

April 20, 2022

Pentair Plc. (PNR)

Industrials – Building Products

Stock Rating

SELL \$59 to \$69

Investment Thesis

We recommend a sell rating for Pentair Plc with little potential upside of 9%. Pentair is poorly positioned for growth relative to its peer group. The company is letting go of hundreds of salaried workers to aggressively cut costs as part of its restructuring and transformational programs. We expect this will result in poor delivery of its backlog due to the already scarce labor supply within the industry. Additionally, we expect the increase in demand for pools and pool-related products to be short-lived and driven only by COVID trends. Overall, we expect Pentair to underperform its peers within a shrinking industry.

Drivers of Thesis

- Pentair has previously benefited from COVID-driven trends in home improvement, which we expect to slow in 2022. Our base case projects Consumer Solutions revenues to grow at a modest 2% and 3% in 2022 and 2023.
- We expect that Pentair will grow its margins through its restructuring and transformation program. However, the company will likely need to rehire some of these employees at a higher rate to deliver its backlog leaving the company unable to reach its 2025 margin goal.
- Pool Corp. was responsible for roughly 20% and 15% of the company's revenues in 2021 and 2020. Pentair has no long-term contracts guaranteeing this revenue moving forward and can quickly be underpriced by other suppliers.

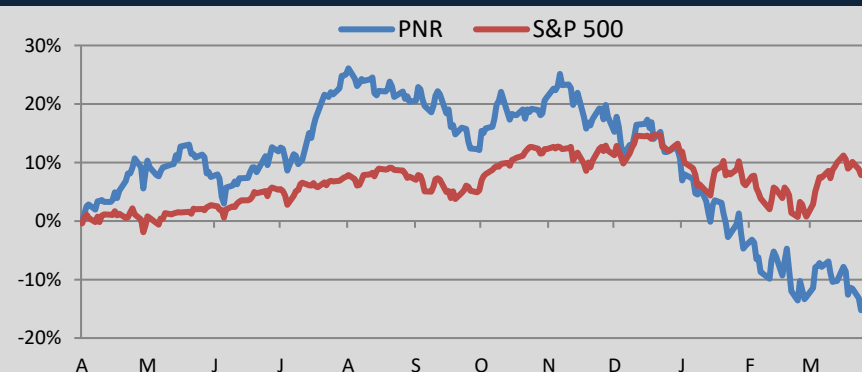
Risks to Thesis

- Pentair has historically made accretive and well-integrated acquisitions. If its pending acquisition of Manitowoc Ice is completed, it may significantly boost margins and overall performance.
- Pentair has more favorable margins than its competitors and leaves room for more competitive pricing. The company could attract higher demand from current customers and potential customers.
- Migration to rural and southern states could significantly increase pool-related revenues for the company.

Earnings Estimates

Year	2019	2020	2021	2022E	2023E	2024E
EPS	\$2.12	\$2.14	\$3.30	\$3.60	\$3.96	\$4.31
HF est. growth	8.2%	0.9%	54.2%	7.9%	5.7%	3.9%

12 Month Performance



Target Price

\$

Henry Fund DCF	\$54
Henry Fund DDM	\$76
Relative EV/LTM EBITDA	\$69

Price Data

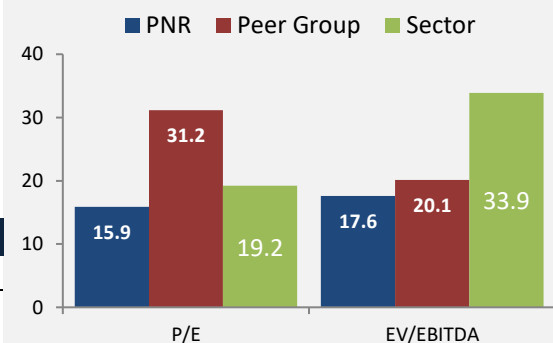
Current Price	\$53
52wk Range	\$51 – 80
Consensus 1yr Target	\$71

Key Statistics

Market Cap (B)	\$8.98
Shares Outstanding (M)	\$165.1
Institutional Ownership	98.7%
Beta	1.14
Dividend Yield	1.6%
Est. 5yr Growth	5.9%
Price/Earnings (TTM)	15.9
Price/Earnings (FY1)	14.6
Price/Sales (TTM)	2.3
Price/Book (mrq)	3.6

Profitability

Operating Margin	16.0%
Profit Margin	11.9%
Return on Assets (TTM)	12.4%
Return on Equity (TTM)	24.6%

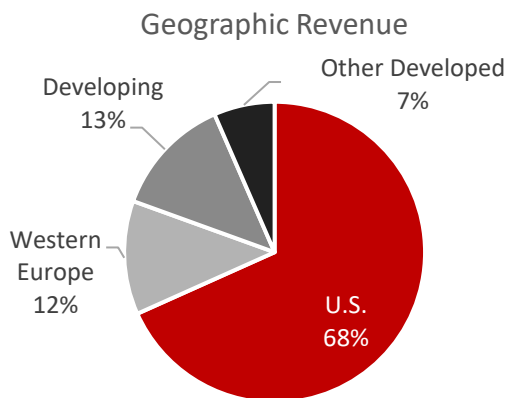


Company Description

Pentair is an Irish company domiciled in the UK that manufactures water transmission and filtration solutions products. Pentair offers its products and services to residential, commercial, and industrial companies. The company mainly operates within the US but has a strong presence in many other developed countries. Pentair specializes in pool filtration, pool cleaners, and other pool-related products. Its primary customer is Pool Corp., for which 20% of Pentair's revenues were attributable in 2021.

COMPANY DESCRIPTION

Pentair Holdings is a manufacturing and building product company specializing in water filtration, transmission, and solutions for residential and commercial markets. Pentair is an Irish company based in the UK and generates most of its revenues in the United States. Being a UK company, it benefits from a lower corporate income tax rate of 19%. The company operates through two segments: **Consumer Solutions**, accounting for **62%** of revenue, and **Industrial and Flow Technologies**, which accounts for **38%**. Additionally, Pentair’s operations can be split between residential, commercial, and industrial, which roughly account for 60%, 20%, and 20%, respectively¹. Below is Pentair’s geographic breakdown of revenues. The company primarily operates in the US, and most of its revenues come from developed countries but have been expanding into developing areas.



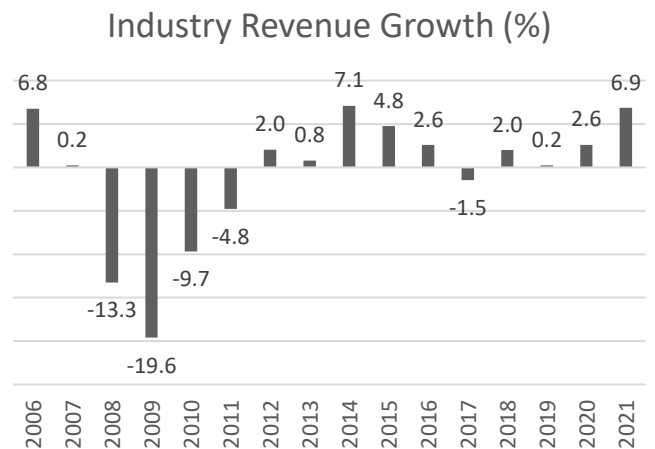
Source: FactSet

Consumer Solutions

The consumer solutions segment manufactures residential and commercial pool equipment and residential water treatment products and systems¹. The segment is primarily business to consumer, and 65% of FYE 2021 segment revenues originated from pool-related products and services¹. Pool products and services mainly include pumps, filters, heaters, and other miscellaneous accessories. The remaining 35% was attributable to water treatment systems that provide installation and

maintenance services for whole-home and commercial filtration systems. Pool Corp. is the segment's largest customer and accounted for roughly 20% of sales in 2021 and 15% in 2020¹. Pentair does not have a long-term contract with Pool Corp. and is at risk of being underpriced by Pool Corp’s other large suppliers: Hayward Holdings and Zodiac Pool Systems. However, most industry operators will negotiate and secure pricing during the fall of each year.

Pentair benefited from pandemic-induced demand for pools as more people wanted to improve their amenities while isolating themselves at home. However, pool construction has been struggling since 2008. This can be seen in the chart below, representing swimming pool construction revenue growth from 2007 to 2021. Building a pool carries an average cost of around \$40,000, and people are likely to make improvements elsewhere¹⁶. We do not think the growth in pool installments during the pandemic months will carry forward.



Source: IBISWorld

Management seems aware of the potential slowdown in pool construction and stated that they have little exposure to new construction of 10% for all operations and 20% exposure in its consumer solutions segment⁴. Consumer solutions grew over 34% at the end of the most recent fiscal year, and management is expecting further accelerated growth in pool replacement projects and related products and services. However, the company

increased the prices of all its offerings, and the considerable growth is likely associated with this and enhanced demand. The company does not offer specific guidance on this segment but expects total sales growth of 6% to 9%⁴.

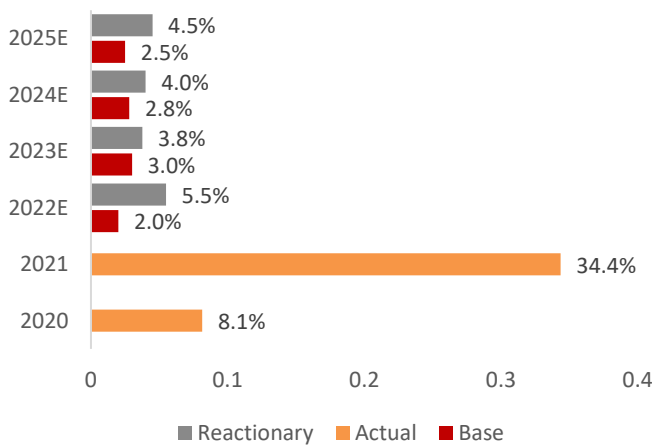
The following chart represents our growth expectations for the consumer solutions segment over five years. Our expectations consist of a base and reactionary case. The base case considers how the company has been performing recently and expects revenues to be more defensive to swings in the broader economy. The reactionary case attempts to trace how revenues would counter expected shifts in the business cycle. We are pessimistic about growth in this sector as we believe trends in home improvement have slowed, and pool usage rates will decline as more people return to work. Additionally, we expect supply chain bottlenecks to cause delays and increase the segment’s backlog. Consequently, we are under consensus for the segment in our base case and our reactionary scenario. In 2022, our base case is under consensus in Consumer Solutions by 6.1%, and the reactionary case is below consensus by 2.6% in Consumer Solutions. Our expectations are closer to consensus in 2023. Our expectations are above by 0.4% and 1.1% in our base case and reactionary case, respectively.

Industrial & Flow Technologies

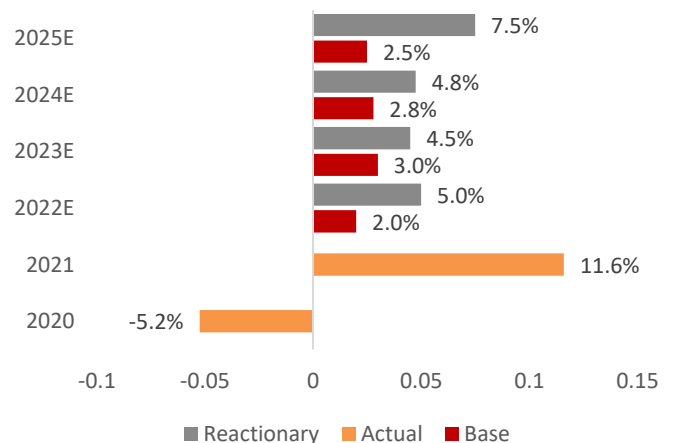
The industrial and flow technologies segment provides fluid treatment products, pumps, valves, and spray nozzles. The segment is focused on business-to-business relationships and those customers who serve the end market. At the end of FY 2021, approximately 45% of segment revenue was from residential irrigation flow services, while 25% and 30% were commercial and industrial customers.

Segment revenues fell over 5% in 2020 and grew a little over 11% in 2021, of which some were derived from the company’s acquisition of Pleatco⁴. The drop in 2020 and the relatively small growth in 2021 are likely attributable to a slow improvement in commercial real estate occupancy and a gradual return to restaurants. Management has given guidance that they foresee industrial revenues within the segment increasing in 2022 but have not given any specific growth numbers⁴. We agree that the segment will experience growth; however, we do not expect it to be substantial. We see supply chain bottlenecks relating to COVID and geopolitical turmoil halting production and increasing backlog. Our base case is under street expectations in 2022 by 3.3% and under by 1.1% in 2023. The reactionary case is below consensus in 2022 by 0.8% and above by 1.2% in 2023.

Consumer Solutions Revenue Growth

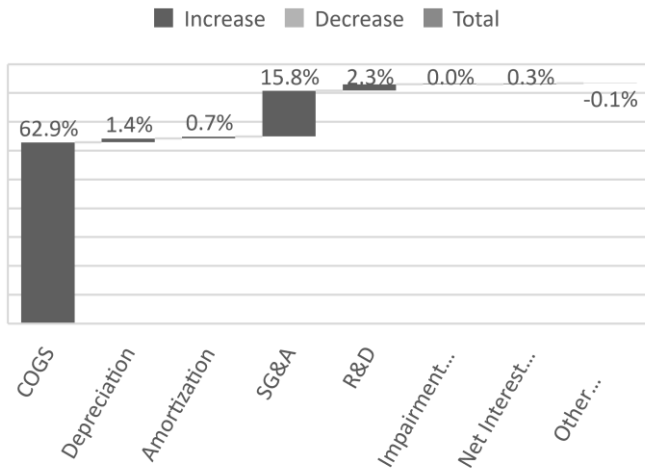


Industrial & Flow Technologies Revenue Growth



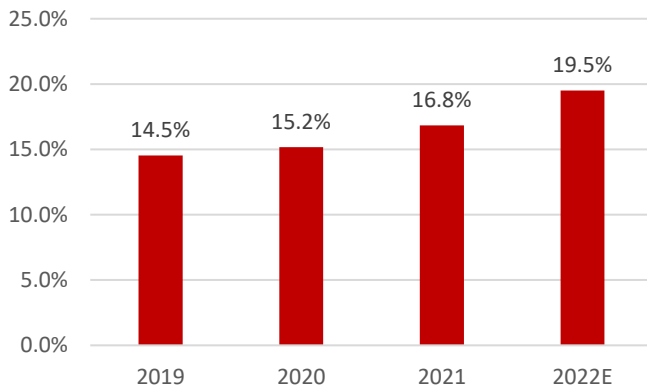
Cost Structure Analysis

Costs as a % of Revenue



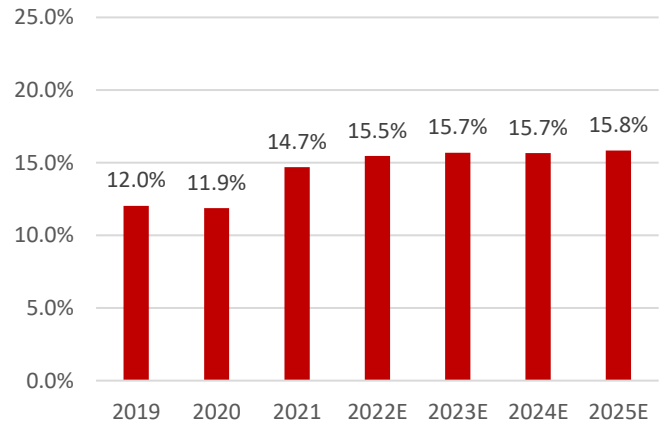
The above is a waterfall chart representing each expense as a percentage of sales for the 2021 FY. As seen within, SG&A is the second largest expense, accounting for 15.8% of revenues. This includes costs related to the company's restructuring and transformational programs. The company's restructuring program aims to reduce fixed costs by reducing the number of hourly and salaried employees. The company has let go of 625 employees since 2019 and paid out over \$7 million in severance. Hourly workers are difficult to source, which could leave the company in a poor position to handle a fast-paced delivery of its backlog.

EBIT Margin %



The previous chart represents the historical EBIT margin for Pentair over the past three years and our projected 2022 result. We expect EBIT margin to increase as the transformational program attempts to reduce SG&A expenses.

Net Margin %



The transformational program attempts to reduce SG&A expenses by creating more efficiencies within the company. Costs related to the program are reflected in SG&A. The company is trying to increase its net margin by 300 basis points by 2025. However, with rising input costs and low pricing power, we see this as an unrealistic number. We foresee the company increasing its net margin by 1.1% by 2025 and then slightly decreasing over the rest of the horizon to 15.4%. The decline is justified by reasonable business cycle adjustment and input cost pressures. Although we expect increasing margins, Pentair will likely experience decreased sales as they continue to raise prices. Therefore, growing margins do not sway our sell rating.

Debt Maturity Analysis

The table below contains the debt maturity schedule of Pentair. Its largest principal payment is due in 2024. Pentair has historically been great at generating free cash flow and has been returning capital to investors via repurchases and dividends. We do not think Pentair will have an issue paying any of its debt. However, the pending acquisition of Manitowoc Ice is likely to be financed with a

significant amount of debt. The company does not seem to have any covenants to prevent them from taking on this considerable amount of debt. This would impact its capital structure, but we do not think it will have difficulty servicing its current debt.

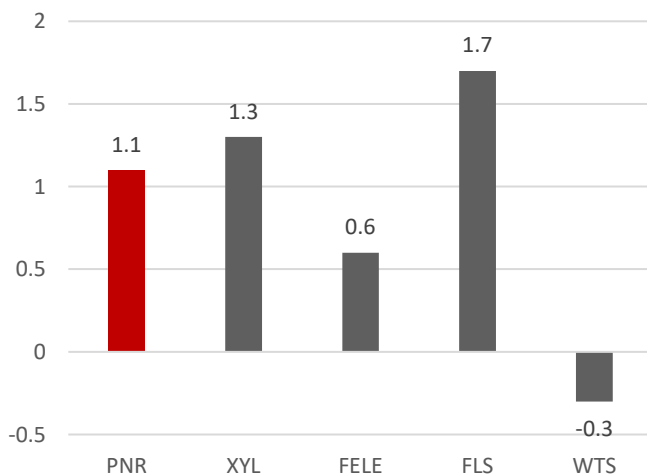
Five-Year Debt Maturity Schedule

Fiscal Year	Coupon (%)	Payment (\$mil)
2022	3.150%	\$88.3
2023	-	-
2024	1.033%	200
2025	4.650%	19.3
2026	1.107%	195
Thereafter	4.500%	400
Total		\$902.6

Source: Pentair 2021 10-K

Furthermore, the following graph contains net leverage ratios for Pentair and its competitors. Net leverage is calculated as net debt divided by EBIT and represents the number of years it would take to pay off its debt. As depicted, Pentair is somewhat average relative to its peers. Flowserve has the highest net leverage ratio; therefore, it would take them the longest to pay back its debt.

2021 Net Leverage Ratio



Source: FactSet

Pentair has a credit of BBB- which is on par with its peers. However, XYL has the highest credit rating of BBB, and Hayward has the lowest at BB-. Franklin Electric Company

has not been rated, and Watts Water Technologies has withdrawn its rating.

Ticker	S&P Rating
PNR	BBB-
XYL	BBB
FELE	N/R
FLS	BBB-
WTS	W/R
HAYW	BB-

Source: Bloomberg LP

ESG Analysis

Over the past four years, Pentair has made long strides toward becoming an industry leader in ESG and sustainability. The company's sustainable mission is to provide clean and safe water while eliminating plastic consumption⁴. Additionally, they aim to reduce carbon-based electricity through their products. These include variable speed pumps and LED lighting⁴. Bloomberg ranks Pentair as a 3.7/10 in environmental initiatives. The company falls below its peer group in social action with a score of 2.45³. This is primarily related to labor and employment practices in which it was scored a zero. It is possible that the restructuring program was a reason for the low score. Lastly, Pentair is leading its peer group in governance and has a score of 7.56. The company scored 10/10 on leadership independence within this category³. However, it was lagging in pay for performance. We expect Pentair to improve in the governance category as it continues to make great efforts in diversity, equity & inclusion. Overall, we see Pentair continuing to integrate ESG values into its operations.

Ticker	E	S	G	Risk
PNR	3.7	2.45	7.56	29.4
XYL	6.45	3.09	7.43	15.95
FELE	N/A	N/A	N/A	N/A
FLS	3.34	6.33	7.42	26.49
WTS	N/A	N/A	N/A	N/A
HAYW	N/A	N/A	N/A	N/A

Source: Bloomberg LP

Segment Backlog

Below is a table of Pentair’s backlog per segment in 2020 and 2021. As indicated in the table, the consumer solutions segment has seen an over 133% increase in its backlog. The company attributes this to enhanced demand in the company’s pool offerings¹.

Segment	2021	2020	% change
Consumer Solutions	\$ 1,073.7	\$ 459.1	133.90%
Industrial & Flow Technologies	446.3	288.7	54.60%
Total	\$ 1,520.0	\$ 747.8	103.30%

RECENT DEVELOPMENTS

Recent Earnings Announcement

Management seemed optimistic about future growth in Pentair’s most recent earnings call. Management expects to be shielded from any slumps in new home construction as they claimed that its revenues are only around 10% exposed to new home construction. Additionally, they expect to see increased revenue in pool-related products as more people migrate to southern states. They also claimed that pool and water treatment are growing faster than GDP. Furthermore, they have started to aggressively market their products and website through the web, app, social, and digital ads and claim it has successfully accumulated large amounts of leads for the company. Management expects overall revenues to grow 6% to 9% and EPS to grow 9% to 12%⁴. Additionally, they expect that the company’s price increases will combat any inflation costs. We are below guidance on total revenue and EPS but in line with street estimates.

Acquisition of KBI and Pleatco

On October 18th, 2021, Pentair completed its acquisition of Pleatco, paying \$255 million in an all-cash transaction². Pleatco enhances the company’s pool and spa filtration offerings as it holds a reputable portfolio of replacement

filters. Additionally, the company offers synergies in the distribution of these products.

On May 19th, 2021, Pentair completed its acquisition of Ken’s Beverage, Inc. (KBI) for \$80 million in an all-cash transaction². KBI provides beverage equipment, maintenance, installation, and filtration services to restaurants and convenience stores. The acquisition will allow Pentair to further vertically integrate its commercial filtration offerings.

Pending Acquisition of Manitowoc Ice

On March 2nd, 2022, Pentair entered an agreement to purchase Welbilt’s Manitowoc Ice business. Manitowoc is a leading manufacturer and distributor of commercial ice machines in the US, and one of every two cubed ice machines is a Manitowoc Ice machine¹¹. Pentair will pay a purchase price of \$1.6 billion for the company, and they expect to finance it through new debt issuance². Pentair expects a \$0.25 and \$.40 adjusted EPS accretion in 2023 and 2024, respectively. The acquired company has proven to have strong EBIT margins near 30% and strong free cash flow. The company expects to achieve synergies in both of its segments. We see this as an immense opportunity to vertically integrate their commercial water quality business as Pentair currently provides filtration for most of the ice machines. Furthermore, Pentair management stated they expect to still achieve a return on invested capital above 15% upon acquisition¹¹. However, the acquisition is contingent on regulatory approval of Ali Group’s acquisition of Welbilt.

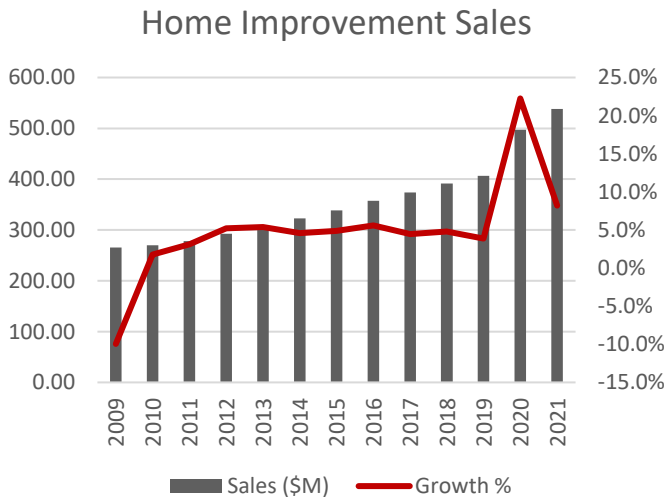
Russia-Ukraine Conflict

Geopolitical tensions have caused a significant strain on the global supply chain. The current conflict between Russia and Ukraine has slowed the distribution of iron bars, nickel, and vanadium. Vanadium is required to make steel, a critical input material for many of Pentair’s products⁶. We expect this will hinder new home construction and push back maintenance projects due to the inability to source materials.

INDUSTRY TRENDS

Home Improvement

The chart below represents home improvement sales in the US from 2009 to 2021. As depicted in the chart, home improvement sales grew by almost 25% in 2020¹². Recent heightened sales in home improvement are consequential to the pandemic and work-from-home. As more people were forced to spend a significant amount of time at home, they likely started to notice things that could use improvement and acted on them. In 2021 we saw enhanced growth in this sector, and we expect this to remain high in 2022 but slow in 2023 and thereafter. As mortgage rates increase, we expect to see less demand for new home purchases, which will lead to fewer home improvement projects. This is because a lot of repair and remodeling projects occur when moving into a new home as there is usually something the new owner is unsatisfied with⁵.



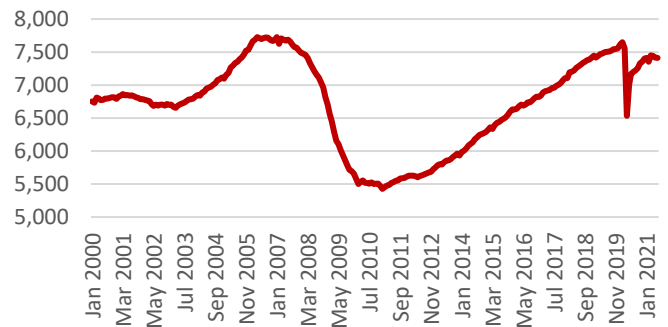
Source: Statista

Construction Labor Shortage

The graph below shows the number of construction workers (in 1,000s) participating in the labor force. The number of construction workers is close to pre-2008 numbers. However, the construction labor force is still well below demand. Increases in construction spending have worsened the issue and firms have had to significantly

raise wages to coax workers to enter¹². Additionally, companies are starting to provide on-the-job training which could be a substitute for a trade school degree¹². Still, the number of workers has remained low. A four-year education has been glorified in the US and has placed a negative stigma related to trade school and construction work. We expect this trend to continue as the younger generations see the four-year degree as a natural step to take once graduating high school. This will place downward pressure on margins for construction companies as well as building products manufacturing.

Construction Worker Monthly Employment



Source: Statista

MARKETS AND COMPETITION

Pentair falls into the broad building products industry. The industry is comprised of companies that manufacture products used in the installation and maintenance of the residential and commercial real estate. This is not to be confused with building materials, which consist of raw materials such as concrete and steel used in the initial construction. We believe the industry is in the beginning stages of the maturity phase of the cycle. This is because the industry is becoming harder to enter, yet there is a very low concentration of firms. Therefore, the weed-out period has not quite started, but we are seeing consolidation within the industry and expect this to increase drastically in the next couple of years.

The degree of rivalry within the market is high as there are a high number of firms with little product differentiation⁵. However, we expect this to decrease with further

consolidation. Bargaining suppliers are currently moderate, given that many firms source materials from few suppliers. We foresee bargaining power increasing as resources become scarcer with geopolitical tensions and supply chain bottlenecks. Overall, we expect the industry to perform poorly due to project delays caused by supply chain interruptions and high levels of competition among industry operators.

is unique in that it has the broadest geographic reach of the companies in this competitor set and plans to continue expanding in emerging markets. Approximately 44% of revenues are sourced in the United States, with 27% in Western Europe and 21% from Emerging Markets. The company plans to keep expanding in emerging markets to help provide clean and safe water to the inhabitants.

Franklin Electric Company (FELE)

The Franklin Electric Company was founded in 1944 and named after Benjamin Franklin as they deem him the pioneer of electrical engineering in the US. The company designs, manufactures, and distributes water and fuel pumping systems. Franklin Electric Company was the first to manufacture a submersible motor for water systems and the first to do the same for fueling systems⁸. This is still their main operation today. The company operates through three segments: Water Systems, Fueling Systems, and Distribution Systems. Water systems is its largest segment accounting for 53% of revenue in the most recent fiscal year. The company generates 65% of its revenues within the United States and 11% from Europe, the Middle East, and Africa. The rest of its geographic revenues are split between Latin America and various other regions. Franklin Electric Company specializes in submersible motors, pumps, and electronic controls.

COMPARABLE COMPANIES

Name	Ticker	Mkt Cap (M)	Sales (M)	EBIT (M)	Net Income (M)	EV/EBITDA
Pentair	PNR-US	8,556.1	3,764.8	656.6	553.0	12.86x
Xylem	XYL-US	14,884.7	5,199.0	596.0	427.0	19.38x
Franklin Electric Co	FELE-US	3,676.2	1,661.9	184.5	153.0	15.95x
Watts Water Tech A	WTS-US	4,352.9	1,809.2	258.9	165.7	14.17x
Flowserve	FLS-US	4,771.0	3,541.1	285.1	125.9	14.67x
Hayward	HAYW-US	3,798.3	1,401.8	333.0	97.5	11.74x

The table above lists the metrics of Pentair’s comparable companies. Not all of these companies pure play comparables as they serve different markets. However, their products are similar in function. Xylem is the largest of the peer group, with sales of over \$5 billion in 2021. However, Pentair has performed better than its peer group in terms of net margin. Pentair had a net margin of around 14.7% in 2021. Overall, we believe this comparable set serves as a worthy benchmark, as each company leverages a unique quality to serve a similar product.

Xylem Corp. (XYL)

Xylem is a water solutions engineering, service, and manufacturing company. It operates through three segments: Water Infrastructure, Applied Water, and Measurement and Control Solution⁷, for which it generates 43.3%, 31%, and 25.7% of revenues, respectively. The company focuses on larger industrial scale engineered water testing, treatment, and application solutions. Its strategy is to help customers solve the world’s most significant water challenges with innovative products, services, and solutions to deliver sustainable economic, social, and environmental benefits⁷. It seems the company has environmental sustainability ingrained in everything they do, and they operate under its four values of Respect, Responsibility, Integrity, and Creativity. Xylem

Flowserve Corp. (FLS)

Flowserve Corporation is a leading manufacturer and aftermarket service provider of comprehensive flow control systems⁹. The company’s customers tend to be downstream utility, energy, and water management companies. Flowserve’s product portfolio primarily consists of pumps, valves, and seals. Flowserve’s revenues are split into two segments: Flowserve Pump and Flow Control. The company generates 70% of its revenues from its Flowserve Pump segment. Flowserve Corporation serves mainly oil and gas, chemical, and other general industries. However, only 3% of its revenues come from water management⁹. Although its products are similar to others in this set, it focuses on serving other markets. Additionally, the company differentiates itself by focusing

on using its size to leverage economies of scale to reduce administrative and overhead costs to better serve its customers⁹. The company’s revenues are mostly earned within the United States, Europe, the Middle East, and Africa. Approximately 39% of its revenues come from the US, while 36% are from Europe, the Middle East, and Africa (grouped into one category).

Watts Water Technologies (WTS)

Watts Water Technologies is a global manufacturer of water quality, control, and conservation products¹⁰. The company’s main customers are usually wholesalers and accounted for 61% of revenue in 2021¹⁰. The company plans to expand organically by enhancing its product portfolio by adding new complementary products. Additionally, its strategy includes promoting plumbing code development to increase the need for safety and better products. The company operates through four segments: Residential and Commercial Flow Control, HVAC, Drainage and Water Re-use, and Water Quality, which generate 53%, 31%, 10%, and 6% of its revenue, respectively. Watts also generates roughly 62% of its revenue from the United States and 28% from Europe.

Hayward Holdings, Inc. (HAYW)

Hayward Holdings is a leading manufacturer of pool equipment and pool automation systems¹³. The company operates through three segments: Residential Pool, Industrial Flow Control, and Commercial Pool. The company mainly focuses on its Residential Pool segment which accounted for 94.5% of revenue in 2021¹³.

Fluidra (FDR-ES)

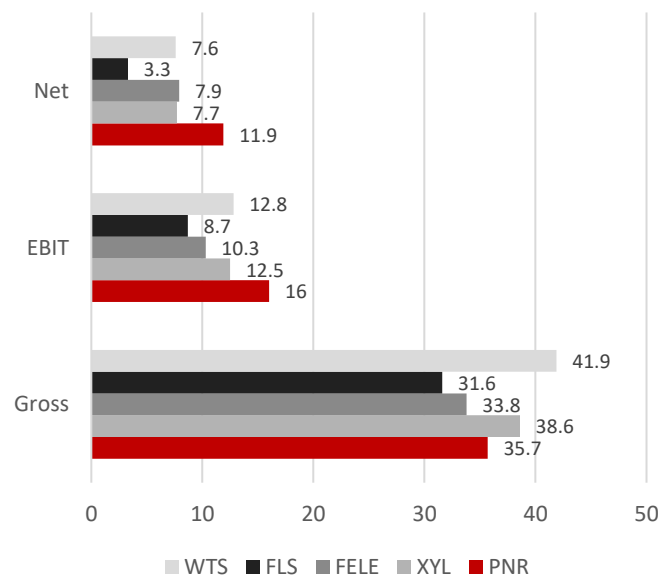
Fluidra is a Spanish listed company that offers products and services essential to building and maintaining residential and commercial pools³. The company is a main supplier to Pool Corp. along with Pentair and Hayward. Fluidra trades on the Madrid exchange and only trades OTC in the US. The company receives 40.7%, 27.5%, 17.4%, and 14.4% from North America, Southern Europe, Rest of Europe, and the Rest of the World³. The company is unique

in this comparable set as it only trades on the Madrid exchange and generates most of its revenues from the European market. Fluidra was not considered in relative multiple evaluations as it is only traded on the Madrid exchange and is subject to market risks that the other companies in the peer set are much less reactive to.

Margin Analysis

The following chart represents gross, EBIT, and net margins across Pentair and its competitors. On average, Watts Water has had the highest gross margin over the five-year period. However, they did not perform as well in both EBIT and net margin. Pentair has historically achieved higher margins than the competitor set. Additionally, Pentair is making efforts to increase its EBIT and net margin through its transformational program. If successful, we could see Pentair pull away from its competition. However, the restructuring program may leave the company understaffed to serve its customers as adequately as before.

Margin Analysis Five Year Average



Source: FactSet

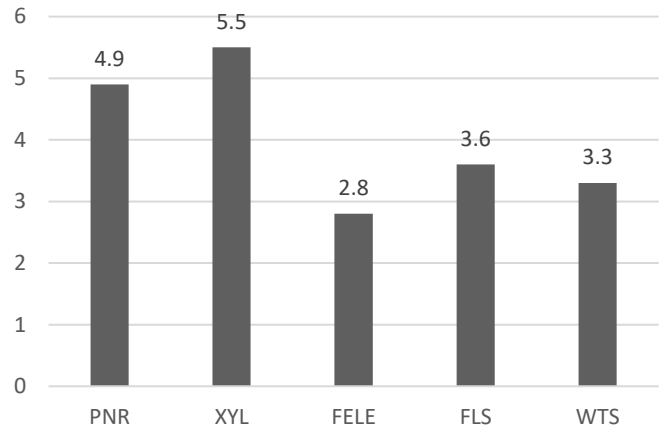
Degree of Financial Leverage

The following chart shows each companies’ degree of financial leverage. A company’s degree of financial

leverage is a measure of the sensitivity of its net income to changes in EBIT. It is measured by dividing EBIT by EBIT minus interest expense. As depicted, Flowserve has the highest degree of financial leverage, with Xylem not far behind. Both Pentair and Watts Water have low degrees of financial leverage as both do not incur much interest expense. Therefore, each company's net income would be less sensitive to swings in the business cycle. However, if Pentair were to acquire Manitowoc Ice in an all-debt transaction, it is likely that its DFL would increase. Flowserve seems to be the most ill-positioned to engage in acquisitions as they have the highest degree of financial leverage and the highest net leverage ratio. Therefore, lenders are likely less inclined to finance an acquisition by Flowserve. However, Pentair and Franklin Electric are well suited to source debt for acquisitions as they have low financial leverage and low net leverage compared to the peer set.

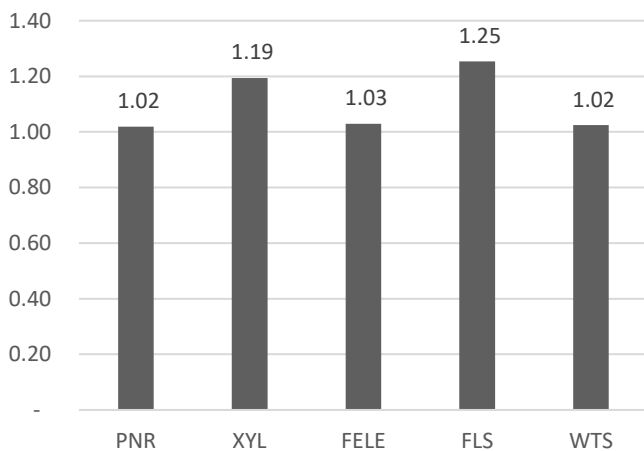
company is selling and replacing its inventory at a higher rate than its competitors. Pentair is not far behind, and Franklin Electric is at the bottom of the list.

Inventory Turnover Five Year Average



Source: FactSet

Degree of Financial Leverage 2021



Source: FactSet

Inventory Turnover

Inventory turnover is a measure of how many times a company has sold and replaced inventory over a specific period. The metric is calculated by dividing cost of goods sold by average inventory over the current and previous period. The following chart contains average inventory turnover ratios for Pentair and its competitors over the past five years. Xylem has had the highest inventory turnover of 5.5 over the five-year period. Therefore, the

ECONOMIC OUTLOOK

Global Growth

The war in Ukraine has caused substantial economic slowdown throughout the globe. The slowdown of output from Russia and Ukraine has pushed inflation higher in commodity markets. Additionally, lockdowns in China have stalled and disrupted the global supply chain. Global growth was 7.1% in 2021 and the IMF expects this to slow to 3.6% in 2022 and 2023¹⁸. Additionally, the IMF is forecasting global inflation to be 5.7% in developed countries and 8.7% in emerging markets in 2022¹⁸.

Business Cycle

We have determined that we are currently in an economic trough that has been created by COVID and geopolitical supply chain issues, as well as regulatory shifts. We expect these issues to continue through 2023 and 2024 and eventually dissipate in 2025.

Housing Construction and Interest Rates

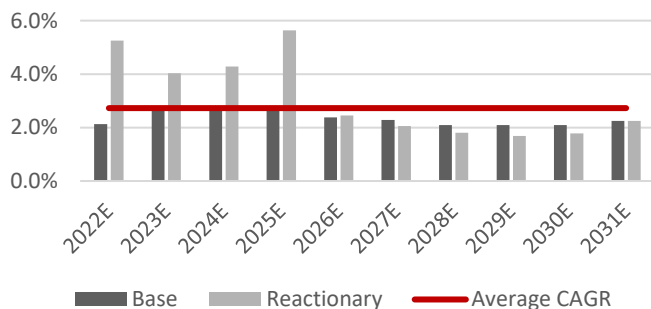
Housing construction has increased over the past couple of years as people are looking for more space due to the current work-from-home environment. Additionally, extremely low lending rates have allowed for more affordable relocation. However, mortgage rates have recently increased to over 5% due to fed rate hikes and anticipation of open market sales³. This will disincentivize people to relocate and enter into a new mortgage agreement. We expect residential construction to slow due to rising mortgage rates as well as supply chain bottlenecks and

Consumer Confidence

Consumer confidence hit a decade low in March of this year as inflation, COVID, and war plague the globe³. We expect consumer confidence to remain low through 2022 and eventually increase when COVID and geopolitical tensions calm. Low consumer confidence negatively affects consumer purchase behavior, and we hope this will stall revenue growth in Pentair’s residential income.

VALUATION

Total Revenue Growth



	2022E	2023E	2024E	2025E	2026E
Recent	2.1%	2.7%	2.7%	2.7%	2.4%
Normal	5.3%	4.0%	4.3%	5.6%	2.4%
Average CAGR	2.7%	2.7%	2.7%	2.7%	2.7%

Segmented growth projections can be found in the Company Description section of this report. Overall expected revenue growth rates are listed in the above

graph and table. Recent and Normal are separate forecast scenarios that were used to arrive at an average DCF share price. The current growth scenario focuses on how the company has been performing recently and forecasts revenues without regard to frontloaded expected business cycle fluctuations. The normal scenario is the opposite of this, and revenues are forecasted based on our expectations for the business cycle over the forecast horizon.

Recent Scenario

Recently, Pentair has been benefiting from COVID-induced trends in home improvement. However, this has been almost offset by its slowed growth in commercial and industrial revenue. Additionally, supply chain issues have made it difficult and expensive to source materials leading to project delays and a larger backlog of installation revenues for Pentair and its peers. We foresee supply chain issues continuing to burden the industry. Additionally, Pentair increased the prices of all its products due to the current inflationary environment and related cost incursions. We expect that people will be less willing to purchase Pentair’s products as the industry has a low concentration of firms with low levels of product differentiation. Therefore, it is easy for consumers to shift to more reasonably priced products. We are in line with other analyst EPS estimates in 2022 and under in 2023.

Normal Scenario

As previously stated, the normal scenario attempts to predict how Pentair’s revenues will react to business cycle fluctuations. Details on where we are currently located in the business cycle can be found in the Economic section of this report. If COVID eases and the war in Ukraine subsides, we expect a steep expansion in the business cycle with slowed growth starting in 2024 and 2025, as the typical business cycle lasts around five years. We expect that slowed growth to continue until a steady-state growth rate of 2.25%. The average CAGR of the two scenarios is 2.7% per annum.

Cost Assumptions

Costs were the same in each revenue scenario as we believe margins will move with the company's restructuring and transformational programs regardless of revenue scenario. We do not see Pentair reaching its 3% net margin increase objective by 2025. This is largely due to rising labor and input costs. Even with the company's wage and cost cutting programs, we still see a need for the terminated employees and the company will likely need to rehire at elevated rates. More information on these programs and our margin analysis can be found in the cost structure analysis section of this report. Overall, we see net margin increasing only slightly to 2025 as the company will likely struggle with order fulfillment and require additional labor. Additionally, we expect commodity prices to play a role in the slow growth of the company's margin enhancement programs. Pentair has a pending acquisition of Manitowoc Ice for \$1.6 Billion, a subsidiary of Welbilt. Pentair will likely need to finance all or most of the deal with debt which would significantly increase its interest expense. This could have adverse effects on margins depending on how well Manitowoc is integrated into Pentair. This acquisition would have a significant impact on the Pentair's capital structure as it would likely be adding a great deal of debt to finance the acquisition.

Discount Rate Assumptions

Five main assumptions flow into the weighted average cost of capital. These include:

- Risk-Free Rate
- Beta
- Equity Risk Premium
- Default Premium
- Marginal Tax Rate

The risk-free rate used for Pentair is the 10-year US treasury yield as of 4/20/2022. It was determined that the 10-year best represented the long-term risk-free rate for Pentair considering the current economic and geopolitical climate. We are currently in a rapidly increasing interest

rate environment and investors are moving to the short end of the yield curve to reduce duration, which pushes down yields. Therefore, we determined that the 10-year was a better choice than the 3-month T-bill. The Beta of 1.14 was gathered from Bloomberg and is the company's 5-year monthly raw beta. This was chosen as five years is usually the typical length of one full business cycle and we wanted this to be represented in the beta. The equity risk premium of 5.15% is the Henry Funds forecasted equity risk premium. These three assumptions are used in the CAPM model to calculate Pentair's cost of equity, of 8.69%. Pentair's pre-tax cost of debt was calculated by adding its default premium to the risk-free rate. Pentair's default premium was found by taking the 10-year regressed yield of the company's comparable set provided by Bloomberg. The pre-tax cost of debt came out to 4.24%. This was then multiplied by one minus the tax rate of 15.1%, which we carried forward from the previous year, to get a cost of debt of 3.60%. Both the cost of equity and cost of debt were multiplied by their respective weights to arrive at a weighted average cost of capital of 8.24%.

Discounted Cash Flow Model

Our base case DCF model resulted in an estimated share price of **\$56.73**. The reactionary case DCF model resulted in a price of **\$57.99**. We are most comfortable with this model as we are very confident in the growth rates we crafted in both scenarios, as well as the other inputs into the model. The DCF/EP models are calculated by discounting expected free cash flows by the company's weighted average cost of capital to present value. This gives you the present value of the company's operating assets. Non-operating assets and cash are added back, and debt and NCI are subtracted to arrive at the equity value. We then allocated a 75% weight to our base case as we are most confident in the inputs to the scenario. The model is very reactive to its inputs. The table below represents the model's sensitivity to the risk-free rate and CV growth rate changes. Changes in the risk-free rate significantly impact the WACC, and a slight increase could drastically reduce the valuation.

CV Growth of NOPLAT

	53.14	1.5%	1.8%	2.0%	2.3%	2.5%	2.8%	3.0%
Risk Free Rate	2.1%	56.57	58.01	59.59	61.32	63.23	65.33	67.66
2.4%	54.10	55.40	56.81	58.35	60.04	61.90	63.95	
2.6%	51.82	52.99	54.26	55.64	57.14	58.79	60.60	
2.9%	49.70	50.76	51.90	53.14	54.49	55.96	57.57	
3.1%	47.73	48.69	49.73	50.84	52.05	53.37	54.80	
3.4%	45.90	46.77	47.71	48.72	49.80	50.99	52.27	
3.6%	44.18	44.98	45.83	46.74	47.73	48.79	49.94	

Dividend Discount Model

The DDM model discounts expected dividends by the cost of equity to arrive at a purchase price of the equity. The resulting price per share is **\$76.48**. The model is sensitive to its discount rate, which is the cost of equity as well as the CV growth rate of EPS. Additionally, it is exposed to the payout ratio as this will change the capital returned to shareholders via dividends. Below is a sensitivity table representing changes in dividend payout ratio and CV EPS growth. We are least confident in this valuation model because Pentair is very inconsistent dividend growth. The company's dividend

CV Growth of EPS

	76.48	1.5%	1.8%	2.0%	2.3%	2.5%	2.8%	3.0%
Dividend Payout Ratio	23.7%	71.55	72.39	73.29	74.26	75.31	76.45	77.69
28.7%	73.17	74.08	75.06	76.11	77.24	78.47	79.81	
33.7%	74.77	75.75	76.80	77.93	79.15	80.47	81.91	
38.7%	76.36	77.41	78.53	79.74	81.04	82.46	83.99	
43.7%	77.94	79.05	80.24	81.53	82.91	84.42	86.05	
48.7%	79.49	80.67	81.93	83.30	84.77	86.36	88.09	
53.7%	81.03	82.28	83.61	85.05	86.60	88.28	90.11	

Relative Valuation

We calculated the relative value of Pentair based on the implied, relative EV/LTM EBITDA. After averaging the multiples of the company's peer group, it was determined that Pentair should be trading at **\$69.01** per share or 15.24-times EBITDA. We believe this value to be the upper bound of what someone should pay for a share of Pentair. The valuation is market-based and consists of few pure play comparable companies. Therefore, we believe it is a less reliable model representing the upper bound target.

Target Range

The target range was calculated by taking a weighted average of the three models to find the lower bound of the

range at **\$59.50**. A 70% weight was allocated to the DCF, 20% to the relative EV/LTM EBITDA, and 10% to DDM to arrive at that upper bound number. The lower bound is just the relative PEG rounded to \$36.

KEYS TO MONITOR

- Rural Migration:** Since the onset of the pandemic, United States residents have started to less densely populated states¹⁷. Vermont saw the largest percentage of inbound movers, at 74%¹⁷. We believe that as more people move to less densely populated states, they might splurge on amenities that they did not have the room for prior, such as pools.
- Mortgage Rates:** If mortgage rates continue to rise, we expect the move rate to slow. This may decrease the amount of installation projects. Therefore, pool revenues would slow.
- Industry Concentration and M&A:** Consolidation within the industry could lead to better pricing power and increased margins. However, the opposite is true as well. If industry concentration remains low, then slightly differentiated products will continue to be quite elastic. Therefore, firms that are actively engaging in mergers and acquisitions will be better positioned in terms of pricing power through economies of scale. Companies that engage in accretive strategic acquisitions will likely perform well moving forward.
- Supply Chain:** COVID and the current geopolitical climate have caused significant global supply chain disruptions. If the war in Ukraine and strict COVID regulations were to dissipate, we could expect an immense increase in commodity flows. Therefore, input costs would decrease for Pentair, boosting margins.
- Wage Inflation:** Hourly construction labor has been in scarce supply since 2008. If the stigma that revolves around construction work subsides, wages could decrease, increasing margins for industry operators. However, we do not expect this to happen as long as a four-year traditional education continues to be glorified.

Conclusion

Overall, we see the traditional home pool and barbecue setup dying off in the US. Pool construction revenue had been falling since 2008 until the COVID-19 pandemic. We believe the recent growth is short lived and revenue growth will fall sharply in 2022 and 2023. We see Pentair being ill-positioned compared to its peer group. The company has terminated over 600 employees in an effort to increase margins. We foresee the company having to rehire its hourly workers at higher wage rates to deliver its backlog. Furthermore, the company received over 20% of its revenues from a single customer in 2021. Pentair has no long-standing contracts with the customer and could easily be replaced.

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Revenue Decomposition

<i>Fiscal Years Ending Dec. 31</i>	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Business													
Consumer Solutions	1,611.70	1,742.90	2,341.90	2,388.74	2,460.40	2,529.29	2,592.52	2,652.15	2,713.15	2,767.41	2,822.76	2,879.22	2,944.00
	2.1%	8.1%	34.4%	2.0%	3.0%	2.8%	2.5%	2.3%	2.3%	2.0%	2.0%	2.0%	2.3%
Industrial & Flow Technologies	1,344.10	1,273.60	1,421.40	1,456.94	1,488.99	1,526.21	1,572.00	1,611.30	1,647.55	1,684.62	1,722.53	1,761.28	1,800.91
	-3.0%	-5.2%	11.6%	2.5%	2.2%	2.5%	3.0%	2.5%	2.3%	2.3%	2.3%	2.3%	2.3%
Other	1.40	1.30	1.50										
		-7.1%	15.4%										
Historical Segments													
Total	2,957.20	3,017.80	3,764.80	3,845.67	3,949.39	4,055.50	4,164.52	4,263.45	4,360.70	4,452.04	4,545.29	4,640.50	4,744.91
	-0.3%	2.0%	24.8%	2.1%	2.7%	2.7%	2.7%	2.4%	2.3%	2.1%	2.1%	2.1%	2.3%

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Income Statement

<i>Fiscal Years Ending Dec. 31</i>	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Net sales	2,957.20	3,017.80	3,764.80	3,845.67	3,949.39	4,055.50	4,164.52	4,263.45	4,360.70	4,452.04	4,545.29	4,640.50	4,744.91
Cost of goods sold	1,825.70	1,885.10	2,368.10	2,370.16	2,434.08	2,499.48	2,566.67	2,627.64	2,687.58	2,743.87	2,801.35	2,860.03	2,924.38
Gross profit	1,131.50	1,132.70	1,396.70	1,475.51	1,515.31	1,556.02	1,597.85	1,635.81	1,673.12	1,708.16	1,743.94	1,780.47	1,820.53
Depreciation	48.30	46.70	51.20	42.65	44.06	45.53	47.04	48.61	50.22	51.89	53.62	55.40	57.24
Amortization	31.70	28.40	26.30	23.30	21.00	20.50	20.50	19.20	18.00	16.88	15.83	14.84	13.92
Selling, general and administrative	540.10	520.50	596.40	562.15	577.31	602.96	619.17	644.53	670.14	717.57	755.32	771.14	788.49
Research and development	78.90	75.70	85.90	95.30	97.87	100.50	103.20	105.65	108.06	110.33	112.64	115.00	117.59
Impairment of goodwill and trade names	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Interest Expense	30.10	23.90	12.50	35.19	28.55	20.38	11.91	2.94	(6.32)	(15.83)	(25.21)	(34.60)	(44.40)
Other Expense (Income)	(5.10)	5.40	(2.40)	22.11	22.71	23.32	23.95	24.52	25.07	25.60	26.14	26.68	27.28
Income / loss from continuing operations before income taxes	407.50	432.10	626.80	694.82	723.80	742.84	772.08	790.35	807.93	801.73	805.60	832.00	860.41
Provision / benefit for income taxes	(45.80)	(75.00)	(70.80)	(104.92)	(109.29)	(112.17)	(116.58)	(119.34)	(122.00)	(121.06)	(121.65)	(125.63)	(129.92)
Net income / loss from continuing operations	361.70	357.10	556.00	589.90	614.51	630.67	655.50	671.01	685.93	680.67	683.96	706.37	730.49
Income / loss from discontinued operations, net of tax	(6.00)	1.50	(3.00)	-	-	-	-	-	-	-	-	-	-
Loss / gain from sale / impairment of discontinued operations, net of tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Net income / loss	355.70	358.60	553.00	589.90	614.51	630.67	655.50	671.01	685.93	680.67	683.96	706.37	730.49
Noncontrolling interest	-	-	-	-	-	-	-	-	-	-	-	-	-
Net income / loss attributable to Pentair plc	355.70	358.60	553.00	589.90	614.51	630.67	655.50	671.01	685.93	680.67	683.96	706.37	730.49
Basic EPS	2.06	2.14	3.33	3.59	3.79	3.95	4.16	4.31	4.45	4.46	4.53	4.71	4.91
Weighted average shares	172.60	167.95	166.15	164.48	161.97	159.68	157.61	155.73	154.03	152.50	151.12	149.88	148.77
Basic	169.40	166.50	165.80	163.16	160.77	158.59	156.62	154.84	153.23	151.78	150.47	149.29	148.24

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Balance Sheet

Fiscal Years Ending Dec. 31	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Cash & cash equivalents	82.50	82.10	94.50	427.50	719.04	1,021.34	1,341.14	1,670.70	2,009.64	2,343.37	2,678.42	3,028.55	3,395.09
Accounts receivable, net	502.90	367.50	534.30	589.82	605.73	622.00	638.73	653.90	668.81	682.82	697.12	711.73	727.74
Inventories	377.40	420.00	562.90	511.24	525.03	539.13	553.63	566.78	579.71	591.85	604.24	616.90	630.78
Cost in excess of billings (AKA Contr	41.00	50.10	48.80	61.78	63.45	65.16	66.91	68.50	70.06	71.53	73.02	74.55	76.23
Prepaid expenses	48.30	48.50	57.10	58.68	60.26	61.88	63.55	65.06	66.54	67.93	69.36	70.81	72.40
Prepaid income taxes	5.20	3.80	-	-	-	-	-	-	-	-	-	-	-
Other current assets	4.60	3.10	6.40	6.15	6.31	6.48	6.66	6.82	6.97	7.12	7.27	7.42	7.59
Current assets held for sale	-	-	-	-	-	-	-	-	-	-	-	-	-
Total current assets	1,061.90	975.10	1,304.00	1,655.17	1,979.83	2,316.00	2,670.61	3,031.75	3,401.74	3,764.62	4,129.44	4,509.97	4,909.84
Property, plant & equipment, net	283.20	301.20	310.00	320.31	330.96	341.97	353.34	365.09	377.23	389.77	402.73	416.13	429.96
Goodwill	2,258.30	2,392.20	2,504.50	2,504.50	2,504.50	2,504.50	2,504.50	2,504.50	2,504.50	2,504.50	2,504.50	2,504.50	2,504.50
Intangibles, net	339.20	325.90	428.00	404.70	383.70	363.20	342.70	323.50	305.50	288.62	272.79	257.94	244.03
Prepaid income taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos-related insurance receivab	-	-	-	-	-	-	-	-	-	-	-	-	-
Right-of-use lease assets	77.20	83.60	84.50	87.31	90.21	93.21	96.31	99.52	102.82	106.24	109.78	113.43	117.20
Deferred income taxes	29.60	27.40	23.10	19.89	16.54	13.11	9.54	5.88	2.15	(1.56)	(5.28)	(9.13)	(13.11)
Deferred compensation plan assets	21.30	22.60	25.60	26.20	26.81	27.44	28.08	28.74	29.41	30.10	30.80	31.52	32.26
Other non-current assets	68.80	69.20	73.90	89.12	91.52	93.98	96.50	98.80	101.05	103.17	105.33	107.53	109.95
Non-current assets held for sale	-	-	-	-	-	-	-	-	-	-	-	-	-
Total assets	4,139.50	4,197.20	4,753.60	5,107.19	5,424.07	5,753.40	6,101.58	6,457.77	6,824.40	7,185.46	7,550.09	7,931.89	8,334.64
Current maturities of long-term debt	-	-	-	-	-	-	-	-	-	-	-	-	-
Accounts payable	325.10	245.10	385.70	401.26	412.08	423.15	434.53	444.85	455.00	464.53	474.26	484.19	495.09
Employee compensation & benefits	71.00	117.00	140.10	114.06	117.14	122.34	125.63	130.78	135.97	145.59	153.25	156.47	159.99
Deferred revenue & customer depos	-	-	-	-	-	-	-	-	-	-	-	-	-
Dividends payable	32.00	33.20	33.00	43.87	45.70	46.90	48.75	49.90	51.01	50.62	50.86	52.53	54.32
Billings in excess of cost (AKA Contr	22.50	22.50	31.20	28.14	28.90	29.68	30.48	31.20	31.91	32.58	33.26	33.96	34.73
Current portion of operating lease lia	19.00	22.10	25.60	23.67	24.46	25.27	26.11	26.98	27.88	28.81	29.77	30.76	31.78
Income taxes payable	11.10	14.60	32.00	28.01	29.18	29.95	31.13	31.86	32.57	32.32	32.48	33.54	34.69
Accrued Liabilities	131.80	174.20	286.40	194.49	199.74	205.10	210.62	215.62	220.54	225.16	229.87	234.69	239.97
Other current liabilities	136.50	143.80	117.70	169.10	173.66	178.33	183.12	187.47	191.75	195.76	199.86	204.05	208.64
Current liabilities held for sale	-	-	-	-	-	-	-	-	-	-	-	-	-
Total current liabilities	749.00	772.50	1,051.70	1,002.61	1,030.86	1,060.73	1,090.36	1,118.67	1,146.63	1,175.37	1,203.62	1,230.19	1,259.20
Long-term debt	1,029.10	839.60	894.10	963.75	968.96	974.53	980.37	985.86	991.56	997.19	1,003.28	1,009.80	1,017.26
Pension & other post-retirement corr	96.40	102.00	93.20	84.73	76.25	67.78	59.31	50.84	42.36	33.89	25.42	16.95	8.47
Deferred tax liabilities	104.40	107.40	89.80	91.57	93.41	95.30	97.27	99.28	101.34	103.38	105.43	107.55	109.74
Long-term Operating lease liability	61.10	65.10	62.60	67.26	69.49	71.80	74.19	76.66	79.21	81.84	84.56	87.38	90.28
Asbestos-related liabilities	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Income taxes payable LT	45.40	44.80	34.10	75.43	78.58	80.64	83.82	85.80	87.71	87.04	87.46	90.32	93.41
Self-insurance liabilities	41.60	42.00	42.60	41.63	43.01	44.44	45.92	47.45	49.02	50.65	52.34	54.08	55.88
Deferred compensation plan liabilities	21.30	22.60	25.60	23.27	20.95	18.62	16.29	13.96	11.64	9.31	6.98	4.65	2.33
Foreign currency contract liabilities	11.60	69.60	9.50	37.99	39.01	40.06	41.14	42.11	43.08	43.98	44.90	45.84	46.87
Other non-current liabilities	25.70	25.30	28.50	30.60	31.43	32.27	33.14	33.93	34.70	35.43	36.17	36.93	37.76
Non-current liabilities held for sale	-	-	-	-	-	-	-	-	-	-	-	-	-
Total liabilities	2,185.60	2,090.90	2,331.70	2,418.83	2,451.96	2,486.18	2,521.81	2,554.56	2,587.25	2,618.08	2,650.16	2,683.69	2,721.19
Common Stock	1,779.40	1,682.40	1,584.40	1,598.94	1,613.48	1,628.03	1,642.57	1,657.11	1,671.65	1,686.20	1,700.74	1,715.28	1,729.82
Retained earnings (accumulated defi	401.00	631.20	1,051.40	1,303.32	1,572.53	1,853.10	2,151.10	2,460.01	2,779.39	3,095.08	3,413.08	3,746.83	4,097.52
Unrecognized pension & other post-r	-	-	-	-	-	-	-	-	-	-	-	-	-
Accumulated other comprehensive ir	(226.50)	(207.30)	(213.90)	(213.90)	(213.90)	(213.90)	(213.90)	(213.90)	(213.90)	(213.90)	(213.90)	(213.90)	(213.90)
Total shareholders' equity (deficit	1,953.90	2,106.30	2,421.90	2,688.36	2,972.12	3,267.22	3,579.77	3,903.22	4,237.15	4,567.38	4,899.92	5,248.21	5,613.44
Non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	-
Total equity (deficit)	1,953.90	2,106.30	2,421.90	2,688.36	2,972.12	3,267.22	3,579.77	3,903.22	4,237.15	4,567.38	4,899.92	5,248.21	5,613.44

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Historical Cash Flow Statement

Fiscal Years Ending Dec. 31	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Net income / loss	(104.61)	542.60	214.90	(76.40)	522.20	666.50	347.40	355.70	358.60	553.00
Loss / income from discontinued operations	-	-	6.40	4.70	(70.00)	(5.40)	(25.70)	6.00	(1.50)	3.00
Loss from sale / impairment of discontinued operations, net of equity income / losses of unconsolidated subsidiaries	(2.16)	(1.80)	(1.20)	(2.80)	(4.30)	(1.30)	(8.40)	(3.50)	(1.40)	(0.30)
Depreciation	87.83	148.90	138.70	139.50	84.60	85.20	49.70	48.30	46.70	51.20
Amortization	75.96	137.20	114.00	121.40	96.40	97.70	34.90	31.70	28.40	26.30
Loss / gain on sale of businesses, net of equity income / losses of unconsolidated subsidiaries	(19.70)	0.20	3.20	3.90	4.20	7.30	(2.20)	0.10	(1.40)	(1.40)
Deferred income taxes	(146.90)	55.20	2.00	3.00	(16.10)	(159.70)	(4.10)	(18.40)	4.60	(9.00)
Share-based compensation	35.85	31.10	33.60	33.00	34.20	39.60	20.90	21.40	20.30	29.80
Other non-current assets and liabilities	66.35	49.50	(13.20)	580.40	(94.60)	66.10	(11.20)	21.20	-	-
Gain / loss on early extinguishment of debt	75.37	-	-	-	-	101.40	17.10	-	-	-
Pension and other post-retirement expense	167.54	(31.30)	76.20	9.10	31.80	29.20	-	1.90	12.20	2.80
Excess tax benefits from share-based compensation	(4.98)	(16.80)	(12.60)	(6.00)	(8.00)	-	-	-	-	-
Amortization of bridge financing debt	-	-	-	10.80	-	-	-	-	-	-
Pension and other post-retirement contributions	(238.01)	(34.00)	(27.70)	(24.70)	(13.50)	(15.70)	-	(20.90)	(8.40)	(9.40)
Loss / gain on sale of assets	(2.28)	3.40	(1.50)	-	-	-	-	-	-	-
Accounts and notes receivable	55.72	(91.10)	9.00	48.80	21.30	(30.90)	(15.30)	(17.50)	148.30	(142.00)
Inventories	125.10	67.70	(3.70)	1.40	34.30	(29.40)	(40.10)	13.60	(29.10)	(121.40)
Other current assets	(6.70)	(5.40)	(22.00)	(21.70)	(15.80)	(5.90)	31.20	(18.40)	(2.30)	(12.30)
Accounts payable	(61.99)	36.40	34.50	(8.10)	38.00	32.60	58.30	(63.60)	(81.90)	114.20
Employee compensation and benefits	(81.31)	56.70	13.20	(41.10)	7.00	10.20	(0.60)	(19.10)	42.50	24.50
Other current liabilities	27.18	(13.30)	58.50	(31.20)	51.60	(29.30)	(3.30)	(0.40)	32.00	116.20
Other non-current assets and liabilities	-	-	-	-	-	-	-	9.40	5.10	(11.60)
Net cash provided by / used for operating activities of discontinued operations	-	-	3.40	(10.70)	159.00	(53.80)	(19.00)	7.80	(0.60)	(0.40)
Net cash provided by / used for operating activities	67.96	915.30	1,008.40	739.30	861.40	620.20	439.10	353.00	573.60	613.20
Capital expenditures	(94.53)	(170.00)	(129.60)	(134.30)	(117.80)	(70.90)	(48.20)	(58.50)	(62.20)	(60.20)
Proceeds from sale of property and equipment	5.51	6.00	13.10	27.30	24.70	7.90	0.20	0.60	0.10	3.90
Other	(5.86)	45.20	0.50	(3.60)	(5.20)	2,759.40	(12.80)	13.80	2.20	4.10
Payments due to / proceeds from sale of businesses, net of equity income / losses of unconsolidated subsidiaries	43.50	0.30	-	-	-	2,759.40	(12.80)	15.30	-	1.40
Other excluding payments due to / proceeds from sale of businesses, net of equity income / losses of unconsolidated subsidiaries	1.70	0.20	(3.60)	-	-	-	-	(1.50)	2.20	2.70
Acquisitions, net of cash acquired	470.46	(92.40)	(12.30)	(1,913.90)	(25.00)	(69.50)	(0.90)	(287.80)	(58.00)	(338.50)
Net cash provided by / used for investing activities	-	-	-	59.00	1.50	(6.50)	(7.10)	-	-	-
Net cash provided by / used for investing activities	375.58	(211.20)	(128.30)	(1,965.50)	(121.80)	2,630.40	(68.80)	(331.90)	(117.90)	(390.70)
Net receipts / repayments of short-term debt	(3.70)	-	0.50	(2.30)	0.80	(0.80)	-	-	-	-
Net receipts / repayments of commercial paper and other short-term debt	104.20	468.60	363.50	(385.30)	(913.10)	39.70	51.50	(117.50)	158.90	-
Proceeds from long-term debt	1,536.15	0.70	2.20	1,714.80	-	-	-	600.00	-	-
Repayments of long-term debt	(1,305.34)	(7.40)	(16.80)	(356.60)	(0.70)	(2,009.30)	(675.10)	(401.50)	(74.00)	(103.80)
Purchase of / distribution to noncontrolling interests	(1.55)	(2.00)	(134.70)	-	-	-	-	-	-	-
Debt issuance costs	(9.70)	(1.40)	(3.10)	(26.80)	-	-	-	-	-	-
Payment for debt extinguishment or prepayment of debt	(74.75)	-	-	-	-	(94.90)	(16.00)	-	-	-
Distribution of cash from nVent, net of equity income / losses of unconsolidated subsidiaries	4.98	16.80	12.60	6.00	8.00	-	919.40	-	-	-
Shares issued to employees, net of withholding taxes	68.18	80.00	37.00	19.40	20.70	37.20	13.30	12.50	32.90	22.20
Repurchases of ordinary shares	(334.16)	(715.80)	(1,150.00)	(200.00)	-	(200.00)	(500.00)	(150.00)	(150.20)	(150.00)
Dividends paid	(112.40)	(194.20)	(211.40)	(231.70)	(243.60)	(251.70)	(187.20)	(122.70)	(127.10)	(133.00)
Payments upon the maturity of cross default swaps	-	-	-	-	-	-	-	-	-	(14.70)
Other	-	-	-	-	-	-	(2.00)	(6.90)	-	(1.80)
Net cash provided by / used for financing activities	(232.31)	(719.10)	(995.10)	1,286.30	(600.10)	(3,432.60)	(407.90)	(17.10)	(435.90)	(222.20)
Change in cash and cash equivalents	211.26	3.80	(145.60)	15.90	112.20	(125.20)	(12.00)	8.20	(0.40)	12.40
Cash and cash equivalents, beginning of period	50.08	261.30	256.00	110.40	126.30	238.50	86.30	74.30	82.50	82.10
Cash and cash equivalents, end of period	261.34	265.10	110.40	126.30	238.50	113.30	74.30	82.50	82.10	94.50

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Forecasted Cash Flow Statement

Fiscal Years Ending Dec. 31	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Net Income	589.90	614.51	630.67	655.50	671.01	685.93	680.67	683.96	706.37	730.49
Depreciation	42.65	44.06	45.53	47.04	48.61	50.22	51.89	53.62	55.40	57.24
Amortization	23.30	21.00	20.50	20.50	19.20	18.00	16.88	15.83	14.84	13.92
Accounts receivable, net	(55.52)	(15.91)	(16.28)	(16.72)	(15.17)	(14.92)	(14.01)	(14.30)	(14.60)	(16.01)
Inventories	51.66	(13.79)	(14.11)	(14.49)	(13.15)	(12.93)	(12.14)	(12.40)	(12.66)	(13.88)
Cost in excess of billings	(12.98)	(1.67)	(1.70)	(1.75)	(1.59)	(1.56)	(1.47)	(1.50)	(1.53)	(1.68)
Prepaid expenses	(1.58)	(1.58)	(1.62)	(1.66)	(1.51)	(1.48)	(1.39)	(1.42)	(1.45)	(1.59)
Other Current Assets	0.25	(0.17)	(0.17)	(0.17)	(0.16)	(0.16)	(0.15)	(0.15)	(0.15)	(0.17)
Prepaid income taxes	-	-	-	-	-	-	-	-	-	-
Other non-current assets	(15.22)	(2.40)	(2.46)	(2.53)	(2.29)	(2.25)	(2.12)	(2.16)	(2.21)	(2.42)
Deferred compensation plan asse	(0.60)	(0.61)	(0.63)	(0.64)	(0.66)	(0.67)	(0.69)	(0.70)	(0.72)	(0.74)
Accounts payable	15.56	10.82	11.07	11.38	10.32	10.15	9.53	9.73	9.93	10.89
Deferred revenue & customer dep	-	-	-	-	-	-	-	-	-	-
Dividends payable	10.87	1.83	1.20	1.85	1.15	1.11	(0.39)	0.24	1.67	1.79
Income taxes payable	(3.99)	1.17	0.77	1.18	0.74	0.71	(0.25)	0.16	1.06	1.15
Accrued Liabilities	(91.91)	5.25	5.37	5.51	5.00	4.92	4.62	4.72	4.82	5.28
Billings in excess of cost	(3.06)	0.76	0.78	0.80	0.72	0.71	0.67	0.68	0.70	0.76
Other Current Liabilities	51.40	4.56	4.67	4.79	4.35	4.28	4.02	4.10	4.19	4.59
Change in Deferred Taxes	4.98	5.19	5.33	5.54	5.67	5.79	5.75	5.78	5.96	6.17
Employee compensation & benefi	(26.04)	3.08	5.20	3.29	5.15	5.20	9.62	7.66	3.21	3.52
Other non-current liabilities	2.10	0.83	0.84	0.87	0.79	0.77	0.73	0.74	0.76	0.83
Foreign currency contract liabilitie	28.49	1.02	1.05	1.08	0.98	0.96	0.90	0.92	0.94	1.03
Deferred revenue	-	-	-	-	-	-	-	-	-	-
Income taxes payable LT	41.33	3.15	2.07	3.18	1.98	1.91	(0.67)	0.42	2.87	3.08
Pension & other post-retirement c	(8.47)	(8.47)	(8.47)	(8.47)	(8.47)	(8.47)	(8.47)	(8.47)	(8.47)	(8.47)
Deferred compensation plan liabil	(2.33)	(2.33)	(2.33)	(2.33)	(2.33)	(2.33)	(2.33)	(2.33)	(2.33)	(2.33)
CF From Operations	640.79	670.29	687.27	713.72	730.33	745.89	741.20	745.12	768.59	793.47
Investing										
CAPEX	(52.95)	(54.71)	(56.53)	(58.41)	(60.36)	(62.36)	(64.44)	(66.58)	(68.79)	(71.08)
Self-insurance liabilities	(0.97)	1.38	1.43	1.48	1.53	1.58	1.63	1.68	1.74	1.80
Right-of-use lease assets	(2.81)	(2.90)	(3.00)	(3.10)	(3.20)	(3.31)	(3.42)	(3.53)	(3.65)	(3.77)
CF From Investing	(56.74)	(56.23)	(58.10)	(60.04)	(62.03)	(64.10)	(66.23)	(68.43)	(70.70)	(73.06)
Financing										
Current portion of operating lease lia	(1.93)	0.79	0.81	0.84	0.87	0.90	0.93	0.96	0.99	1.02
Long-term Operating lease liability	4.66	2.24	2.31	2.39	2.47	2.55	2.63	2.72	2.81	2.91
Treasury Shares	(162.50)	(162.50)	(162.50)	(162.50)	(162.50)	(162.50)	(162.50)	(162.50)	(162.50)	(162.50)
Shares Outstanding	14.54	14.54	14.54	14.54	14.54	14.54	14.54	14.54	14.54	14.54
Dividends Paid	(175.48)	(182.80)	(187.60)	(194.99)	(199.60)	(204.04)	(202.48)	(203.46)	(210.12)	(217.30)
Long-term debt	69.65	5.22	5.57	5.84	5.48	5.70	5.63	6.09	6.52	7.46
CF from Financing	(251.06)	(322.51)	(326.87)	(333.88)	(338.74)	(342.85)	(341.25)	(341.64)	(347.76)	(353.87)
Change in Cash	333.00	291.54	302.30	319.81	329.56	338.94	333.73	335.05	350.13	366.54

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Common Size Income Statement

Fiscal Years Ending Dec. 31	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Net sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of goods sold	61.7%	62.5%	62.9%	61.6%	61.6%	61.6%	61.6%	61.6%	61.6%	61.6%	61.6%	61.6%	61.6%
Gross profit	38.3%	37.5%	37.1%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%
Depreciation	1.6%	1.5%	1.4%	1.1%	1.1%	1.1%	1.1%	1.1%	1.2%	1.2%	1.2%	1.2%	1.2%
Amortization	1.1%	0.9%	0.7%	0.6%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.3%	0.3%	0.3%
Selling, general and administrative	18.3%	17.2%	15.8%	14.6%	14.6%	14.9%	14.9%	15.1%	15.4%	16.1%	16.6%	16.6%	16.6%
Research and development	2.7%	2.5%	2.3%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Impairment of goodwill and trade nar	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Interest Expense	1.0%	0.8%	0.3%	0.9%	0.7%	0.5%	0.3%	0.1%	-0.1%	-0.4%	-0.6%	-0.7%	-0.9%
Other Expense (Income)	-0.2%	0.2%	-0.1%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Income / loss from continuing operat	13.8%	14.3%	16.6%	18.1%	18.3%	18.3%	18.5%	18.5%	18.5%	18.0%	17.7%	17.9%	18.1%
Provision / benefit for income taxes	-1.5%	-2.5%	-1.9%	-2.7%	-2.8%	-2.8%	-2.8%	-2.8%	-2.8%	-2.7%	-2.7%	-2.7%	-2.7%
Net income / loss from continuing op	12.2%	11.8%	14.8%	15.3%	15.6%	15.6%	15.7%	15.7%	15.7%	15.3%	15.0%	15.2%	15.4%
Income / loss from discontinued oper	-0.2%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Loss / gain from sale / impairment of	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income / loss	12.0%	11.9%	14.7%	15.3%	15.6%	15.6%	15.7%	15.7%	15.7%	15.3%	15.0%	15.2%	15.4%
Noncontrolling interest	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income / loss attributable to Pent	12.0%	11.9%	14.7%	15.3%	15.6%	15.6%	15.7%	15.7%	15.7%	15.3%	15.0%	15.2%	15.4%

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Common Size Balance Sheet

Fiscal Years Ending Dec. 31	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Cash & cash equivalents	2.5%	2.8%	2.7%	2.5%	11.1%	18.2%	25.2%	32.2%	39.2%	46.1%	52.6%	58.9%	65.3%	71.6%
Accounts receivable, net	16.5%	17.0%	12.2%	14.2%	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%	15.3%
Inventories	13.1%	12.8%	13.9%	15.0%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Cost in excess of billings	1.2%	1.4%	1.7%	1.3%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
Prepaid expenses	1.2%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Prepaid income taxes	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other current assets	0.3%	0.2%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Current assets held for sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total current assets	35.1%	35.9%	32.3%	34.6%	43.0%	50.1%	57.1%	64.1%	71.1%	78.0%	84.6%	90.9%	97.2%	103.5%
Property, plant & equipment, net	9.2%	9.6%	10.0%	8.2%	8.3%	8.4%	8.4%	8.5%	8.6%	8.7%	8.8%	8.9%	9.0%	9.1%
Goodwill	69.9%	76.4%	79.3%	66.5%	65.1%	63.4%	61.8%	60.1%	58.7%	57.4%	56.3%	55.1%	54.0%	52.8%
Intangibles, net	9.3%	11.5%	10.8%	11.4%	10.5%	9.7%	9.0%	8.2%	7.6%	7.0%	6.5%	6.0%	5.6%	5.1%
Prepaid income taxes	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Asbestos-related insurance receivable	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Right-of-use lease assets	0.0%	2.6%	2.8%	2.2%	2.3%	2.3%	2.3%	2.3%	2.4%	2.4%	2.4%	2.4%	2.4%	2.5%
Deferred income taxes	0.9%	1.0%	0.9%	0.6%	0.5%	0.4%	0.3%	0.2%	0.1%	0.0%	0.0%	-0.1%	-0.2%	-0.3%
Deferred compensation plan assets	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Other non-current assets	3.3%	2.3%	2.3%	2.0%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
Non-current assets held for sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total assets	128.4%	140.0%	139.1%	126.3%	132.8%	137.3%	141.9%	146.5%	151.5%	156.5%	161.4%	166.1%	170.9%	175.7%
Current maturities of long-term debt & short-term borrowings	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Accounts payable	12.8%	11.0%	8.1%	10.2%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%
Employee compensation & benefits	3.8%	2.4%	3.9%	3.7%	3.0%	3.0%	3.0%	3.0%	3.1%	3.1%	3.3%	3.4%	3.4%	3.4%
Deferred revenue & customer deposits	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dividends payable	1.0%	1.1%	1.1%	0.9%	1.1%	1.2%	1.2%	1.2%	1.2%	1.2%	1.1%	1.1%	1.1%	1.1%
Billings in excess of cost	0.7%	0.8%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Current portion of operating lease liability	0.0%	0.6%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%
Income taxes payable	0.4%	0.4%	0.5%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Accrued Liabilities	3.9%	4.5%	5.8%	7.6%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%
Other current liabilities	5.0%	4.6%	4.8%	3.1%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
Current liabilities held for sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total current liabilities	27.6%	25.3%	25.6%	27.9%	26.1%	26.1%	26.2%	26.2%	26.3%	26.4%	26.4%	26.5%	26.5%	26.5%
Long-term debt	26.6%	34.8%	27.8%	23.7%	25.1%	24.5%	24.0%	23.5%	23.1%	22.7%	22.4%	22.1%	21.8%	21.4%
Pension & other post-retirement compensation & benefits	3.0%	3.3%	3.4%	2.5%	2.2%	1.9%	1.7%	1.4%	1.2%	1.0%	0.8%	0.6%	0.4%	0.2%
Deferred tax liabilities	3.6%	3.5%	3.6%	2.4%	2.4%	2.4%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
Long-term Operating lease liability	0.0%	2.1%	2.2%	1.7%	1.7%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.9%	1.9%	1.9%
Asbestos-related liabilities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deferred revenue	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Income taxes payable	1.6%	1.5%	1.5%	0.9%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.9%	1.9%	2.0%
Self-insurance liabilities	1.6%	1.4%	1.4%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.2%	1.2%	1.2%
Deferred compensation plan liabilities	0.7%	0.7%	0.7%	0.7%	0.6%	0.5%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%	0.1%	0.0%
Foreign currency contract liabilities	1.0%	0.4%	2.3%	0.3%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Other non-current liabilities	0.7%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Non-current liabilities held for sale	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total liabilities	66.5%	73.9%	69.3%	61.9%	62.9%	62.1%	61.3%	60.6%	59.9%	59.3%	58.8%	58.3%	57.8%	57.3%
Common Stock	63.9%	60.2%	55.7%	42.1%	41.6%	40.9%	40.1%	39.4%	38.9%	38.3%	37.9%	37.4%	37.0%	36.5%
Retained earnings (accumulated deficit)	5.7%	13.6%	20.9%	27.9%	33.9%	39.8%	45.7%	51.7%	57.7%	63.7%	69.5%	75.1%	80.7%	86.4%
Unrecognized pension & other post-retirement benefit costs, net of tax	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Accumulated other comprehensive income (loss)	-7.7%	-7.7%	-6.9%	-5.7%	-5.6%	-5.4%	-5.3%	-5.1%	-5.0%	-4.9%	-4.8%	-4.7%	-4.6%	-4.5%
Total shareholders' equity (deficit)	61.9%	66.1%	69.8%	64.3%	69.9%	75.3%	80.6%	86.0%	91.6%	97.2%	102.6%	107.8%	113.1%	118.3%
Non-controlling interests	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total equity (deficit)	61.9%	66.1%	69.8%	64.3%	69.9%	75.3%	80.6%	86.0%	91.6%	97.2%	102.6%	107.8%	113.1%	118.3%

Pentair plc
Value Driver Estimation

Fiscal Years Ending Dec. 31	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Marginal Tax Rate	9.1%	10.8%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%
NOPLAT:													
Revenue	2,957.20	3,017.80	3,764.80	3,845.67	3,949.39	4,055.50	4,164.52	4,263.45	4,360.70	4,452.04	4,545.29	4,640.50	4,744.91
Cost of Goods Sold	1,825.70	1,885.10	2,368.10	2,370.16	2,434.08	2,499.48	2,566.67	2,627.64	2,687.58	2,743.87	2,801.35	2,860.03	2,924.38
Depreciation	48.30	46.70	51.20	42.65	44.06	45.53	47.04	48.61	50.22	51.89	53.62	55.40	57.24
Amortization	31.70	28.40	26.30	23.30	21.00	20.50	20.50	19.20	18.00	16.88	15.83	14.84	13.92
Selling, general and administrative	540.10	520.50	596.40	562.15	577.31	602.96	619.17	644.53	670.14	717.57	755.32	771.14	788.49
Research and development	78.90	75.70	85.90	95.30	97.87	100.50	103.20	105.65	108.06	110.33	112.64	115.00	117.59
Implied Interest on Operating Leases	3.27	3.54	3.58	3.70	3.82	3.95	4.08	4.22	4.36	4.50	4.65	4.81	4.97
EBITA	429.23	457.86	633.32	748.42	771.24	782.58	803.85	813.59	822.33	806.99	801.88	819.28	838.32
Adjusted Taxes:													
Provision for income taxes	45.80	75.00	70.80	104.92	109.29	112.17	116.58	119.34	122.00	121.06	121.65	125.63	129.92
Add: Impairment of goodwill and trade nam	-	-	-	-	-	-	-	-	-	-	-	-	-
Add: Net Interest Expense (Income)	2.74	2.58	1.89	5.31	4.31	3.08	1.80	0.44	(0.95)	(2.39)	(3.81)	(5.22)	(6.71)
Add: Other Expense (Income)	(0.46)	0.58	(0.36)	3.34	3.43	3.52	3.62	3.70	3.79	3.87	3.95	4.03	4.12
Add: Implied Interest on operating leases	0.30	0.38	0.54	0.56	0.58	0.60	0.62	0.64	0.66	0.68	0.70	0.73	0.75
Adjusted Taxes	48.37	78.55	72.87	114.13	117.61	119.36	122.61	124.13	125.49	123.22	122.49	125.16	128.09
Change in Deferred Taxes	(4.90)	5.20	(13.30)	4.98	5.19	5.33	5.54	5.67	5.79	5.75	5.78	5.96	6.17
NOPLAT	375.95	384.51	547.15	639.27	658.81	668.54	686.77	695.13	702.63	689.52	685.17	700.08	716.40
Invested Capital (IC):													
Operating Assets													
Normal Cash	46.38	47.33	59.05	60.32	61.94	63.61	65.32	66.87	68.39	69.83	71.29	72.78	74.42
Accounts receivable, net	502.90	367.50	534.30	589.82	605.73	622.00	638.73	653.90	668.81	682.82	697.12	711.73	727.74
Inventories	377.40	420.00	562.90	511.24	525.03	539.13	553.63	566.78	579.71	591.85	604.24	616.90	630.78
Cost in excess of billings	41.00	50.10	48.80	61.78	63.45	65.16	66.91	68.50	70.06	71.53	73.02	74.55	76.23
Prepaid expenses	48.30	48.50	57.10	58.68	60.26	61.88	63.55	65.06	66.54	67.93	69.36	70.81	72.40
Prepaid income taxes	5.20	3.80	-	-	-	-	-	-	-	-	-	-	-
Other Current Assets	4.60	3.10	6.40	6.15	6.31	6.48	6.66	6.82	6.97	7.12	7.27	7.42	7.59
Operating Liabilities													
Accounts payable	325.10	245.10	385.70	401.26	412.08	423.15	434.53	444.85	455.00	464.53	474.26	484.19	495.09
Deferred revenue & customer deposits	-	-	-	-	-	-	-	-	-	-	-	-	-
Dividends payable	32.00	33.20	33.00	43.87	45.70	46.90	48.75	49.90	51.01	50.62	50.86	52.53	54.32
Income taxes payable	11.10	14.60	32.00	28.01	29.18	29.95	31.13	31.86	32.57	32.32	32.48	33.54	34.69
Accrued Liabilities	131.80	174.20	286.40	194.49	199.74	205.10	210.62	215.62	220.54	225.16	229.87	234.69	239.97
Billings in excess of cost	22.50	22.50	31.20	28.14	28.90	29.68	30.48	31.20	31.91	32.58	33.26	33.96	34.73
Other current liabilities	136.50	143.80	117.70	169.10	173.66	178.33	183.12	187.47	191.75	195.76	199.86	204.05	208.64
Operating Working Capital	366.78	306.93	382.55	423.12	433.47	445.16	456.16	467.01	477.71	490.10	501.71	511.23	521.73
Add: Property, plant & equipment, net	283.20	301.20	310.00	320.31	330.96	341.97	353.34	365.09	377.23	389.77	402.73	416.13	429.96
Add: Intangibles, net	339.20	325.90	428.00	404.70	383.70	363.20	342.70	323.50	305.50	288.62	272.79	257.94	244.03
Add: Prepaid income taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
Add: Right-of-use lease assets	77.20	83.60	84.50	87.31	90.21	93.21	96.31	99.52	102.82	106.24	109.78	113.43	117.20
Add: Other non-current assets	68.80	69.20	73.90	89.12	91.52	93.98	96.50	98.80	101.05	103.17	105.33	107.53	109.95
Less: Deferred revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Less: Income taxes payable	45.40	44.80	34.10	75.43	78.58	80.64	83.82	85.80	87.71	87.04	87.46	90.32	93.41
Less: Other non-current liabilities	25.70	25.30	28.50	30.60	31.43	32.27	33.14	33.93	34.70	35.43	36.17	36.93	37.76
Invested Capital	1,064.08	1,016.73	1,216.35	1,218.52	1,219.86	1,224.60	1,228.06	1,234.18	1,241.90	1,255.44	1,268.70	1,279.01	1,291.71
Free Cash Flow (FCF):													
NOPLAT	375.95	384.51	547.15	639.27	658.81	668.54	686.77	695.13	702.63	689.52	685.17	700.08	716.40
Change in IC	83.18	(47.35)	199.62	2.17	1.34	4.74	3.46	6.12	7.72	13.54	13.27	10.31	12.70
FCF	292.77	431.86	347.54	637.10	657.48	663.80	683.31	689.01	694.92	675.98	671.90	689.77	703.71
Return on Invested Capital (ROIC):													
NOPLAT	375.95	384.51	547.15	639.27	658.81	668.54	686.77	695.13	702.63	689.52	685.17	700.08	716.40
Beginning IC	980.90	1,064.08	1,016.73	1,216.35	1,218.52	1,219.86	1,224.60	1,228.06	1,234.18	1,241.90	1,255.44	1,268.70	1,279.01
ROIC	0.38	0.36	0.54	0.53	0.54	0.55	0.56	0.57	0.57	0.56	0.55	0.55	0.56
Economic Profit (EP):													
Beginning IC	980.90	1,064.08	1,016.73	1,216.35	1,218.52	1,219.86	1,224.60	1,228.06	1,234.18	1,241.90	1,255.44	1,268.70	1,279.01
x (ROIC - WACC)	0.30	0.28	0.46	0.44	0.46	0.47	0.48	0.48	0.49	0.47	0.46	0.47	0.48
EP	295.11	296.81	463.36	539.02	558.39	568.01	585.85	593.92	600.92	587.17	581.70	595.52	611.00

Pentair plc

Weighted Average Cost of Capital (WACC) Estimation

Cost of Equity:

Risk-Free Rate	2.88%
Beta	1.14
Equity Risk Premium	5.15%
Cost of Equity	8.75%

ASSUMPTIONS:

*10 year treasury yield
5 year monthly raw beta bloomberg
Henry Fund ERP*

Cost of Debt:

Risk-Free Rate	2.88%
Implied Default Premium	1.36%
Pre-Tax Cost of Debt	4.24%
Marginal Tax Rate	15.10%
After-Tax Cost of Debt	3.60%

10 year treasury yield

*Regressed 10 year yield of comps issued debt bloomber NIA
most recent marginal tax rate*

Market Value of Common Equity:

Total Shares Outstanding	165.80
Current Stock Price	\$54.32
MV of Equity	9,006.26

MV Weights

90.20%

Market Value of Debt:

Short-Term Debt	
Current Portion of LTD	
Long-Term Debt	894.10
PV of Operating Leases	84.50
MV of Total Debt	978.60

9.80%

Market Value of the Firm

9,984.86

100.00%

Estimated WACC

8.24%

Pentair plc

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

CV Growth of NOPLAT	2.25%
CV Year ROIC	56%
WACC	8.24%
Cost of Equity	8.75%

<i>Fiscal Years Ending Dec. 31</i>	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
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DCF Model:

Free Cash Flow (FCF)	637.1	657.5	663.8	683.3	689.0	694.9	676.0	671.9	689.8	703.7
Continuing Value (CV)										11476.9
PV of FCF	588.6	561.2	523.4	497.8	463.7	432.1	388.3	356.6	338.2	5627.1

Value of Operating Assets:	9777.0
Non-Operating Adjustments	
Excess Cash	35.5
Deferred compensation plan as	25.6
Employee compensation & ber	140.1
Pension & other post-retiremer	93.2
Deferred compensation plan lie	25.6
Value of debt incl. Op. Leases	978.6
Foreign currency contract liabil	9.5
Value of Equity	8591.0
Shares Outstanding	165.8
Intrinsic Value of Last FYE	\$ 51.82
Implied Price as of Today	\$ 53.14

EP Model:

Economic Profit (EP)	539.0	558.4	568.0	585.8	593.9	600.9	587.2	581.7	595.5	611.0
Continuing Value (CV)										10197.9
PV of EP	498.0	476.6	447.9	426.8	399.7	373.6	337.3	308.7	292.0	5000.0

Total PV of EP	8560.6
Invested Capital (last FYE)	1216.3
Value of Operating Assets:	9777.0
Non-Operating Adjustments	
Excess Cash	35.5
Deferred compensation plan as	25.6
Employee compensation & ber	140.1
Pension & other post-retiremer	93.2
Deferred compensation plan lie	25.6
Value of debt incl. Op. Leases	978.6
Foreign currency contract liabil	9.5
Value of Equity	8591.0
Shares Outstanding	165.8
Intrinsic Value of Last FYE	\$ 51.82
Implied Price as of Today	\$ 53.14

Pentair plc*Dividend Discount Model (DDM) or Fundamental P/E Valuation Model*

<i>Fiscal Years Ending Dec. 31</i>	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
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EPS	\$ 3.59	\$ 3.79	\$ 3.95	\$ 4.16	\$ 4.31	\$ 4.45	\$ 4.46	\$ 4.53	\$ 4.71	\$ 4.91
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Key Assumptions

CV growth of EPS	2.25%
CV Year ROE	13.92%
Cost of Equity	8.75%

Future Cash Flows

P/E Multiple (CV Year)											12.91
EPS (CV Year)											\$ 4.91
Future Stock Price											\$ 63.37
Dividends Per Share	1.07	1.13	1.17	1.24	1.28	1.32	1.33	1.35	1.40		
Discounted Cash Flows	0.98	1.13	1.17	1.24	1.28	1.32	1.33	1.35	1.40		63.37

Intrinsic Value as of Last FYE	\$ 74.58
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Implied Price as of Today	\$ 76.48
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Pentair plc

Relative Valuation Models

Ticker	Company	Price	EPS		P/E 22	P/E 23	Est. 5yr			EV	LTM EBITDA	LTM EV/EBITDA
			2022E	2023E			EPS gr.	PEG 22	PEG 23			
XYL	Xylem Corp.	\$86.60	\$2.59	\$3.24	33.44	26.73	18.8	1.78	1.42	17,043.00	914.00	18.65
FELE	Franklin Electric Compar	\$81.98	\$3.59	\$3.99	22.84	20.55	13.4	1.70	1.53	4,003.70	247.40	16.18
FLS	Flowserve Corp.	\$36.96	\$1.73	\$2.23	21.36	16.57	14.6	1.46	1.14	5,705.20	411.80	13.85
WTS	Watts Water Technolog	\$137.96	\$5.88	\$6.32	23.46	21.83	8.0	2.93	2.73	4,570.70	296.20	15.43
HAYW	Hayward Holdings	\$16.69	\$1.19	\$1.24	14.03	13.46	52.7	0.27	0.26	4,546.90	375.80	12.10

Average 23.02 19.83 1.63 1.42 15.24

PNR Pentair plc \$54.32 3.59 3.79 15.1 14.3 5.3 2.9 2.7 750.6

Implied Relative Value:

P/E (EPS22) \$ 82.58
P/E (EPS23) \$ 75.23
PEG (EPS22) \$ 30.98
PEG (EPS23) \$ 28.46
LTM EV/EBITDA \$ 69.01

Pentair plc

Present Value of Operating Lease Obligations

Fiscal Years Ending Dec. 31	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Year 1	300.0	25.7	52.3	54.5	51.9	44.3	29.8	34.0	22.5	23.3	400.0	400.0
Year 2	250.0	19.1	40.2	39.8	39.7	32.6	23.9	29.1	17.0	18.8	350.0	350.0
Year 3	225.0	15.7	28.8	29.4	30.8	24.8	19.3	21.2	12.7	16.3	275.0	275.0
Year 4	175.0	12.6	20.7	21.4	19.3	19.8	14.4	15.6	10.5	13.9	225.0	225.0
Year 5	100.0	10.2	16.3	13.4	15.3	14.9	10.7	13.1	8.9	11.0	140.0	140.0
Thereafter	290.0	16.7	31.8	23.4	19.1	23.3	12.2	15.1	13.2	11.0	390.0	390.0
Total Minimum Payments	1340.0	99.9	190.1	181.9	176.1	159.7	110.3	128.1	84.8	94.3	1780.0	1780.0
Less: Cumulative Interest	176.6	12.1	22.4	20.1	19.0	18.5	12.3	14.4	10.0	11.0	234.0	234.0
PV of Minimum Payments	1163.4	87.8	167.7	161.8	157.1	141.2	98.0	113.7	74.8	83.3	1546.0	1546.0
Implied Interest in Year 1 Payment		49.3	3.7	7.1	6.9	6.7	6.0	4.2	4.8	3.2	3.5	65.5
Pre-Tax Cost of Debt	4.24%	4.24%	4.24%	4.24%	4.24%	4.24%	4.24%	4.24%	4.24%	4.24%	4.24%	4.24%
Years Implied by Year 6 Payment	2.9	1.6	2.0	1.7	1.2	1.6	1.1	1.2	1.5	1.0	2.8	2.8
Expected Obligation in Year 6 & Beyond	100	10.228	16.322	13.4	15.3	14.9	10.7	13.1	8.9	11	140	140
Present Value of Lease Payments												
PV of Year 1	287.8	24.6	50.2	52.3	49.8	42.5	28.6	32.6	21.6	22.4	383.7	383.7
PV of Year 2	230.1	17.5	37.0	36.6	36.5	30.0	22.0	26.8	15.6	17.3	322.1	322.1
PV of Year 3	198.6	13.8	25.4	26.0	27.2	21.9	17.0	18.7	11.2	14.4	242.8	242.8
PV of Year 4	148.2	10.6	17.5	18.1	16.3	16.8	12.2	13.2	8.9	11.8	190.6	190.6
PV of Year 5	81.3	8.3	13.3	10.9	12.4	12.1	8.7	10.6	7.2	8.9	113.8	113.8
PV of 6 & beyond	217.4	12.8	24.3	18.0	14.8	18.0	9.5	11.7	10.2	8.6	293.1	293.1
Capitalized PV of Payments	1163.4	87.8	167.7	161.8	157.1	141.2	98.0	113.7	74.8	83.3	1546.0	1546.0

Pentair plc*Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding*

Number of Options Outstanding (shares):	1.60
Average Time to Maturity (years):	4.50
Expected Annual Number of Options Exercised:	0.36

Current Average Strike Price:	\$ 40.90
Cost of Equity:	8.75%
Current Stock Price:	\$54.32

Fiscal Years Ending Dec. 31	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Increase in Shares Outstanding:	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Average Strike Price:	\$ 40.90	\$ 40.90	\$ 40.90	\$ 40.90	\$ 40.90	\$ 40.90	\$ 40.90	\$ 40.90	\$ 40.90	\$ 40.90
Increase in Common Stock Account:	14.54	14.54	14.54	14.54	14.54	14.54	14.54	14.54	14.54	14.54
Share Repurchases (\$)	163	163	163	163	163	163	163	163	163	163
Expected Price of Repurchased Shares:	\$ 54.32	\$ 59.07	\$ 64.24	\$ 69.85	\$ 75.96	\$ 82.61	\$ 89.83	\$ 97.69	\$ 106.23	\$ 115.52
Number of Shares Repurchased:	3	3	3	2	2	2	2	2	2	1
Shares Outstanding (beginning of the year)	166	163	161	159	157	155	153	152	150	149
Plus: Shares Issued Through ESOP	0	0	0	0	0	0	0	0	0	0
Less: Shares Repurchased in Treasury	3	3	3	2	2	2	2	2	2	1
Shares Outstanding (end of the year)	163	161	159	157	155	153	152	150	149	148

Pentair plc*Valuation of Options Granted under ESOP*

Current Stock Price	\$54.32
Risk Free Rate	2.88%
Current Dividend Yield	0.00%
Annualized St. Dev. of Stock Returns	40.00%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Range 1	1.6	40.90	4.50	\$ 25.62	\$ 41
Range 2					
Range 3					
Range 4					
Range 5					
Range 6				\$	-
Range 7				\$	-
Range 8				\$	-
Range 9				\$	-
Total	2	\$ 40.90	4.50	\$ 25.62	\$ 41

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Sensitivity Tables

		CV Growth of NOPLAT							
		53.14	1.5%	1.8%	2.0%	2.3%	2.5%	2.8%	3.0%
Risk Free Rate	2.1%	53.14	56.57	58.01	59.59	61.32	63.23	65.33	67.66
	2.4%	53.14	54.10	55.40	56.81	58.35	60.04	61.90	63.95
	2.6%	53.14	51.82	52.99	54.26	55.64	57.14	58.79	60.60
	2.9%	53.14	49.70	50.76	51.90	53.14	54.49	55.96	57.57
	3.1%	53.14	47.73	48.69	49.73	50.84	52.05	53.37	54.80
	3.4%	53.14	45.90	46.77	47.71	48.72	49.80	50.99	52.27
	3.6%	53.14	44.18	44.98	45.83	46.74	47.73	48.79	49.94

		Equity Risk Premium							
		53.14	3.7%	4.2%	4.7%	5.2%	5.7%	6.2%	6.7%
Default Premium	0.6%	53.14	74.29	66.06	59.39	53.86	49.21	45.24	41.80
	0.9%	53.14	73.87	65.72	59.10	53.62	49.00	45.06	41.65
	1.1%	53.14	73.45	65.38	58.82	53.38	48.79	44.88	41.49
	1.4%	53.14	73.04	65.04	58.54	53.14	48.59	44.70	41.33
	1.6%	53.14	72.63	64.71	58.26	52.91	48.39	44.52	41.17
	1.9%	53.14	72.23	64.38	57.99	52.67	48.18	44.34	41.02
	2.1%	53.14	71.83	64.05	57.71	52.44	47.98	44.17	40.86

		CAPEX %							
		53.14	2.1%	7.1%	12.1%	17.1%	22.1%	27.1%	32.1%
LTD %	1.0%	53.14	63.50	62.38	60.75	58.40	55.06	50.36	43.79
	1.5%	53.14	61.75	60.62	58.99	56.65	53.31	48.60	42.04
	2.0%	53.14	59.99	58.87	57.24	54.90	51.56	46.85	40.29
	2.5%	53.14	58.24	57.12	55.49	53.14	49.80	45.10	38.53
	3.0%	53.14	56.49	55.36	53.73	51.39	48.05	43.34	36.78
	3.5%	53.14	54.73	53.61	51.98	49.63	46.30	41.59	35.02
	4.0%	53.14	52.98	51.85	50.22	47.88	44.54	39.83	33.27

		COGS %							
		53.14	58.6%	59.6%	60.6%	61.6%	62.6%	63.6%	64.6%
SC&A %	15.6%	53.14	68.93	65.42	61.91	58.40	54.89	51.39	47.88
	16.1%	53.14	67.17	63.66	60.16	56.65	53.14	49.63	46.13
	16.6%	53.14	65.42	61.91	58.40	54.90	51.39	47.88	44.37
	17.1%	53.14	63.66	60.16	56.65	53.14	49.63	46.13	42.62
	17.6%	53.14	61.91	58.40	54.90	51.39	47.88	44.37	40.86
	18.1%	53.14	60.16	56.65	53.14	49.63	46.13	42.62	39.11
	18.6%	53.14	58.40	54.90	51.39	47.88	44.37	40.87	37.36

		CV Growth of EPS							
		76.48	1.5%	1.8%	2.0%	2.3%	2.5%	2.8%	3.0%
Dividend Payout Ratio	23.7%	76.48	71.55	72.39	73.29	74.26	75.31	76.45	77.69
	28.7%	76.48	73.17	74.08	75.06	76.11	77.24	78.47	79.81
	33.7%	76.48	74.77	75.75	76.80	77.93	79.15	80.47	81.91
	38.7%	76.48	76.36	77.41	78.53	79.74	81.04	82.46	83.99
	43.7%	76.48	77.94	79.05	80.24	81.53	82.91	84.42	86.05
	48.7%	76.48	79.49	80.67	81.93	83.30	84.77	86.36	88.09
	53.7%	76.48	81.03	82.28	83.61	85.05	86.60	88.28	90.11

		Tax Rate							
		53.14	7.6%	10.1%	12.6%	15.1%	17.6%	20.1%	22.6%
Beta	1.29	53.14	51.24	49.88	48.51	47.13	45.75	44.37	42.98
	1.24	53.14	53.24	51.83	50.42	48.99	47.57	46.13	44.69
	1.19	53.14	55.39	53.93	52.46	50.99	49.51	48.03	46.54
	1.14	53.14	57.70	56.19	54.67	53.14	51.61	50.07	48.52
	1.19	53.14	55.39	53.93	52.46	50.99	49.51	48.03	46.54
	1.24	53.14	53.24	51.83	50.42	48.99	47.57	46.13	44.69
	1.29	53.14	51.24	49.88	48.51	47.13	45.75	44.37	42.98

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Key Management Ratios

<i>Fiscal Years Ending Dec. 31</i>	2019	2020	2021	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Liquidity Ratios:													
Current Ratio (CA/CL)	1.42	1.26	1.24	1.65	1.92	2.18	2.45	2.71	2.97	3.20	3.43	3.67	3.90
Quick Ratio ((CA-INV)/CL)	0.91	0.72	0.70	1.14	1.41	1.68	1.94	2.20	2.46	2.70	2.93	3.16	3.40
Cash Ratio	0.11	0.11	0.09	0.43	0.70	0.96	1.23	1.49	1.75	1.99	2.23	2.46	2.70
Asset-Management Ratios:													
Total Asset Turnover (Sales/Total Assets)	0.71	0.72	0.79	0.75	0.73	0.70	0.68	0.66	0.64	0.62	0.60	0.59	0.57
Inventory Turnover (Sales/Inventory)	7.84	7.19	6.69	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52
NWC Turnover (Sales/NWC)	8.06	9.83	9.84	9.09	9.11	9.11	9.13	9.13	9.13	9.08	9.06	9.08	9.09
Contract Asset Turnover? (Sales/Contract Assets)	72.13	60.24	77.15	62.24	62.24	62.24	62.24	62.24	62.24	62.24	62.24	62.24	62.24
Financial Leverage Ratios:													
Debt-to-Equity (Total Debt/Total Equity)	1,029.14	839.64	894.13	963.78	968.99	974.56	980.40	985.88	991.58	997.21	1,003.30	1,009.83	1,017.28
Equity Multiplier (Total Assets/Total Equity)	2.12	1.99	1.96	1.90	1.82	1.76	1.70	1.65	1.61	1.57	1.54	1.51	1.48
Degree of Financial Leverage (EBIT/EBIT-Interest)	1.08	1.06	1.02	1.05	1.04	1.03	1.02	1.00	0.99	0.98	0.97	0.96	0.95
Profitability Ratios:													
Return on Equity (NI/Beg TSE)	0.19	0.18	0.26	0.24	0.23	0.21	0.20	0.19	0.18	0.16	0.15	0.14	0.14
Return on Assets (NI/Beg. Total Assets)	0.09	0.09	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.09	0.09
ROIC (NOPLAT/Beg. IC)	0.38	0.36	0.54	0.53	0.54	0.55	0.56	0.57	0.57	0.56	0.55	0.55	0.56
EBIT Margin (EBIT/Sales)	14.5%	15.2%	16.8%	19.5%	19.5%	19.3%	19.3%	19.1%	18.9%	18.1%	17.6%	17.7%	17.7%
Profit Margin	12.0%	11.9%	14.7%	15.3%	15.6%	15.6%	15.7%	15.7%	15.7%	15.3%	15.0%	15.2%	15.4%
Gross Margin	38.3%	37.5%	37.1%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%	38.4%
Payout Policy Ratios:													
Dividend Payout Ratio (Dividend/EPS)	0.35	0.36	0.24	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Total Payout Ratio ((Divs. + Repurchases)/NI)	0.77	0.77	0.51	0.57	0.56	0.56	0.55	0.54	0.53	0.54	0.54	0.53	0.52