%	-9.5%	-10.1%	-7.5%	7.8%
Net Sales Y/Y		6.8%	-2.8%	6.2%	5.4%	3.7%	-2.7%
Products Segments							
Comfort				\$ 1,114			\$ 256
% Total				45%			43%
Security				\$ 784			\$ 211
% Total				32%			35%
RTS				\$ 576			\$ 128
% Total				23%			22%
Total Product GROSS				\$ 2,474			\$ 595
Thermostat				\$ 550			
				\$ 1,924			
% Products not Theromstats				78%			

Source: Resideo Holdings

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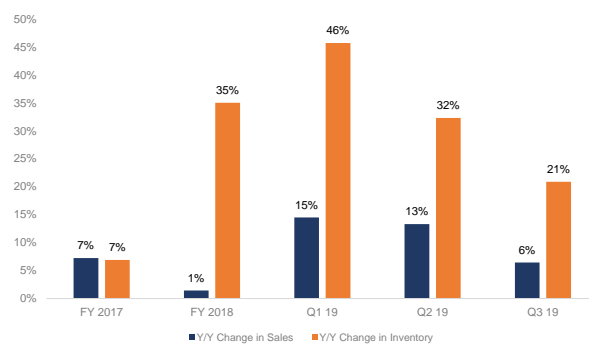
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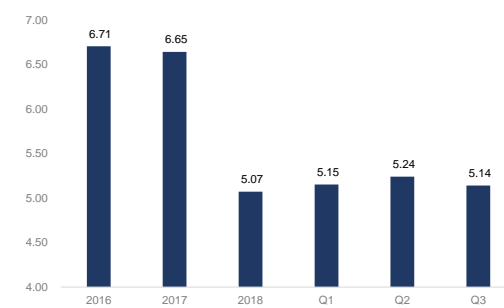
Product Weakness and Shift to Distribution = Greater Working Capital Intensity and Inventory Problems

- In the last 9 months inventory at Rezi has increased by \$100mn and since 2017, \$264mn. At the same time, inventory turns have declined by 1.5X. Year over Year growth in inventory has outpaced growth in sales by almost 2X and inventory as a percent of sales is now 15%, up from 10% in 2017.

Y/Y Increase in Sales vs. Inventory



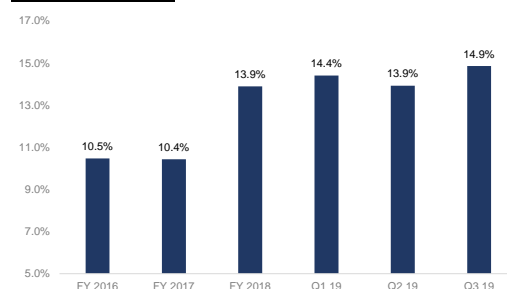
Inventory Turnover



Source: Resideo Holdings

- The revenue mix shift towards distribution forces Rezi to hold more inventory. This should explain some, but not all of what is happening. The increase in finished goods inventory is indicative that certain products are slow moving and potentially obsolete. What is concerning is that Rezi's inventory write off will increase 8x this year. With over 3,000 products, many of which may now be obsolete or hard to sell as Rezi shifts to connected and newer, upgraded versions, we think the risk of further large scale write downs and fire sale of inventory is high. In the short term, liquidating inventory and doing a re-set is the right thing to do and cash flow would improve. However, the longer term implication is that Rezi has the wrong process, people and assets in place to adequately understand what their customers want and deliver it in a profitable and efficient way.
- Regardless of what is happening under the hood, the trends in inventory at Rezi are a negative. Priority number one for any new management is to properly align orders and capacity to identify issues and understand how to turn inventory faster. Rezi's business, if growing, should be consuming and investing in inventory but based on the trends we see here, there is a lot of work to do.
- The discussion about inventory is important because it is a large consumer of cash. Over the last three years Rezi has built inventory and receivables. We believe many bull cases for Rezi do not properly account for how working capital intensive this business is. For a business that just received a covenant waiver, understanding all uses of cash flow is even more important.

Inventory as a % of Sales



Source: Resideo Holdings

	FY 2016	FY 2017	FY 2018	Q1 19	Q2 19	Q3 19
	12/31/2016	12/31/2017	12/31/2018	3/30/2019	6/30/2019	9/30/2019
Inventory Breakdown						
Raw Materials	\$ 100	\$ 108	\$ 167	\$ 166	\$ 133	\$ 143
WIP	\$ 24	\$ 21	\$ 34	\$ 29	\$ 21	\$ 19
Finished Products	\$ 311	\$ 336	\$ 427	\$ 506	\$ 538	\$ 567
Total Inventory	\$ 435	\$ 465	\$ 628	\$ 701	\$ 692	\$ 729
Raw Materials		23%	27%	24%	19%	20%
WIP		5%	5%	4%	3%	3%
Finished Products		72%	68%	72%	78%	78%
Dollar Increase in Inventory		\$ 163	\$ 73	\$ (9)	\$ 37	
Inventory % Sales	10.5%	10.4%	13.9%	14.4%	13.9%	14.9%

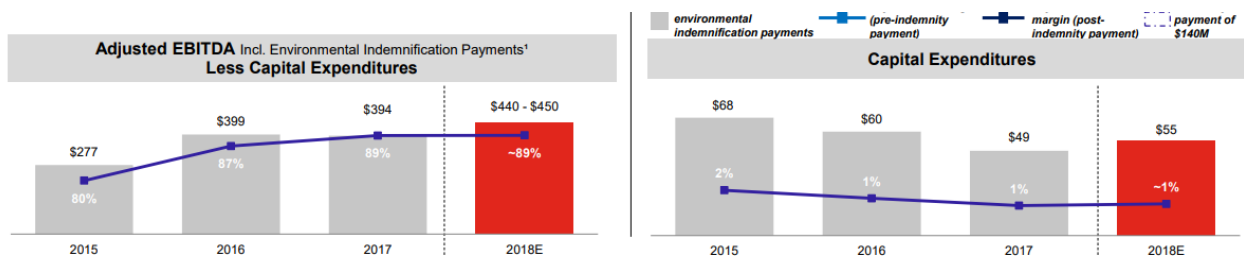
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\$400mn of EBITDA and Zero Free Cash Flow

- The biggest issue facing Rezi is its lack of free cash flow generation. Year to date, Rezi has consumed \$133mn in cash. Major uses included \$107mn for inventory and \$27mn for receivables. \$66mn was spent on cap-ex and \$17mn in cash on a small acquisition. Cash from operations is - \$70mn and Rezi borrowed \$60mn on its revolver. According to management, Rezi's business is second half weighted and cash generation is split 40-60 between the first and second half of the year.
- Previous management had stated that the business will be cash flow positive in 2019 but we struggle to see how. At the December 2019 Imperial Capital Conference, interim CFO Robert Ryder stated that the business intends to generate positive operating cash flow before capital spending. That is different than generating free cash flow or being cash flow positive.
- Below is a clip from prior management's investor day presentation in 2018. Management wanted investors to think that Adjusted EBITDA less Cap-ex is a proxy for free cash flow.



Source: Resideo Holdings

- A more accurate view showing cash from operations vs. cap-ex indicates there is little actual cash generated - certainly not in the \$300-\$400mn range Rezi would like investors to think. Even adjusting for one of items like tax benefits (2018) and expenses as well as acquisitions (2015/2016) Rezi is generating very little and consuming a tremendous amount of cash.

	12/31/2015	12/31/2016	12/31/2017	12/31/2018	3/31/2019	6/30/2019	9/30/2019
CFO	\$ 128.0	\$ 151.0	\$ 37.0	\$ 462.0	\$ (10.0)	\$ (27.0)	\$ (33.0)
Cap-Ex	\$ (68.0)	\$ (60.0)	\$ (49.0)	\$ (64.0)	\$ (15.0)	\$ (23.0)	\$ (28.0)
"FCF"	\$ 60.0	\$ 91.0	\$ (12.0)	\$ 398.0	\$ (25.0)	\$ (50.0)	\$ (61.0)

Source: Resideo Holdings

Abuse of One Time Items and Adjusted EBITDA

- Additional confusion regarding what Rezi is earning stems from its liberal use of one-time and adjusted earning metrics. As a newly formed company Rezi wanted to call out all the one off and cash costs associated with starting up as a public company. They also wanted to identify all the associated restructuring and repositioning costs so an investor could attempt to look through to what the core earnings power of the business is. The largest adjustment relates to the Honeywell liability reimbursement. These payments are capped at \$140mn/year and though the timing is not consistent as it is run through the income statement, Rezi simply charges themselves \$35mn/quarter as a reduction in cash flow.
- What the table on the following page shows, however, is that when you break down all the sources and uses of cash flow generation all those onetime charges are large consumers of cash. It also isn't clear that many are in fact onetime. Some of these charges may end up being persistent large uses of cash. We highlight the approximate reconciliation below as it helps illustrate the dangers of EBITDA and Adjusted EBITDA.

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Adj EBITDA Reconciliation	3/31/2018	6/30/2018	9/30/2018	12/31/2018	2018	3/31/2019	6/30/2019	9/30/2019
Net Income	\$ 33.0	\$ 33.0	\$ 311.0	\$ 16.0	\$ 405.0	\$ 49.0	\$ (11.0)	\$ 8.0
Net Interest	\$ 19.0	\$ (1.0)		\$ 14.0	\$ 13.0	\$ 16.0	\$ 18.0	\$ 16.0
Tax Expense (benefit)	\$ 25.0	\$ (28.0)	\$ (329.0)	\$ 22.0	\$ (301.0)	\$ 36.0		
D&A	\$ 17.0	\$ 16.0	\$ 16.0	\$ 17.0	\$ 66.0	\$ 16.0	\$ 20.0	\$ 19.0
EBITDA (Rezi Define)	\$ 94.0	\$ 20.0	\$ (2.0)	\$ 69.0	\$ 183.0	\$ 117.0	\$ 27.0	\$ 43.0
Environmental	\$ 48.0	\$ 123.0	\$ 146.0	\$ 18.0	\$ 340.0			
Honeywell Expense				\$ 49.0	\$ 49.0	\$ (14.0)	\$ 36.0	\$ 35.0
Stand Alone Cost	\$ 3.0	\$ 4.0	\$ 2.0	\$ 6.0	\$ 15.0			
Stock Comp	\$ 4.0	\$ 5.0	\$ 6.0	\$ 5.0	\$ 20.0	\$ 7.0	\$ 7.0	\$ 8.0
Repositioning	\$ 5.0			\$ 3.0	\$ 4.0		\$ 25.0	\$ 9.0
Other: Spin Off and Legal		\$ 2.0		\$ 23.0	\$ 23.0	\$ 18.0	\$ 22.0	\$ 19.0
Adj EBITDA Ex/ Honeywell	\$ 154.0	\$ 154.0	\$ 152.0	\$ 173.0	\$ 639.0	\$ 128.0	\$ 116.0	\$ 114.0
Hon. Re-imbursement	\$ (35.0)	\$ (35.0)	\$ (35.0)	\$ (35.0)	\$ (140.0)	\$ (35.0)	\$ (35.0)	\$ (35.0)
Adj EBITDA w/ Honeywell	\$ 119.0	\$ 119.0	\$ 117.0	\$ 138.0	\$ 499.0	\$ 93.0	\$ 81.0	\$ 79.0
TTM EBITDA Rezi Define					\$ 183.0	\$ 204.0	\$ 211.0	\$ 256.0
TTM EBITDA + Honeywell					\$ 323.0	\$ 344.0	\$ 351.0	\$ 396.0
TTM Adj EBITDA w Honeywell					\$ 499.0	\$ 467.0	\$ 429.0	\$ 391.0
TTM Adj. EBITDA Ex Honeywell					\$ 639.0	\$ 607.0	\$ 569.0	\$ 531.0
Actual Cash Generation								
Cash Sources								
NI + D&A + Stock Comp	\$ 54.0	\$ 54.0	\$ 4.0	\$ 38.0	\$ 190.0	\$ 72.0	\$ 16.0	\$ 35.0
Cash Uses								
Interest + Env. + Repo. + Spin/Legal	\$ 24.0	\$ 1.0	\$ -	\$ 40.0	\$ 180.0	\$ 34.0	\$ 65.0	\$ 44.0
Cash Generated	\$ 30.0	\$ 53.0	\$ 4.0	\$ (2.0)	\$ 10.0	\$ 38.0	\$ (49.0)	\$ (9.0)
TTM Cash Generated Ops.						\$ (9.0)	\$ (22.0)	
TTM Cash For Honeywell							\$ (140.0)	
Estimated Cash Uses							\$ (162.0)	
Actual Change in Cash							\$ (133.0)	

Source: Resideo Holdings

Why Cant Rezi Generate Cash?

- Within Honeywell Rezi was likely run for cash and the struggles in the Products division make clear it was under-invested in. As a standalone company Rezi is required to not only fund operations on its own including IT, HR and legal but they also needed to invest additional cap-ex to grow the business. Prior management guided to cap-ex of around 1% of sales, \$45-\$50mn, in a normal year. However, for 2019 they will end up spending \$90mn in gross cap-ex. In addition to spending \$120-135mn/year in R&D, we think normalized cap-ex to grow this business is probably more in the 1.5% of sales range or \$75mn/year not, \$45mn. As is evident from recent inventory and product issues, the products division will require significant cash investment to compete in a fast growing and highly competitive markets going forward.
- The table on the following page lays out the issues that Rezi is having. Rezi's TTM gross margin is 24.8% down from 28.3% at the end of 2018. Giving no credit for any improvement, even if Rezi can grow sales from here at 1%, **absent a significant increase in gross profit or a reduction in SG&A, it will be very difficult for them to generate significant free cash flow to service their debt and justify their current valuation.**
 - The table on the following page assumes Rezi's Product division is stable. If recent trends continue and revenue and gross margin continue to contract, Rezi will likely be cash flow negative in 2020 as a result of additional one-time charges
 - Each 1% decline in gross margin costs Rezi about \$150mn in cash flow over a four-year period
 - *All this should be taken with a grain of salt as Rezi is going to announce a big restructuring in Q1. The example is used to show the key drivers of the business. We would point out that continued restructuring efforts that consume cash could push Rezi further into negative cash flow territory into 2020.*

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- The Honeywell expense is below the EBIT line (Gross profit – SG&A) and is not tax deductible. We charge them the full \$140mn. The timing and charge will be uncertain but to be extremely conservative and realistic about the \$140mn as a real cash expense, we charge the full amount and subtract it from EBITDA. Our estimate of EBITDA is pre any one-time or adjusted add backs. The reality is our EBITDA number is likely *too* high making the cash use much greater than we state. If Rezi were to have a similar level of one time charges in 2020 as it did in 2019, Rezi could end up generating negative cash flow for the year

Resideo Cash Flow Generation: Conservative Scenario

	TTM	2020	2021	2022	2023
Revenue	\$ 4,950	\$ 5,000	\$ 5,049	\$ 5,100	\$ 5,151
Y/Y Growth		1.0%	1.0%	1.0%	1.0%
Gross Profit	\$ 1,228	\$ 1,240	\$ 1,252	\$ 1,265	\$ 1,277
Gross Margin	24.8%	24.8%	24.8%	24.8%	24.8%
SG&A	\$ 937	\$ 946	\$ 956	\$ 965	\$ 975
EBIT	\$ 291	\$ 294	\$ 296	\$ 299	\$ 302
Honeywell	\$ (140)	\$ (140)	\$ (140)	\$ (140)	\$ (140)
D&A	\$ 72	\$ (72)	\$ (72)	\$ (72)	\$ (72)
Interest	\$ (69)	\$ (70)	\$ (70)	\$ (70)	\$ (70)
Pre-Tax Income	\$ 150	\$ 292	\$ 294	\$ 297	\$ 300
Tax	\$ 75	\$ 61	\$ 62	\$ 62	\$ 63
EBITDA Pre/Honeywell	\$ 431	\$ 506	\$ 508	\$ 511	\$ 514
EBITDA w/ Honeywell	\$ 291	\$ 364	\$ 366	\$ 369	\$ 372
Interest	\$ (69)	\$ (70)	\$ (70)	\$ (70)	\$ (70)
Cash Tax	\$ (75)	\$ (61)	\$ (62)	\$ (62)	\$ (63)
CFO	\$ 147	\$ 232	\$ 235	\$ 237	\$ 239
Cap-Ex	\$ (75)	\$ (75)	\$ (75)	\$ (75)	\$ (75)
Working Capital	\$ (75)	\$ (75)	\$ (75)	\$ (75)	\$ (75)
FCF Pre 1 Time Charges	\$ (3)	\$ 82	\$ 85	\$ 87	\$ 89
2020-2023 Cumulative FCF		\$ 343			

TTM 1 Time Charges \$119

Average/Qtr \$20

Source: Resideo Holdings

Honeywell Liability Risk: Misunderstood Large Use of Cash

- The Honeywell liability is a significant source of confusion for many investors. Including us. To simplify as much as we can, as a result of the separation, Rezi is responsible for paying a maximum of \$140mn/year for up to 24 years to Honeywell. The payments service a legacy liability related to environmental and health related claims at legacy Honeywell factories. The \$140mn per year is the maximum payment Rezi needs to make and it is likely that overtime the amount Resideo pays to service the claims will end up being much lower. Below is language from the 10-k:

"Payment amounts under the Honeywell Reimbursement Agreement Reimbursement will be deferred to the extent that the payment thereof would cause a specified event of default under certain indebtedness, including our principal credit agreement, or cause us to not be compliant with certain financial covenants in certain indebtedness, including our principal credit agreement on a pro forma basis, including the maximum total leverage ratio (ratio of debt to EBITDA, which excludes any amounts owed to Honeywell under the Honeywell Reimbursement Agreement), and the minimum interest coverage ratio. A 5% late payment fee will accrue on all amounts that are not otherwise

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entitled to be deferred under the terms of the Honeywell Reimbursement Agreement, without prejudice to any other rights that Honeywell may have for late payments."

- The only way Rezi can stop paying the liability is if paying will cause them to trigger an event of default as defined by the credit agreement and then – they must pay a 5% fee for late payment.
- There are a few different ways to think about valuing the liability. Some investors argue you can add the present value of the liability payments to Rezi's enterprise value. For valuation, you would then use Rezi's EBITDA + the \$140mn payment. For our purposes, we simply take the charge as is and assume it is on-going for the foreseeable future. This is perhaps too punitive, but we view the \$140 as a real use of cash until it isn't.

Debt Overview: Rezi More Levered Than It Appears. Honeywell Liability Payment Serious Long-Term Risk

- Rezi is more levered than it appears at first glance. Debt/Adj. EBITDA has gone from 2.4x as of 12/31/2018 to an estimated 3.7x as of the end of 2019, based on an estimated \$340mn of Adj EBITDA for the full year. Below is an overview of the current debt structure. The debt stack consists of two term loans, senior unsecured notes and a \$350mn revolver which Rezi tapped for \$60mn in Q3 to fund operations.

Rezi Debt Overview	Drawn	Available	Rate	Interest	Maturity
Revolver	\$ 60	\$ 290	4.9%	\$ 2.94	
Term Loan A	\$ 341		L + 200	\$ 14.8	2023
Term Loan B	\$ 473		L + 200	\$ 20.5	2025
Senior Unsecured Notes	\$ 400		6.3%	\$ 25.0	2026
Unamortized Discounts	\$ (23)				
Total Debt	\$ 1,251		TTM Int	\$ 69.0	
Cash	\$ 132				
Net Debt	\$ 1,119				
Foreign Cash Subject to Tax	\$ 82				
US Cash	\$ 50				

Source: Resideo Holdings

- Rezi discussed getting covenant relief on its Q3 2019 earnings call in November. On the night before Thanksgiving they released an 8-K that gave them covenant relief in the form of step ups on their max leverage ratio. The max leverage ratio was increased from 4x to 5.25x. The reason is that at \$340mn in Adj. EBITDA for 2019 – max leverage would have been 3.7x vs covenant maximum of 4.0x. To breach current covenants Adj. EBITDA would have had to fall just 7% to \$313 and with significant potential restructuring and additional issues in the products division left to surface, Rezi needed and management proactively got relief. *Of note, the max leverage ratio is pre-Honeywell payments and excludes the Honeywell liability that is on the balance sheet. It is effectively equal to EBITDA as Rezi provides it plus the \$140mn payment.*
- To breach the new covenant, Adj. EBITDA would have to fall 30% from TTM 2019 expected \$340mn to about \$240mn. The fact the company was pro-active about getting covenant relief combined with the telegraphed potential for major restructuring and inventory write downs in Q1 is indicate the worst may not be over for Rezi and the bottom is most certainly not in.
- The table on the following page highlights the challenge of figuring out what the right metric to use for assessing debt covenants is. The covenant is calculated pre-Honeywell payments (denominator) and excluding the liability on the balance sheet (numerator). If we use Rezi defined EBITDA and add the \$140mn Honeywell payment, then we think Rezi's max leverage ratio will end the year around 3.68X.

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As the covenant was set at 4.0X, it makes sense they needed breathing room. Any way you slice it, we view the covenant relief as a negative. Yes, for a small fee to lenders Rezi got more breathing room, but the bigger takeaway is that the key earnings metric the business uses is a serious risk to continue to decline.

Covenants	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019	9/30/2019	12/31/2019
Products TTM ADJ EBITDA	\$ 438	\$ 438	\$ 402	\$ 363	\$ 322	\$ 286	
ADI TTM ADJ EBITDA	\$ 163	\$ 163	\$ 168	\$ 173	\$ 178	\$ 188	
Total ADJ EBITDA pre Hon.	\$ 601	\$ 601	\$ 570	\$ 536	\$ 500	\$ 474	
TTM Adj EBITDA w Honeywell			\$ 499	\$ 467	\$ 429	\$ 391	\$ 340
TTM EBITDA			\$ 183	\$ 204	\$ 211	\$ 256	
TTM EBITDA + 140 Honeywell			\$ 323	\$ 344	\$ 351	\$ 396	

Max Leverage	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019	9/30/2019	12/31/2019
Total Sec. + Unsec. Debt			\$ 1,201	\$ 1,196	\$ 1,191	\$ 1,251	\$ 1,251
Honeywell Liability on BS							
Total Debt For Covenant			\$ 1,201	\$ 1,196	\$ 1,191	\$ 1,251	\$ 1,251

TTM Adj. EBITDA pre Hon w/Add Back			\$ 639	\$ 607	\$ 569	\$ 531	\$ 480
TTM EBITDA			\$ 183	\$ 204	\$ 211	\$ 256	
TTM EBITDA + 140 Honeywell			\$ 323	\$ 344	\$ 351	\$ 396	\$ 340
Calc. Max Leverage Cov							
TTM Adj. EBITDA pre Hon w/Add Back			1.88	1.97	2.09	2.36	2.61
TTM EBITDA			6.56	5.86	5.64	4.89	
TTM EBITDA + 140 Honeywell			3.72	3.48	3.39	3.16	3.68
Calc. Max Leverage Cov			3.72	3.48	3.39	3.16	3.68
Max Leverage Cov.			4	4	4	4	5.25
To Breach						\$ 313	\$ 238
EBITDA Decline Required to Breach						-21%	-30%

Source: Resideo Holdings

Upside: Where Are We Wrong? What is the Activist Case for Rezi?

- Despite all the negatives, we do believe there is value in Rezi. At close to \$5bn in sales, Rezi is the one of the largest building products company in the US. Rezi's previous CEO and CFO were two of the worst executives we have ever come across. Interim CFO Rob Ryder appears capable but it is too early to tell. With the CEO and CFO gone in less than two years we think an activist case – outside of cleaning house at the C-suite – could be building. Praesidium Capital, a firm that is known to take a private equity approach to public equity investing has recently filed a 13D on Rezi. They increased their stake in December following the announcement of the CEO transition.
- The ADI distribution business is the crown jewel within Rezi and will be a focus of any activist investor case. ADI has a #1 global position in distribution of security related products. It has locations in 17 countries, carries 350,000 products from 1,000 OEMs and serves over 100,000 customers per year. As opposed to the products and solutions division, which serves the residential housing market, over 65% of ADI's products are sold to non-residential end markets. ADI sells primarily to security dealers, system integrators and other professionals. As the largest player their scale allows them to carry the largest selection of products. OEMs and customers want to work with them knowing they have the reach and power to carry products and get them to the widest array of customers. Greater assortment of product leads to customer loyalty, more scale and so on in a virtuous cycle.
- The market ADI competes in is about \$20bn and they have an estimated 14-15% market share globally and a 32% market share in the US. Rezi products account for about \$400mn of ADI's \$2.8bn in sales. Given positive sales momentum from new products and increased market share the business has been able to grow EBITDA margins over 150bps in the last two years. Cap-ex

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requirements are low, at around \$20mn/year. However, as a distribution business they do need to build and hold inventory as it grows.

ADI Global Distribution	2015	2016	2017	2018	3/31/2019	6/30/2019	9/30/2019
Net Revenue	\$ 2,188.0	\$ 2,355.0	\$ 2,477.0	\$ 2,658	\$ 665	\$ 705	\$ 714
Y/Y Growth		8%	5%	7%	4%	4%	6%
Q/Q Growth					0%	6%	1%
Adj EBITDA	\$ 87.0	\$ 115.0	\$ 141.0	\$ 162.8	\$ 46.0	\$ 46.0	\$ 48.0
TTM	\$ 87.0	\$ 115.0	\$ 141.0	\$ 162.8	\$ 167.8	\$ 172.8	\$ 177.8
Cap-Ex	\$ (8.0)	\$ (11.0)	\$ (7.0)	\$ (8.0)	\$ (5.0)	\$ (5.0)	\$ (5.0)
Adj EBITDA-Cap-Ex	\$ 79.0	\$ 104.0	\$ 134.0	\$ 154.8	\$ 41.0	\$ 41.0	\$ 43.0
TTM Revenue				\$ 2,658	\$ 2,681	\$ 2,708	\$ 2,748
TTM Adj EBITDA				\$ 163	\$ 168	\$ 173	\$ 178
Adj. EBITDA Margin	4.0%	4.9%	5.7%	6.1%	6.9%	6.5%	6.7%

Source: Resideo Holdings

- Despite the lower margins, the growth potential and cash flow generation at ADI make it an attractive asset. ADI would have significant value to a strategic acquirer or private equity. We believe it can be sold and generate a minimum of \$1bn in net proceeds after tax. Concerns about a sale would relate mostly to the fact about 30% of ADI's sales come from Rezi and other legacy Honeywell products that Honeywell has retained.
- Recent transactions for similar companies, (Anixter) imply ADI could be sold for 8X EBITDA at a minimum. If that was the case, backing out the proceeds, the remaining EV of Rezi would be \$1.3 bn. Charging the full \$140mn of liability to the Rezi product divisions TTM EBITDA would mean the product division is trading for about 6.9x EBITDA. This is a significant discount to peers, but given all of its issues seems fair. To us, this implies that at \$11.4/share – giving full value to ADI, Rezi appears fairly valued.
- There are significant hurdles to any sale of ADI. According to the language below from the Rezi 2018 10-k, Honeywell, not Rezi, must approve any transaction or strategic alternative:

“...Engage in any type of significant transactions on favorable terms (or at all), including, but not limited to, equity and debt financings, liability management transactions, refinancing transactions, mergers, acquisitions, joints ventures, and other strategic transactions.”
- Honeywell's priority is to service the liability. Given the issues, cap-ex requirements, additional re-investment and working capital intensity of the Products division, it remains unclear if ADI was sold, the Products division can service the liability on its own. Given the minimal cap-ex requirements and growth outlook, we question whether Honeywell will let ADI go.

ADI Comp Sale		
TTM Rev	\$	2,748
TTM Adj EBITDA	\$	178
TTM Cap-Ex	\$	(20)
Adj. EBITDA - Cap-Ex	\$	158
Comps	EV/EBITDA	EBITDA %
Rexel	7.4	5.2%
Ferguson	8.4	8.5%
Anixter	7.1	5.0%
Scansource	8.2	3.7%
Median	7.8	5.1%
ADI		6.5%

Source: Resideo Holdings

	M&A Multiple for ADI				
	6	7	8	9	10
Value	\$ 947	\$ 1,105	\$ 1,262	\$ 1,420	\$ 1,578
Rezi EV	\$ 2,519	\$ 2,519	\$ 2,519	\$ 2,519	\$ 2,519
Less ADI	\$ 1,572	\$ 1,414	\$ 1,256	\$ 1,099	\$ 941
Product Adj EBITDA w/ \$140mn Liability	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182
Implied EV/Adj EBITDA	8.6	7.8	6.9	6.0	5.2

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Product Division Strengths and Potential for Turnaround

- Rezi is the market share leader in thermostats, security systems and indoor sensors. The business has scale with over \$2.5bn in revenue and 18 manufacturing sites. They spend \$130mn/year on R&D and have over 1,300 engineers in Texas alone. The combined market size for products division is around \$15bn and Rezi has an estimated 16% total market share. Within certain products, Rezi has a dominant market share.
 - Traditional, non-connected on wall thermostats: 60% market share
 - RTS Segments: HVAC, boilers, furnace control panels: 21% (largest player)
 - Security Systems: 15% market share
- The 25% or so of Rezi's products division that is related to high growth, but highly competitive markets in thermostats and temperature controls was pitched by prior management as the savior for the business. We think that focus was a problem and hope that new management focuses on the 75% of the business where Rezi has a competitive advantage.
- 75% of the products business is behind wall, leak protection, security, HVAC and temperature control systems. Within these segments Rezi has high market share good brands and excellent distribution with professional contractors. This is where we believe the big opportunity for Rezi lies. The strength of the products business are the legacy Honeywell name, distribution capabilities and relationships with professional contractors who trust the brands. It is estimated that Rezi works with over 110,000 contractors in the Do it For Me (DIFM) market for home repairs and building as opposed to the Do It Yourself (DIY) market. Rezi's product sales to retailers like Home Depot and Lowes is less than 5% of total product revenue.
- About 25% or \$600mn of product revenue is from non-discretionary replacement products which adds some level of defensiveness to revenue. Products like boiler controls, HVAC and water systems, once they break can't delay replacement. Rezi's products are directly integrated into OEM systems and they have long term/sticky contracts that are defensible.
- 80% of the business is tied to replacements and up to 150mn households worldwide, mostly in the US, have a Rezi (legacy Honeywell) product in their home. The median age of US housing stock is rising implying replacement demand for new equipment.
- Prior management was obsessed with positioning Rezi as a "connected home" provider. We believe they focused too much on connected devices, particularly thermostats, in order to show investors growth in "recurring revenue". The thought was that if investors can view the business as a razor/razor blade model – where they business makes a small margin on the product but a large margin over time on recurring maintenance or monitoring revenue, the overall profitability of a product would increase. However, this flies against the reality of the business Rezi competes in. Older, non-connected, legacy thermostats and temperature control devices are among Rezi's highest margin products. The fact prior management went head first into competition with Amazon, Google and other well-funded, money losing startups continues to have negative ripple effects on Rezi's business and reported financials. It will take time to unwind many of these actions.
- We absolutely believe that part of the opportunity at Rezi involves connecting many of its products and devices within a home together. However, this is not consistent with the legacy asset base, products cycles and product integrations. These are very distinct sets of assets with different selling channels. While the professional channel creates barriers and opportunities it also creates obstacles in terms of buying patterns. We don't believe many professionals specialize in total home sales but rather specific segments of the market. It is going to take time to work with distribution and sales partners to package all of Rezi's products into one consistent platform.

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- There is tremendous potential in Rezi's Products division. However, with a massive restructuring ahead it may make sense to see where the dusts settle before assessing the long-term prospects.

Valuation

- Valuing Rezi is difficult
 - There is no clear definition of what the best proxy for EBITDA or Adjusted EBITDA is
 - GAAP earnings are distorted by the Honeywell expense and other charges
 - Re-investment and working capital needs are high and the business isn't generating cash
 - One-time start-up costs, non-recurring, recurring charges and a cost savings plan estimated to take \$50mn of SG&A out of the business further mask earnings power

		2023		
	2019 E	Base	High	Low
Products				
Revenue	\$ 2,500	\$ 2,731	\$ 2,893	\$ 2,499
Gross Margin		35.5%	38.0%	30.0%
Gross Profit		\$ 969	\$ 1,099	\$ 750
Distribution				
Revenue	\$ 2,748	\$ 2,958	\$ 3,002	\$ 2,830
Gross Margin		17.5%	18.0%	17.0%
Gross Profit		\$ 518	\$ 540	\$ 481
Total Revenue	\$ 4,969	\$ 5,689	\$ 5,895	\$ 5,329
Avg. Growth		4.6%	5.9%	2.4%
Total Gross Profit	\$ 1,232	\$ 1,487	\$ 1,640	\$ 1,231
Gross Margin (%)	24.8%	26.1%	27.8%	23.1%
SG&A		\$ 900	\$ 875	\$ 920
EBIT		\$ 587	\$ 765	\$ 311
Honeywell		\$ 140	\$ 140	\$ 140
Interest		\$ 69	\$ 69	\$ 69
Pre Tax Income		\$ 378	\$ 556	\$ 102
Tax		\$ 109	\$ 146	\$ 51
Net Income		\$ 269	\$ 410	\$ 51
EBITDA ex Hon		\$ 653	\$ 831	\$ 377
EBITDA w/Hon \$140	\$ 340	\$ 513	\$ 691	\$ 237
Average EBITDA	\$ 480			
Fair Value At 8X EV/EBITDA		\$ 3,105	\$ 4,526	\$ 895
Price/Share		\$ 25.2	\$ 36.8	\$ 7.3
Discounted FV				
Discount Rate	10%	Base	High	Low
FV/Share Today		\$ 19.0	\$ 27.6	\$ 5.5
Upside vs. Today		67%	143%	-52%
Assumptions				
Products Growth		3.0%	5.0%	0.0%
Dist. Growth		2.5%	3.0%	1.0%

Source: Resideo Holdings and Porter Street Estimates

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- If we project out what earnings could be in a few years by division we get to an average or normalized EBITDA level of about \$480mn. This assumes a recovery and normalization in the products division which we think is highly unlikely as the business exists today. In fact, we believe our “low” scenario may be the most accurate. In that case, assuming 10% discount rate three years out, we think Rezi shares are overvalued by at least 50%
- Alternatively, if we think things will get worse before they get better, assuming EBITDA declines below \$300mn next year, we think shares could trade down between \$5-\$8/share making Rezi a good near term short
- While the upside potential in Rezi shares absolutely exists we think all factors point to continued weakness in the near term. Regardless of where revenue and adjusted EBITDA lands, Rezi is going to have a hard time generating free cash flow over the next 6-18 months which biases any potential estimate of fair value to the downside.

	2020/Cov Downside	2020 Low	2019 Guide TTM Adj.	2020 High	Normalized/ Stable
Adj EBITDA Post Honeywell Payment					
EV/EBITDA	\$ 240	\$ 300	\$ 340	\$ 400	\$ 480
6	\$ 2.6	\$ 5.5	\$ 7.5	\$ 10.4	\$ 14.3
7	\$ 4.6	\$ 8.0	\$ 10.3	\$ 13.7	\$ 18.2
8	\$ 6.5	\$ 10.4	\$ 13.0	\$ 16.9	\$ 22.1
9	\$ 8.5	\$ 12.9	\$ 15.8	\$ 20.2	\$ 26.0
EV/EBITDA	Upside/Downside (%)				
6	-77%	-51%	-34%	-8%	26%
7	-60%	-30%	-10%	20%	60%
8	-43%	-8%	14%	49%	94%
9	-26%	13%	39%	77%	129%

Sources: Resideo Holdings and Porter Street Estimates

Appendix: Comparable Companies

Products	Market Cap	EV/EBITDA	EBITDA Margin
ADT	\$ 4,845	6.1	48.0%
Alarm.Com	\$ 2,247	20.0	21.5%
AO Smith	\$ 7,669	12.3	19.8%
Fortune Brands Home + Sec.	\$ 9,726	12.0	16.3%
Masco	\$ 13,651	13.0	18.5%
Median Product Peers	\$ 7,669	12.3	19.8%
Rezi Products Pre Hon. (TTM)			14.6%

Distributors	Market Cap	EV/EBITDA	EBITDA Margin
Rexel		7.4	5.2%
Ferguson		8.4	8.5%
Anixter		7.1	5.0%
Scansource		8.2	3.7%
Median Dist. Peers		7.8	5.1%
ADI Dist.			6.7%

Sources: Resideo Holdings and CapitalIQ

Product peers trade between 8-12X EBITDA and distribution between 6-8X.

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