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**Current Price \$120.47**  
**Target Price \$113 - \$125**

**Stock Performance Highlights**

52 week High	\$155.00
52 week Low	\$85.62
Beta Value	1.4
Average Daily Volume	383,491

**Share Highlights**

Market Capitalization	\$6.36b
Shares Outstanding	54.38m
Book Value per share	\$35.72
EPS (TTM)	\$7.34
P/E Ratio	16.00
Dividend Yield	3.02%
Dividend Payout Ratio	46.67%

**Company Performance Highlights**

ROA	8.34%
ROE	21.67%
Sales	\$4.59b

**Financial Ratios**

Current Ratio	1.86
Debt to Equity	0.89%

**One Year Stock Performance**



**Company Overview**

Hubbell Incorporated (HUBB) is a long standing international electrical equipment company within the industrial sector. Hubbell designs, manufactures, and sells two segments of products, electrical and power. Their electrical segment includes items such as wiring device products, rough-in electrical products, connector and grounding products, and lighting fixtures. Their power segment consists of the design and manufacture of various transmission, substation, and telecommunications products which are primarily used by the electrical utility industry. 2019 annual reports showed total net sales rose 2.44% to \$4.591 billion.

**Investment Thesis**

We recommend a sell rating for Hubbell due to their high levels of debt coupled with the current economic downturn.

**Drivers of Thesis**

- **Large amounts of debt** has added high amounts of pressure onto the company. Debt that will mature in as soon as 2022 adding pressure to generate sufficient cash flow.
- **Recent economic trends** show discouraging estimates for growth within the industrial industry. Real GDP is a close indication of the performance of companies within the industrial sector and is currently in a downward spiral due to the current pandemic.

**Risk of Thesis**

- **Recent growth in the power sector** has shown promise in strengthening the revenue stream of the company. The sales within the power sector of Hubbell has risen by 113% since 2013 and is expected to continue to grow by over 43% for the next five years.
- **Emerging green initiatives** pose a great opportunity for electrical equipment companies as many organizations begin to shift towards more environmentally friendly sources of power to reduce emissions, many of which are products Hubbell produces.

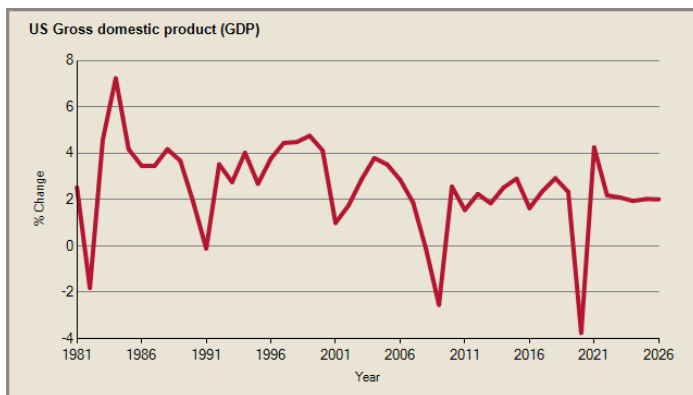
## Executive Summary

As of April 17<sup>th</sup>, 2020, our team suggests a “Sell” Rating for Hubbell, Inc (HUBB) For the University of Iowa Krause Fund. We came to this decision after thoroughly analyzing the pros and cons associated with Hubbell’s current outlook concluding investments would be better off elsewhere. We believe the company will have a 22% drop in sales growth in 2020 due to the current economic climate.

Our valuation models suggest a \$113-\$125 target price range which is between a -6.15% to 3.82% increase or decrease compared to its current stock price.

## Economic Outlook

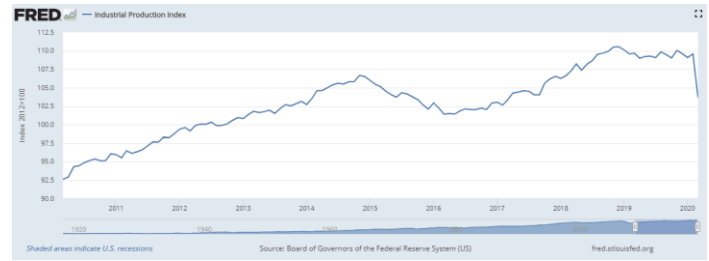
### *Real GDP*



(source: IBIS World)

U.S. real gross domestic product is a measurement of all goods and services exchanged within the U.S. for a specific time frame adjusted for inflation. As you can see on the graph, GDP is projected to shrink by 3.8% for 2020 to a 30-year low. This is particularly damaging towards industrial companies as they will have to postpone their growth as they produce less goods. We expect the GDP to rally back to pre-2020 levels within the next couple of years however, the steady growth rate it experienced previously of the virus outbreak will not be restored for at least 5 years. Therefore, Hubbell’s growth will be limited to an average of 1.36% for the next 5 years.

### *Industrial Production Index*



(Source: FRED)

The Industrial Production Index is an indicator that measures real output for all facilities located in the United States for manufacturing, mining, and electric, and gas utilities. This is useful for the Industrials sector as it measures levels of production by the manufacturing sector, mining – including oil and gas field drilling services – and electrical and gas utilities. It also measures capacity, an estimate of the production levels that could be sustainably maintained; and capacity utilization, the ratio of actual output to capacity. As the IPI goes up, so does the growth for industrial businesses such as Hubbell however, the index has most recently been reported at 103.6635 which is over 5% lower than what it was reported a month prior. As you can see in the chart, the index has had a sharp decline in 2020 due to the corona virus and we project a 22% drop in net sales for Hubbell in the year 2020.

### *Crude Oil*

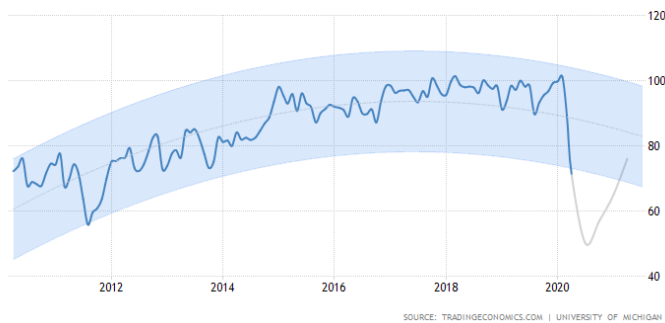


(Source: TradingEconomics)

Crude Oil has dropped by 30% since the beginning of 2020 and is projected to stay at a sub 20 price for at least the next two years according to Trading Economics. The reason for the price not rebounding like that of GDP is because the production of crude oil is nearly impossible to suddenly halt and thus

despite a drop-in demand, the supply has still risen during the pandemic. Normally, a drop in oil prices would be beneficial for industrial businesses and specifically Hubbell as the price of oil is closely related to the cost of petrochemical, a primary material needed for Hubbell's products. However, companies such as Hubbell will not be able to take advantage of these fallen prices as we expect their inventory production to decrease by 18.5% in the coming year.

### ***Consumer Confidence***



(Source: TradingEconomics)

The Consumer Confidence Index is an important economic indicator of the Industrial sector as it measures the optimism of consumers in terms of their expected spending. The chart above shows a steady increase in the 9 years leading up to 2020 however, there has been a drop of over 25% from 101.2 in January of 2020 to most recently 73.1. Consumer confidence is expected to continue to fall with the global economy and is not expected to reach levels close to 100 for at least the next two years. Hubbell will certainly be negatively impacted by this drop in demand, specifically in its electrical sector that provides utility products such as wiring devices and light fixtures. The demand for these products will understandably go down as places such as stores and factories have been forced to either close or decreased their usage.

### ***Capital Market Outlook***

Capital markets have been incredibly volatile as of late. For example, the S&P 500 index reached an all-time high of 3,379 in February of 2020 and immediately fell to 2,238 the following month in March. Due to a slowing economy, reduced growth among end-using industries such as manufacturers, and uncertainty surrounding international growth and

trade, we have forecasted a significant reduction in stockholders equity growth to near 0.

## **Industry Analysis**

### ***Industry Description***

The electrical equipment industry has dropped in the last 5 years which can be primarily attributed to import and export trends. The U.S. dollar has appreciated within the past decade and has caused U.S. products to become much more costly to foreign buyers. Because of this, Hubbell has seen a slowed growth of sales in both China and Japan.

Imports have also seen rising rates in the electronic industry within the past decade. This is due to foreign countries being able to produce their electrical equipment at a lower cost due to more lenient regulation as well as lower wages for their employees. Since March of 2019, the import price index has fallen by 4% and 13.3% since 2014. This has caused many companies to either not be able to compete with the lower prices or offshor their operations to foreign companies where costs are far lower. This may impact Hubbell by causing them to be less competitive as the demand in the industry migrates to lower cost companies and products.

### ***Industry Trends***

The electrical equipment industry has seen a much higher increase in demand of power system products in comparison with electronic products. A large reason for this is the global trend of developing more environmentally friendly sources of power. Many manufacturing companies have adopted green initiatives encouraged by government imposed financial incentives imposed around the globe. This has created an opportunity for electrical equipment companies to improve their power products sales and take advantage of the rising demand. Within the past 3 years, Hubbell has increased their power systems sales by over 70% while their electrical products have risen by less than 10%.

We predict the power products to become the main source of revenue for companies in the industry by the year 2030 however, in the short term as the repercussions of the virus take their

toll, electrical products such as lighting and wires will be the majority due to these products having a well over 50% share in online sales.

## **5-Force Analysis**

### ***Competitive Rivalry***

One competitor of Hubbell is Emerson Electric Co. Who has a significantly higher market cap of 46.3B compared to Hubbell's 8.1. This allows Emerson to be able to produce a larger number of products and achieve higher revenues even while having very similar margins.

Another competitor for Hubbell is Keysight. Similarly, to Emerson, Keysight has a larger market cap which puts Hubbell at a disadvantage. This disadvantage derives from the fact that the majority of products these companies develop are simple items such as wires, cables, and storage batteries. Since these products have very little variation between companies, the main driver for business is competitive prices.

### ***Supplier Power***

Electrical equipment such as wires and cables are made from metals, leading them to be reliant on the materials industry in terms of their production costs. There are many different metal suppliers allowing Hubbell to have other supplier options if their current suppliers were to up their prices. The largest threat to the cost of Hubbell's products is the price of basic metal materials such as copper or aluminum and thus the price of Hubbell's products have a direct relationship with these materials. In the chart below, the global price of copper has seen a steady decrease within the past decade and a sharp decline within the past year due to the virus. We predict the price to return to levels similar to that of 2018 as the current production of copper is lowered. This relatively low price bodes well for Hubbell as their material costs will not drastically increase.



(Source: FRED)

### ***Buyer Power***

Due to more modern businesses relying on technological advancement and automation, there is a wide demand for electrical equipment which lowers the risk of Hubbell being pressured of losing business. Hubbell Inc was established all the way back in 1888 and is well established within the electrical manufacturing industry that is in its maturity age of its life cycle. Since Hubbell is considered to be in its maturity stage it is very limited in its ways of growing as it must either somehow differentiate their simplistic products or find more cost-efficient ways of production.

In the electrical equipment industry, there are few companies that are responsible for a significant amount of sales however, as stated before the companies with offshore manufacturers have an advantage associated with production costs

### ***Threat of Substitution and New Entry***

In the electrical equipment industry, there are few companies that are responsible for a significant amount of sales however, as stated before the companies with offshore manufacturers have an advantage associated with production costs. Also, there are little substitution options for consumers of electrical equipment as most electrical products are made up of the same basic materials such as wires and transistors. There is a relatively low risk of new entry due to the large amounts of capital needed for the manufacturing of electrical products. This is exemplified in the competitors of Hubbell having well over 10 billion in market cap.

### ***Competitors***

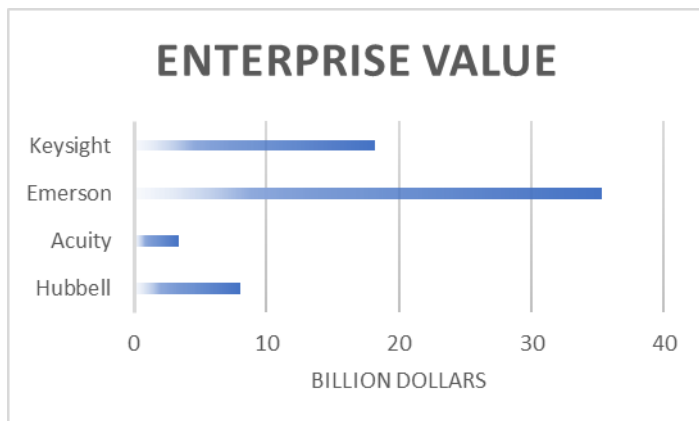
Three main competitors of Hubbell are Emerson Electric Co, a power management company,

Keysight Technologies, an electronic manufacturing company, and Acuity Brands, a lighting and building management firm.



(Source: Yahoo!Finance)

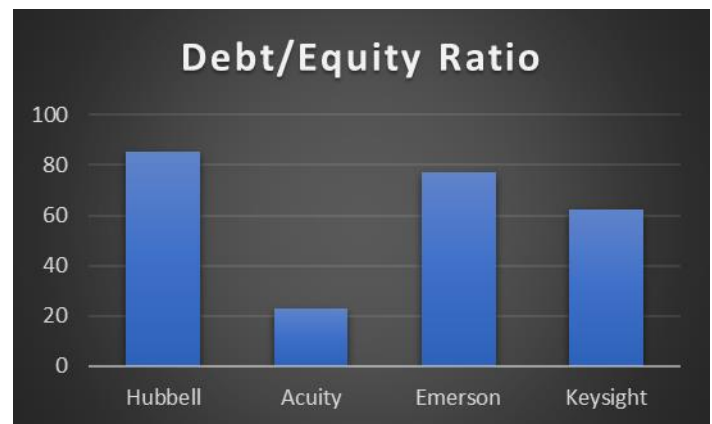
As you can see in the above chart, Hubbell has one of the lower profit margins among its competitors with only an 8.73 margin. This can mostly be attributed to their higher production cost caused by the Brothers of Electrical Workers union which has negotiated for higher wages within countries Hubbell's production is tied to including the US. Companies such as Emerson and Keysight are able to lower their costs and increase their margins because countries where their products are produced, such as China, are not represented by the same union.



(Source: Yahoo!Finance)

Enterprise value is a measurement of a company's total value including debt, market cap, and cash. Despite Hubbell having net sales grow by 44.23% since 2013, the company's large debt of 1.67b is the biggest reasons for its lower Enterprise value. As you can see, Emerson has over twice as large

of an enterprise value compared to any other competitor and this coupled with their large profit margin allows them to bring in gross profits of over 7.82b annually which shows the competitive advantage Emerson as over Hubbell.



(Source: Marketwatch)

This chart helps show the relatively large amounts of debt Hubbell takes on compared to its competitors. A trend in the company's history is their willingness to be highly levered in order to be better positioned to grow. This is shown most recently by their 1.1 billion dollar acquisition of Aclara. While Hubbell is still able to grow and has a healthy level of sales, this amount of debt leaves them to being exposed to high interest rates and a much higher risk of defaulting compared to its competitors which are shown on this graph to have much lower debt to equity ratios.

### Growth

Demand for this industries product traditionally has been driven mostly by North America and Western Europe, however, growing emerging market economies are demanding more product. This can be attributed to rising wages in developing nations and should continue to drive growth in this industry. Higher wages in developing economies will lead to more consumer spending on appliances, lighting products, consumer electronics, vehicles, and much more (products powered by electricity/batteries). These rising wages in developing economies may provide opportunities for US based firms, however, it may also create competitive pressures for these US based companies. Acquisitions and joint ventures are commonly utilized to gain access to low-cost manufacturing and sales channels, as well as to gain access to new technology or market share



## ***Competition from low-cost imports***

US manufacturers of all types of electrical equipment face intense competition in the US market from countries with much lower cost structures. Imports of electrical products account for over 50% of the US market which come primarily from China and Mexico.

The International Brotherhood of Electrical Workers is the largest union for workers within the industry that has over 750,000 member and reaches through various countries including the US, Canada, and many Southern American countries. This union was able to achieve an updated deal regarding its workers in as recent as 2018 however, Mexico and China are not countries whose workers are represented by this union and are therefore given fewer regulations as to how they pay their workers.

## ***Investment Positives***

Growing demand in developing economies spurred by industrialization, urbanization, and rising wages are expected to continue into the foreseeable future. Also, US based firms are lowering manufacturing costs through establishing manufacturing operations in low-cost regions (via M&A and Joint Ventures). The industry is also heavily influenced by global metal prices which are currently dropping by a significant amount. The demand for these raw materials has dropped due to a halt in global purchases caused by the virus however, the supply of these materials is much higher compared to the demand leading the price to be low for the coming years.

## ***Investment Negatives***

Intense competition from low-cost imports which currently owns over half of the US market share and are dominated by China and Mexico. Raw materials used to produce electrical equipment are subject to very volatile price fluctuations once the effects of the virus have subsided. In a normal market, it is commonplace for key raw materials such as steel, plastic, copper and lead to see price fluctuations of more than 10% in a year. Due to volatile raw materials and currency exchange risk, firms must enact hedging strategies that expose them to high amounts of debt and risk.

## **Company Analysis**

### **General Information**

Hubbell Inc. is primarily engaged in the designing, manufacturing, and the sale of electrical/electronic products for a broad range of residential construction, non-residential construction, and industrial/utility applications. Hubbell's long-term strategy is to deliver through competitive cost structures and complement organic growth with acquisitions that enhance product offerings while effectively allocating capital to enhance shareholder value

Hubbell plans to cut costs (effectively allocate capital) by consolidating large, high cost facilities and small, sub-facilities. Their reason is to utilize as much square footage as possible, particularly in large, low cost facilities and they had a 2020 target of 20% improvement in sales per square foot which will not be met this year due to the virus but will be the standard goal for the coming years.

Hubbell also seeks to grow rapidly through acquisitions and joint ventures which can see to be incredibly advantageous to growth. For example, In February of 2018, Hubbell acquired Aclara for 1.1 billion dollars, a leading global provider of infrastructure solutions for electric, gas, and water utilities. This acquisition, and others, are strategic with the goal of expanding capabilities and product offerings as well as compete in core, adjacent or complementary marketplaces. Hubbell is particularly seeking acquisitions that will expand its Internet of Things (IoT) offerings and their overall online presence. This is particularly important right now due to the corona virus and the opportunity to be had with online sales.

Due to these various acquisitions, Hubbell is highly levered which makes for strong cash flow and a large effort to reduce leverage has kept their debt in control. The total debt the company has recently reported is 1.5 billion dollars and had a 16% net debt to total capital ratio increase with the acquisition of Aclara. However, following the acquisition Hubbell has increased its net sales, net income, and EPS over the last 2 fiscal years.

### **Products and Markets**

Hubbell is comprised of two main reporting segments, the electrical segment and the power segment. The Electrical segment is responsible for approximately 57% of Hubbell's consolidated revenues, down from 70% of revenue in 2015. This business segment is comprised of many electrical products including wiring device products, rough-in electrical products, connector and grounding products, lighting fixtures and controls, and many more similar products. These products are typically used by industrial producers, commercial facilities via electrical contractors, maintenance personal, electricians, and telecommunications companies. These Electrical products are primarily sold through electrical and industrial distributors, home centers, retail and hardware outlets, lighting showrooms, and residential product internet sites.

The Power segment is responsible for approximately 43% of Hubbell's consolidated revenues, up from 30% of revenues in 2015. This segment consists of the design and manufacture of various distribution, transmission, substation, and telecommunications products which are primarily used by the electrical utility industry. Certain products in this segment are used by the civil construction and transportation industries. The power segment is currently outperforming the Electrical Segment due to a strong backlog of future business and has had a much larger growth rate. One thing to note about Hubbell's market is that they did not have any customers whose consolidated purchases exceeded 10% of total net sales in 2017 – 2019.

### **Production and Distribution**

Raw materials used in the manufacturing of Hubbell products include steel, aluminum, brass, copper, bronze, zinc, nickel, plastics among others. Hubbell is not dependent on any one supplier for raw materials, however, some of these materials are sourced from a limited number of suppliers. Approximately 19% of Hubbell's product purchases, represented by net sales, are sourced from unaffiliated suppliers outside of the US. This foreign sourcing of products opens up Hubbell to this risk of unexpected fluctuations in product costs, trade risk, political uncertainty, and fluctuations in exchange rates.

### **Competition**

Hubbell does not compete directly with any one company across all product lines; however, its largest competitors compete with Hubbell across many of their lines of business. For example, Emerson Electric Co. competes with Hubbell in the sale of motors and alternators however, both companies have many other products that do not overlap. Emerson has a significantly higher market cap of 46.3B compared to Hubbell's 8.1 but Hubbell has some advantages as well including a significantly higher EPS ratio (7.31 to 3.51) as well as a larger dividend yield (3.64 to 2)

### **Catalysts for Growth/Change:**

Hubbell strongly supplements organic growth with growth through acquisitions as well as joint ventures exemplified in the Aclara acquisition. These activities are meant to improve product offering, expand into new markets, and compete in new and weaker markets. Hubbell is making an effort to expand its Internet of Things as they have historically shown to take on debt example by the Aclara acquisition. Hubbell participates in joint ventures in various foreign countries including Taiwan, Hong Kong, and the Philippines

### **Industrialization and urbanization in emerging markets**

Although demand for the products in this industry have traditionally been driven mostly by North America and Western Europe, growing emerging market economies are demanding more product. The lower cost structures in developing economies will continue to pressure US based electrical equipment companies to reduce cost and price. Hubbell has adjusted to this through the establishment of offshore subsidiaries and manufacturing operations to help reduce costs.

The future of green energy could present many opportunities to Hubbell and other electrical companies going forward as green energy continues to replace gas, coal and fossil fuels. Demand for electrical equipment will rise as it replaces traditional energy sources. A growing green market will attract new businesses trying to establish themselves as well as competitors pivoting to better supply the growing demand of environmentally friendly electrical equipment.

## Key Investment Positives/Negatives

### Strengths

Hubbell is improving its business presence within the growing power sector with acquisitions of infrastructure companies such as Aclara. As you can see in the chart below, the power segment produces fewer overall sales than the electrical segment however, it is growing at a much faster rate.

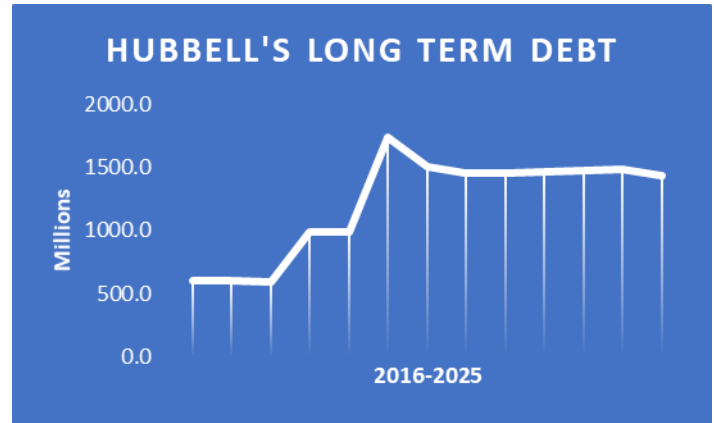


(Source: FactSet)

This improvement within the power segment has allowed Hubbell to increase their revenue stream within their already well diversified product portfolio. Since Hubbell is in the later stage of its life cycle, it is important to adapt to the adjusting demand of the power segment as their already existing products have likely reached their potential.

### Weaknesses

Due to these acquisitions, Hubbell has become highly levered and in a vulnerable position if they do not successfully increase revenues. The rise of the corona virus has impacted the timetable of the debts to be paid off, making them drag onward as shown in this chart with a steady state of debt starting in the year 2020.



(Source: Yahoo!Finance)

This high leverage can cause high interest rate payments for Hubbell especially with the projected slow of revenue due to the virus. This debt will also make it more difficult for the company to invest in future strategies such as mergers and acquisitions of organizations that improve their online presence.

### Opportunities

The growing global trend of moving toward more environmentally friendly equipment is very beneficial for Hubbell. With an increase in demand for electrical equipment to achieve green practices, Hubbell can potentially position itself to benefit from this growing market. In 2018 the US enacted the Environmental Protection Agency (EPA) which uses new emissions regulations along with financial incentives for companies to produce cleaner forms of power which will certainly have to involve electrical and power products within Hubbell's product line.

There is also great opportunity for Hubbell within the various emerging markets around the globe. While Hubbell is already established in North American markets, International sales for Hubbell increased 4.51% since 2018 and is an indication of the growing demand for their products in countries with emerging economies.

### Threats

The volatility for both raw materials and exchange rates pose a large threat to the cost of Hubbell's operations. International sales account for a significant amount of income for the company and any increase in either exchange rate or basic metal prices would significantly cut Hubbell's profits. Shown in the chart below is the change of exchange



rate between the US dollar and the Chinese Yuan. The range of 1 US dollar equaling 7.19 to 6.7 yuans exemplifies the volatility Hubbell is exposed to.

22 Apr 2019 00:00 UTC - 21 Apr 2020 19:52 UTC USD/CNY close:7.07720 low:6.70432 high:7.171



(Source: CurrencyCharts)

## Valuation Analysis

### Valuation Summary

We have concluded with a SELL recommendation for Hubbell, Inc. We used the Discounted Cash Flow (DCF), Economic Profit (EP), Dividend Discount Model (DDM), and a Relative Valuation Model to value Hubbell, Inc. Our target price for Hubbell is \$113 - \$125. We placed added emphasis on the DCF and EP approaches due to the fact that they provided us with outlook on revenue, capital expenditures, and the cost of raising capital will impact the value of Hubbell, Inc. Due to the impact of COVID-19 on short term economic outlook, our target price places little consideration on our Relative Valuation Model.

### Revenue Decomposition

Hubbell, Inc. has two business segments, Electrical and Power. We forecasted the revenue for both of these segments based on our analysis of past business performance, however, the economic impact of the COVID-19 pandemic is reflected our short-term revenue estimates in both segments.

#### *Electrical*

The revenue of Hubbell, Inc.'s Electrical segment stems from the commercial and industrial, construction and energy, and lighting sub-segments. Hubbell's electrical segment has experienced weak growth in comparison to their power segment. From 2014-2019 Hubbell's Electrical segment experienced

an average growth rate of 2.55% which we used to forecast the growth of this segment from our 2022E – 2024 CV. We estimate growth of -25% in 2020, however, we also predict that revenue growth in this segment will bounce back in 2021 with a growth rate of 20%. This negative growth of the segment in our 2020E can be attributed to the negative market outlook due to the COVID-19 pandemic as well as the historically weaker returns Hubbell has experienced in this segment; in 2019, Hubbell experienced growth of -1.31% in this segment. The subsequent bounce back in our 2021E relies on the assumption that the economy will return in 2021 as the COVID-19 virus is slow dealt with.

#### *Power*

The revenues loin's share provided by Hubbell, Inc's Power segment come from the sale of power systems that are used in the electrical utilities industry (10k). From 2014-2019 Hubbell's Power segment experienced revenue growth of 5.90% on average, however, due to the acquisition of Aclara in 2018 this segment experienced massive growth of 60.31%. This acquisition will allow Hubbell to improve its capabilities in this segment substantially and for this reason we have chosen to grow revenues in the Power segment at rates of 7.5%, 8.5% and 9% in our revenue estimates for 2022E-2024CV, respectfully. We estimate growth of -18% in 2020, however, we also predict that revenue growth in the Power segment will bounce back in 2021 with a growth rate of 15%. This negative growth of the segment in our 2020E can also be attributed to the negative market outlook due to the COVID-19. The subsequent bounce back in our 2021E relies on the assumption that the economy will return in 2021 as the COVID-19 virus is slow dealt with. Our slightly more optimistic growth estimates in the Power segment reflect the positive impact of the Aclara acquisition in 2018 as well as the superior historical performance of this segment in comparison to the Electrical segment.

## Assumption Analysis

### Cost of Goods Sold

Over the previous years from 2013-2019 the Cost of Goods Sold divided by net revenues has been performing at a rate of 68.87%. Although Cost of Goods Sold includes Research and Development

costs, we have still chosen this rate of 68.87% to forecast our Cost of Goods Sold percentage in our 2020E-2024 CV. We have deemed this appropriate because Research and Development expense represents a small portion of total Cost of Goods Sold (10k).

### **Sales, General and Administrative**

Over the years 2013-2019, the historical average of SG&A expense divided by net sales has been 17.28%. To calculate SG&A expense into the future we took an average of our SG&A / net sales ratio (17.28%), and our Net Sales estimate for that year divided by SG&A expense in 2019 because we expect that Hubbell will maintain a large amount of their SG&A expense. We used this method to calculate our 2020-2022 estimates, however used just the original rate of 17.28% to estimate SG&A expense for the remainder because we predict net sales will recover and eventually exceed what it was in 2019 by the year 2023.

### **Depreciation Rate**

Hubbell, Inc. has had a fairly steady depreciation rate from 2014-2019 with an average of 13.98%. The depreciation rate was obtained by taking the ratio of the depreciation expense occurring over the course of a particular year divided by that years beginning gross PPE balance. We have used this depreciation rate to estimate our depreciation expense in all years.

### **Shares Outstanding**

As of December 31, 2019, the number of securities to be issued upon exercise of outstanding options, warrants and rights are 1,572 thousand with an average maturity of these securities in 6.80 years. We obtained the expected annual number of options exercised of 325.49 thousand by dividing the number of options outstanding to the average maturity time of those options. We expect the stock option exercised of 325.49 thousand shares per year through CV 2024. We expect a constant stock repurchase value (increase in treasury stock) of \$100 million each year through CV 2024. This estimate is based on the current stock repurchasing program that is authorized to repurchases \$400 million of common stock from 2017-2020 (\$100 million per year average). We

decided to move forward under the same assumptions.

### **Cost of Debt**

To estimate Hubbell, Inc.'s cost of debt we used a senior note maturing in 2022 with a rate of 3.63% found in 2019 annual report. Next we determined the after-tax cost of by using the marginal tax rate to include the effects of leverage.

### **Cost of Equity**

We used the Capital Assets Pricing Model (CAPM) to compute the cost of equity for Hubbell. The risk-free rate of 0.65% we used was determined using the current rate of a 10-year US Treasury security. Our 5-year monthly beta of 1.40 was derived using yahoo finance. Based on the Damodaran, the market risk premium is currently very high at 6.16%. By applying these three inputs to the CAPM model, we arrived at a cost of equity of 9.27%.

### **Weighted Average Cost of Capital**

Hubbell does not currently have any preferred stock outstanding which has therefore been omitted from the calculation. Hubbell has a book value of equity of debt of \$1,669.07 million which accounts for 20.3% of its total capital. The value of Hubbell's equity value is determined by the market value of equity which is the product of their basic shares outstanding and the share price. Using this we arrive at a market value of equity of \$6553.57 million which makes up 79.7% of Hubbell, Inc.'s total capital.

### **Valuation Model**

#### **Discounted Cash Flows (DCF)**

The DCF model uses the free cash flows (FCF) of a business and uses that to determine the intrinsic value of that firm's stock. FCF was computed by taking the difference between Hubbell's net operating profits less adjusted taxes (NOPLAT) and their capital expenditures. First, we calculated FCF for each forecasted year from 2020-2024 (CV) and the terminal value of Hubbell's FCF. Next, we discounted these free cash flows and the terminal value back to present value using the cost of capital (WACC) and sum these discounted values ultimately giving us the

value of operating assets. After adjusting for non-operating assets and non-equity claims we obtained our total equity value. The price as of December 31, 2019 (\$122.94) was calculated by dividing the total equity value by the number of shares outstanding. The intrinsic value of the stock as of April 17<sup>th</sup>, 2020, was determined by adjusting the partial year value at the capital gain rate (cost of equity – dividend yield). This model gives us a final stock price of \$125.22.

### **Economic Profit**

The EP model is used to estimate the economic profit of a firm. It is calculated by taking the difference in NOPLAT and the value of the beginning invested capital multiplied by cost of capital (WACC) to determine a stock's intrinsic value. We calculated EP for each forecasted year as well as the terminal value of Hubbell's economic profit. After this, we discounted these economic profits and the terminal value back to present value using the cost of capital (WACC). The sum of these discounted EP values and the beginning invested capital give us our total value of operating assets. After adjusting for non-operating assets and non-equity claims we obtained our total equity value. The price as of December 31, 2019 (\$122.94) was calculated by dividing the total equity value by the number of shares outstanding. The intrinsic value of the stock as of April 17<sup>th</sup>, 2020, was determined by adjusting the partial year value at the capital gain rate (cost of equity – dividend yield). This model gives us a final stock price of \$125.22.

Our analysts believe that the DCF and EP models provide the most useful and accurate valuation of the intrinsic value of Hubbell, Inc's stock. These models put together using the estimated free cash flows and estimated operating profits which were derived from the forecasted net revenues. These net revenue estimates were constructed using the strenuous research of industry and company specific factors.

### **Dividend Discount Model**

To construct our dividend discount model, we used our estimated dividend per share for forecasted years 2020-2023 which was derived as a function of our EPS and our estimated payout ratio of 51%. Next we calculated the continuing value using CV growth rates of 4.82%, and 24.21% for EPS and ROE respectively. Next we discounted these values back to present day

using the cost of equity giving us a price of \$110.98 as of December 31, 2019. Next we adjusted the price for the date of April 17 giving us a stock price of \$113.04.

### **Relative Valuation**

The relative valuation model comprises of six similar companies within our industry. We chose to focus on the relative P/E valuation method because multiples that rely on book value rather than market value are not as appropriate when analyzing companies with high levels of debt such as Hubbell, Inc.

### **Sensitivity Analysis**

To examine the impacts of key assumptions on the intrinsic value of Hubbell, Inc., we ran several sensitivity tests using different sets of value drivers and assumption. An added emphasis was placed on the CV growth of NOPLAT.

### **CV Growth of NOPLAT vs WACC**

We looked into changes in CV NOPLAT against changes in the weighted average cost of capital (WACC) in order to identify how operating profits and cost structure interact and influence intrinsic value. The DCF and EP models assumes that capital structure does not change throughout the life of the model which can be a weakness of these models. Both these assumptions are subject to change over time and both influence the intrinsic value these models provide. As NOPLAT increases so does value, but on the other hand an increase in WACC results in an increase in value.

### **CV Growth of NOPLAT vs CV ROIC**

We also tested changes in CV growth rate for NOPLAT against changes in CV return on invested capital in order to identify how operating profits and the efficiency of capital allocation impact intrinsic value. A higher CV growth rate of NOPLAT will increase the stock price given RIOIC remains constant. Higher CV RIOIC, which indicates growth and sustainability, also results in higher stock price. However, stock value is less sensitive to CV ROIC than CV Growth of NOPLAT.

## **Marginal Tax Rate**

Unless these experience extreme changes in rates, they will do very little to influence stock price

## **CV ROIC vs WACC**

Higher growth in ROIC results in increased stock value, however it is marginal in comparison to changes in WACC. In conclusion, CV Growth of NOPLAT and the cost of capital (WACC) are the most sensitive inputs contained within our model.

## **Important Disclaimer**

This report was created by students enrolled in the Security Analysis (6F:112) class at the University of Iowa. The report was originally created to offer an internal investment recommendation for the University of Iowa Krause Fund and its advisory board. The report also provides potential employers and other interested parties an example of the students' skills, knowledge and abilities. Members of the Krause Fund are not registered investment advisors, brokers or officially licensed financial professionals. The investment advice contained in this report does not represent an offer or solicitation to buy or sell any of the securities mentioned. Unless otherwise noted, facts and figures included in this report are from publicly available sources. This report is not a complete compilation of data, and its accuracy is not guaranteed. From time to time, the University of Iowa, its faculty, staff, students, or the Krause Fund may hold a financial interest in the companies mentioned in this report.

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**Hubbell Inc.**

*Revenue Decomposition*

<i>Fiscal Years Ending Dec. 31</i>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
Net Sales	3668.8	4481.7	4591.0	3580.8	4216.4	4415.6	4646.6	4904.4
<b>Electrical Sales</b>	<b>2532.8</b>	<b>2660.6</b>	<b>2625.7</b>	<b>1969.3</b>	<b>2363.1</b>	<b>2423.3</b>	<b>2485.0</b>	<b>2548.3</b>
<i>% of Total Sales</i>	69.04%	59.37%	57.19%	55.00%	56.05%	54.88%	53.48%	51.96%
<i>% YOY Growth</i>	2.95%	5.05%	-1.31%	-25.00%	20.00%	2.55%	2.55%	2.55%
<b>Power Sales</b>	<b>1136.0</b>	<b>1821.1</b>	<b>1965.3</b>	<b>1611.5</b>	<b>1853.3</b>	<b>1992.3</b>	<b>2161.6</b>	<b>2356.2</b>
<i>% of Total Sales</i>	30.96%	40.63%	42.81%	45.00%	43.95%	45.12%	46.52%	48.04%
<i>% YOY Growth</i>	8.71%	60.31%	7.92%	-18.00%	15.00%	7.50%	8.50%	9.00%
<b>Total Net Sales</b>	<b>3668.8</b>	<b>4481.7</b>	<b>4591.0</b>	<b>3580.8</b>	<b>4216.4</b>	<b>4415.6</b>	<b>4646.6</b>	<b>4904.4</b>
<i>% YOY Growth</i>	4.67%	22.16%	2.44%	-22.00%	17.75%	4.72%	5.23%	5.55%

Net Sales	3668.8	4481.7	4591.0	3580.8	4216.4	4415.6	4646.6	4904.4
<b>United States</b>	<b>3280.9</b>	<b>4040.6</b>	<b>4190.5</b>	<b>3135.3</b>	<b>3691.8</b>	<b>3866.2</b>	<b>4068.5</b>	<b>4294.2</b>
<i>% of Total Sales</i>	89.43%	90.16%	91.28%	87.56%	87.56%	87.56%	87.56%	87.56%
<i>% YOY Growth</i>	4.24%	23.16%	3.71%	-25.18%	17.75%	4.72%	5.23%	5.55%
<b>International</b>	<b>387.9</b>	<b>441.1</b>	<b>400.5</b>	<b>406.7</b>	<b>395.0</b>	<b>383.6</b>	<b>372.6</b>	<b>361.9</b>
<i>% of Total Sales</i>	10.57%	9.84%	8.72%	11.36%	11.36%	11.36%	11.36%	11.36%
<i>% YOY Growth</i>	8.41%	13.71%	-9.20%	1.55%	1.55%	1.55%	1.55%	1.55%

**Hubbell Inc.**  
*Income Statement*

<b>Fiscal Years Ending Dec. 31</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
<b>Net sales</b>	<b>3668.8</b>	<b>4481.7</b>	<b>4591</b>	3580.8	4216.4	4415.6	4646.6	4904.4
Cost of goods sold	2516.9	3181.3	3238.3	2466.0	2903.8	3040.9	3200.0	3377.6
Deprecitation & Amortization	99.8	148.4	151.0	147.7	148.5	149.6	151.0	152.5
Depreciation	57.7	66.1	70.0	70.4	71.2	72.3	73.8	75.2
Amortization	40.5	82.3	81.0	77.2	77.2	77.2	77.2	77.2
<b>Gross profit</b>	<b>1151.9</b>	<b>1300.4</b>	<b>1352.7</b>	1114.8	1312.6	1374.6	1446.6	1526.8
Selling & administrative expenses	648.2	743.5	756.1	706.2	761.2	778.4	803.2	847.7
<b>Operating income (loss)</b>	<b>503.7</b>	<b>556.9</b>	<b>596.6</b>	408.5	551.5	596.3	643.4	679.1
Gain on disposition of business	0	0	21.7	0	0	0	0	0
Multi-employer pension charge	0	0	8.5	0	0	0	0	0
Interest expense	44.9	72.4	69.4	52.3	99.5	99.5	77.2	77.2
Investment income	0.9	0.1	1.5	0.36	0.37	0.37	0.37	0.37
Gain (loss) on extinguishment of debt	-10.1	0	0	0.0	0.0	0.0	0.0	0.0
Other income (expense), net	-6.5	-17.6	-21.4	-8.9	-9.6	-10.7	-11.3	-12.3
<b>Total other income (expense)</b>	<b>-60.6</b>	<b>-89.9</b>	<b>-76.1</b>	-43.0	-89.5	-88.4	-65.5	-64.5
Income before income taxes	443.1	467	520.5	365.5	461.9	507.8	577.9	614.6
Provision for income taxes	193.2	100.9	113.1	79.3	100.2	110.2	125.4	133.4
<b>Net income (loss)</b>	<b>249.9</b>	<b>366.1</b>	<b>407.4</b>	286.2	361.7	397.6	452.5	481.2
Less: net income attributable to noncontrolling interest	-6.8	-5.9	-6.5	-8.9	-9.6	-10.7	-11.3	-12.3
<b>Net income attributable to Hubbell</b>	<b>243.1</b>	<b>360.2</b>	<b>400.9</b>	277.3	352.1	386.9	441.2	468.9
Weighted average shares outstanding-basic	54.8	54.6	54.4	55.2	56.2	57.1	58.0	58.8
Net earnings (loss) per share-basic	4.42	6.57	7.35	5.03	6.27	6.78	7.61	7.98
Cash Dividends per Common Share	2.87	3.15	3.43	2.56	3.20	3.46	3.88	4.07

**Hubbell Inc.**

*Balance Sheet*

<b>Fiscal Years Ending Dec. 31</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
Cash & cash equivalents	375	189	182	441.7	457.0	576.0	709.5	854.8
Short-term investments	14.5	9.2	14.2	14.22	14.25	14.27	14.29	14.31
Accounts receivable, net	540.3	725.4	683	521.9	614.5	643.5	677.2	714.8
Inventories, net	634.7	651	633	516.8	608.5	637.3	670.6	707.8
Other current assets	39.6	69.1	62	62	62	62	62	62
<b>Total current assets</b>	<b>1604.1</b>	<b>1643.7</b>	<b>1574.2</b>	<b>1556.6</b>	<b>1756.3</b>	<b>1933.1</b>	<b>2133.6</b>	<b>2353.7</b>
Property, plant & equipment, net	458.3	502.1	505.2	510.9	518.8	529.3	539.7	554.4
Investments	57.7	56.3	55.7	56.1	56.4	56.8	57.2	57.5
Goodwill	1089	1784.4	1811.8	1811.8	1811.8	1811.8	1811.8	1811.8
Intangible assets, net	460.4	819.5	781.5	704.3	627.0	549.8	472.5	395.3
Other long-term assets	51.1	66.1	174.6	68.1	80.2	84.0	88.4	93.3
<b>Total assets</b>	<b>3720.6</b>	<b>4872.1</b>	<b>4903</b>	<b>4445.4</b>	<b>4534.2</b>	<b>4543.4</b>	<b>4565.5</b>	<b>4612.6</b>
Short-term & current portion of long-term debt	68.1	56.1	65.4	54.6	51.0	50.0	49.0	48.0
Accounts payable	326.5	393.7	347.7	286.8	337.7	353.6	372.1	392.8
Accrued salaries, wages & employee benefits	76.6	101.6	101.5	90.9	97.9	100.2	103.4	109.1
Accrued insurance	60	61.3	68.1	59.5	64.1	65.6	67.6	71.4
Other accrued liabilities	174.9	226.6	262.2	187.5	202.0	206.6	213.2	225.0
<b>Total current liabilities</b>	<b>706.1</b>	<b>839.3</b>	<b>844.9</b>	<b>679.2</b>	<b>752.7</b>	<b>776.0</b>	<b>805.3</b>	<b>846.3</b>
Long-term debt	987.1	1737.1	1506	1405.8	1380.4	1352.5	1324.8	1299.2
Other non-current liabilities	379.5	496.8	591.6	396.7	427.5	437.2	451.1	476.2
<b>Total liabilities</b>	<b>2072.7</b>	<b>3073.2</b>	<b>2942.5</b>	<b>2481.7</b>	<b>2560.6</b>	<b>2565.6</b>	<b>2581.2</b>	<b>2621.7</b>
Common Stock & Additional paid-in capital	11.6	1.9	0.6	0.0	3.5	1.5	1.4	1.6
Retained earnings	1892.4	2064.4	2279.4	2283.3	2289.5	2295.8	2302.4	2308.9
Accumulated other comprehensive income (loss)	-269.8	-285.7	-332.9	-332.9	-332.9	-332.9	-332.9	-332.9
<b>Total Hubbell shareholders' equity</b>	<b>1634.2</b>	<b>1780.6</b>	<b>1947.1</b>	<b>1950.4</b>	<b>1960.1</b>	<b>1964.4</b>	<b>1970.9</b>	<b>1977.6</b>
Non-controlling interests	13.7	18.3	13.4	13.4	13.4	13.4	13.4	13.4
<b>Total equity</b>	<b>1647.9</b>	<b>1798.9</b>	<b>1960.5</b>	<b>1963.8</b>	<b>1973.5</b>	<b>1977.8</b>	<b>1984.3</b>	<b>1991.0</b>
<b>Total Equity and Liabilities</b>	<b>3720.6</b>	<b>4872.1</b>	<b>4903.0</b>	<b>4445.4</b>	<b>4534.2</b>	<b>4543.4</b>	<b>4565.5</b>	<b>4612.6</b>

**Hubbell Inc.**
*Historical Cash Flow Statement*

<b>Fiscal Years Ending Dec. 31</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Net income (loss)	329.8	327.2	282.1	297.8	249.9	366.1	407.4
Depreciation & amortization	70.6	79.2	85.2	92.3	99.8	148.4	151
Deferred income taxes	13.3	30.3	-4.5	12.7	-14.3	49	6.1
Stock-based compensation	14.3	16.4	17	22.3	22.3	24.2	16.4
Gain on disposition of business	-	-	-	-	-	-	-21.7
Multi-employer pension charge	-	-	-	-	-	-	8.5
Tax benefit on stock-based awards	-8.4	-9.2	-2.3	-4.2	-	-	-
Loss on extinguishment of debt	-	-	-	-	10.1	-	-
Loss (gain) on sale of assets	0.2	-1.3	0.5	-5.8	-11.6	-4	-0.4
Accounts receivable	-30.9	-17.8	1.9	-42.3	3.9	-75.4	46.2
Inventories	-25.9	-46.9	-80.8	18.4	-90.3	34.2	12.2
Current liabilities	1.7	20	46.6	13.8	57.4	15.6	-36.2
Other assets & liabilities, net	15.8	15.4	6.1	8.4	50.7	-20.4	0.9
Contributions to qualified defined benefit pension plans	-3.2	-23.5	-22.6	-18	-1.7	-27.9	-10.4
Other cash flows from operating activities, net	4.5	1.7	1.9	2.8	2.8	7.3	11.6
<b>Net cash flows from operating activities</b>	<b>381.8</b>	<b>391.5</b>	<b>331.1</b>	<b>398.2</b>	<b>379</b>	<b>517.1</b>	<b>591.6</b>
Capital expenditures	-58.8	-60.3	-77.1	-67.2	-79.7	-96.2	-93.9
Acquisitions, net of cash acquired	-96.5	-183.8	-163.4	-173.4	-184.1	-1118	-70.8
Proceeds from disposal of business, net of cash	-	-	-	-	-	-	33.4
Purchases of available-for-sale investments	-11.1	-17.6	-24.5	-20	-20.9	-16.6	-14.1
Proceeds from sale of available-for-sale investments	10.5	12.1	13.8	13.3	17.4	20.5	12.5
Proceeds from disposition of assets	3.4	6	0.7	10.8	18.4	6.8	3.1
Other cash flows from investing activities, net	1.4	1	1.3	6.5	3.3	2.1	0.9
<b>Net cash flows from investing activities</b>	<b>-151.1</b>	<b>-242.6</b>	<b>-249.2</b>	<b>-230</b>	<b>-245.6</b>	<b>-1201.4</b>	<b>-128.9</b>
Issuance of long term debt, net	-	-	-	397	297.6	947.5	-
Extinguishment of long-term debt	-	-	-	-	-300	-	-
Issuance of short-term debt	0.4	2	48.8	1.2	66.3	0.8	0.7
Payment of short-term debt	-0.1	-0.8	-2	-51.5	-1.7	-38	-0.8
Make whole payment for extinguishment of long-term debt	-	-	-	-	-9.9	-	-
Payment of long-term debt	-	-	-	-	-	-168.8	-225
Debt issuance costs	-	-	-	-3.6	-3	-7.6	-
Payment of dividends	-109.5	-121.2	-133.7	-144	-157.6	-172.3	-186.6
Payment of dividends to noncontrolling interest	-1.5	-1.7	-5	-2.8	-3.5	-3.9	-11.3
Proceeds from exercise of stock options	2.4	2.4	-	-	-	-	-
Tax benefit from stock-based awards	8.4	9.2	2.3	4.2	-	-	-
Acquisition of common shares	-31	-105.5	-79.1	-246.8	-92.5	-40	-35
Payments for share reclassification	-	-	-200.7	-	-	-	-
Other cash flows from financing activities, net	-	-	-1.7	-0.5	-10	-11.2	-13
<b>Net cash flows from financing activities</b>	<b>-130.9</b>	<b>-215.6</b>	<b>-371.1</b>	<b>-46.8</b>	<b>-214.3</b>	<b>506.5</b>	<b>-471</b>
Effect of foreign currency exchange rate changes on cash & cash equivalents	-4.1	-20.1	-21.2	-27.3	18.3	-8.2	1.3
<b>Increase (decrease) in cash &amp; cash equivalents</b>	<b>95.7</b>	<b>-86.8</b>	<b>-310.4</b>	<b>94.1</b>	<b>-62.6</b>	<b>-186</b>	<b>-7</b>
Cash & cash equivalents, beginning of year	645	740.7	653.9	343.5	437.6	375	189
Cash & cash equivalents, end of year	740.7	653.9	343.5	437.6	375	189	182

**Hubbell Inc.**

*Forecasted Cash Flow Statement*

<b>Fiscal Years Ending Dec. 31</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
Net income (loss)	358.0821	421.64079	441.55684	464.66082	490.4421
Depreciation	70.43	71.23	72.32	73.79	75.25
Ammortization	77.24	77.24	77.24	77.24	77.24
Accounts Recievable	161.15	-92.63	-29.02	-33.67	-37.57
Inventory	116.21	-91.73	-28.74	-33.34	-37.21
Change in Accounts Payable	60.94	-50.90	-15.95	-18.50	-20.65
Accounts payable	-60.94	50.90	15.95	18.50	20.65
Accrued salaries, wages & employee benefits	-10.62	7.07	2.21	3.19	5.73
Accrued insurance	-8.62	4.63	1.45	2.09	3.75
Other accrued liabilities	-74.74	14.58	4.57	6.58	11.83
<b>Net cash flows from operating activities</b>	<b>689.13</b>	<b>412.03</b>	<b>541.59</b>	<b>560.53</b>	<b>589.47</b>
Capital expenditures	-76.17	-79.07	-82.82	-84.25	-89.93
Change in PP&E	-5.74	-7.83	-10.50	-10.46	-14.69
Intangible assets, net	-77.24	-77.24	-77.24	-77.24	-77.24
Other long-term assets	-106.49	12.09	3.79	4.39	4.90
Change in Equity	3.28	9.73	4.26	6.50	6.69
Change in Investments	0.36	0.36	0.37	0.37	0.37
<b>Net cash flows from investing activities</b>	<b>-262.00</b>	<b>-141.96</b>	<b>-162.14</b>	<b>-160.69</b>	<b>-169.90</b>
Change in short-term & current portion of long-term debt	10.81	3.63	0.92	1.01	1.00
Change in Long Term debt	100.21	25.41	27.92	27.67	25.55
Payment of dividends	\$(191.82)	\$(197.200)	\$(202.72)	\$(208.39)	\$(214.23)
Non-Controlling Interest	13.4	13.4	13.4	13.4	13.4
Accuisition of Common Shares	-100	-100	-100	-100	-100
<b>Net cash flows from financing activities</b>	<b>-167.40</b>	<b>-254.76</b>	<b>-260.48</b>	<b>-266.31</b>	<b>-274.27</b>
<b>Increase (decrease) in cash &amp; cash equivalents</b>	<b>259.73</b>	<b>15.32</b>	<b>118.97</b>	<b>133.53</b>	<b>145.30</b>
Cash & cash equivalents, beginning of year	\$182.00	\$441.73	\$457.05	\$576.02	\$709.55
Cash & cash equivalents, end of year	\$441.73	\$457.05	\$576.02	\$709.55	\$854.85



**Hubbell Inc.**

*Common Size Income Statement*

<b>Fiscal Years Ending Dec. 31</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
<b>Net sales</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of goods sold	68.60%	70.98%	70.54%	68.87%	68.87%	68.87%	68.87%	68.87%
Depreciation & Amortization	2.72%	3.31%	3.29%	4.12%	3.52%	3.39%	3.25%	3.11%
Depreciation	1.57%	1.47%	1.52%	1.97%	1.69%	1.64%	1.59%	1.53%
Amortization	1.10%	1.84%	1.76%	2.16%	1.83%	1.75%	1.66%	1.57%
<b>Gross profit</b>	<b>31.40%</b>	<b>29.02%</b>	<b>29.46%</b>	<b>31.13%</b>	<b>31.13%</b>	<b>31.13%</b>	<b>31.13%</b>	<b>31.13%</b>
Selling & administrative expenses	17.67%	16.59%	16.47%	19.72%	18.05%	17.63%	17.28%	17.28%
<b>Operating income (loss)</b>	<b>13.73%</b>	<b>12.43%</b>	<b>12.99%</b>	<b>11.41%</b>	<b>13.08%</b>	<b>13.50%</b>	<b>13.85%</b>	<b>13.85%</b>
Gain on disposition of business	-	-	0.47%	0.00%	0.00%	0.00%	0.00%	0.00%
Multi-employer pension charge	-	-	0.19%	0.00%	0.00%	0.00%	0.00%	0.00%
Interest expense	1.22%	1.62%	1.51%	1.46%	2.36%	2.25%	1.66%	1.57%
Investment income	0.02%	0.00%	0.03%	0.01%	0.01%	0.01%	0.01%	0.01%
Gain (loss) on extinguishment of debt	-0.28%	-	-	0.00%	0.00%	0.00%	0.00%	0.00%
Other income (expense), net	-0.18%	-0.39%	-0.47%	-0.25%	-0.23%	-0.24%	-0.24%	-0.25%
<b>Total other income (expense)</b>	<b>-1.65%</b>	<b>-2.01%</b>	<b>-1.66%</b>	<b>-1.20%</b>	<b>-2.12%</b>	<b>-2.00%</b>	<b>-1.41%</b>	<b>-1.32%</b>
Income before income taxes	12.08%	10.42%	11.34%	10.21%	10.96%	11.50%	12.44%	12.53%
Provision for income taxes	5.27%	2.25%	2.46%	2.22%	2.38%	2.50%	2.70%	2.72%
<b>Net income (loss)</b>	<b>6.81%</b>	<b>8.17%</b>	<b>8.87%</b>	<b>7.99%</b>	<b>8.58%</b>	<b>9.01%</b>	<b>9.74%</b>	<b>9.81%</b>
Less: net income attributable to noncontrolling interest	-0.19%	-0.13%	-0.14%	-0.25%	-0.23%	-0.24%	-0.24%	-0.25%
<b>Net income attributable to Hubbell</b>	<b>6.63%</b>	<b>8.04%</b>	<b>8.73%</b>	<b>7.74%</b>	<b>8.35%</b>	<b>8.76%</b>	<b>9.49%</b>	<b>9.56%</b>

**Hubbell Inc.**

*Common Size Balance Sheet*

<b>Fiscal Years Ending Dec. 31</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
Cash & cash equivalents	10.08%	3.88%	3.71%	9.94%	10.08%	12.68%	15.54%	18.53%
Short-term investments	0.39%	0.19%	0.29%	0.32%	0.31%	0.31%	0.31%	0.31%
Accounts receivable, net	14.52%	14.89%	13.93%	11.74%	13.55%	14.16%	14.83%	15.50%
Inventories, net	17.06%	13.36%	12.91%	11.63%	13.42%	14.03%	14.69%	15.35%
Other current assets	1.06%	1.42%	1.26%	1.39%	1.37%	1.36%	1.36%	1.34%
<b>Total current assets</b>	<b>43.11%</b>	<b>33.74%</b>	<b>32.11%</b>	<b>35.02%</b>	<b>38.73%</b>	<b>42.55%</b>	<b>46.73%</b>	<b>51.03%</b>
Property, plant & equipment, net	12.32%	10.31%	10.30%	11.49%	11.44%	11.65%	11.82%	12.02%
Investments	1.55%	1.16%	1.14%	1.26%	1.24%	1.25%	1.25%	1.25%
Goodwill	29.27%	36.62%	36.95%	40.76%	39.96%	39.88%	39.68%	39.28%
Intangible assets, net	12.37%	16.82%	15.94%	15.84%	13.83%	12.10%	10.35%	8.57%
Other long-term assets	1.37%	1.36%	3.56%	1.53%	1.77%	1.85%	1.94%	2.02%
<b>Total assets</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Short-term & current portion of long-term debt	1.83%	1.15%	1.34%	1.23%	1.12%	1.10%	1.07%	1.04%
Accounts payable	8.78%	8.08%	7.09%	6.45%	7.45%	7.78%	8.15%	8.51%
Accrued salaries, wages & employee benefits	2.06%	2.09%	2.07%	2.04%	2.16%	2.20%	2.26%	2.36%
Accrued insurance	1.61%	1.26%	1.39%	1.34%	1.41%	1.44%	1.48%	1.55%
Other accrued liabilities	4.70%	4.65%	5.35%	4.22%	4.46%	4.55%	4.67%	4.88%
<b>Total current liabilities</b>	<b>18.98%</b>	<b>17.23%</b>	<b>17.23%</b>	<b>15.28%</b>	<b>16.60%</b>	<b>17.08%</b>	<b>17.64%</b>	<b>18.35%</b>
Long-term debt	26.53%	35.65%	30.72%	31.62%	30.44%	29.77%	29.02%	28.17%
Other non-current liabilities	10.20%	10.20%	12.07%	8.92%	9.43%	9.62%	9.88%	10.32%
<b>Total liabilities</b>	<b>55.71%</b>	<b>63.08%</b>	<b>60.01%</b>	<b>55.82%</b>	<b>56.47%</b>	<b>56.47%</b>	<b>56.54%</b>	<b>56.84%</b>
Common Stock & Additional paid-in capital	0.31%	0.04%	-	0.00%	0.08%	0.03%	0.03%	0.03%
Retained earnings	50.86%	42.37%	46.49%	51.36%	50.49%	50.53%	50.43%	50.05%
Accumulated other comprehensive income (loss)	-7.25%	-5.86%	-6.79%	-7.49%	-7.34%	-7.33%	-7.29%	-7.22%
<b>Total Hubbell shareholders' equity</b>	<b>43.92%</b>	<b>36.55%</b>	<b>39.71%</b>	<b>43.87%</b>	<b>43.23%</b>	<b>43.24%</b>	<b>43.17%</b>	<b>42.87%</b>
Non-controlling interests	0.37%	0.38%	0.27%	0.30%	0.30%	0.29%	0.29%	0.29%
<b>Total equity</b>	<b>44.29%</b>	<b>36.92%</b>	<b>39.99%</b>	<b>44.18%</b>	<b>43.53%</b>	<b>43.53%</b>	<b>43.46%</b>	<b>43.16%</b>
<b>Total Equity and Liabilities</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Hubbell Inc.**

Value Driver Estimation

<b>Fiscal Years Ending Dec. 31</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
<b>NOPLAT:</b>	<b>279.36</b>	<b>532.50</b>	<b>480.10</b>	<b>318.43</b>	<b>429.44</b>	<b>464.08</b>	<b>501.11</b>	<b>528.72</b>
Net Sales	3668.8	4481.7	4591.0	3580.8	4216.4	4415.6	4646.6	4904.4
- COGS (exclude D&A)	2417.1	3032.9	3087.3	2318.4	2755.3	2891.4	3049.0	3225.1
- Depreciation & Amortization	99.8	148.4	151.0	147.7	148.5	149.6	151.0	152.5
- SG&A	648.2	743.5	756.1	706.2	761.2	778.4	803.2	847.7
+ Implied Intrest on Operating Leases	3.32	2.95	4.22	4.27	4.34	4.42	4.51	4.63
<b>EBITA</b>	<b>507.02</b>	<b>559.85</b>	<b>600.82</b>	<b>412.80</b>	<b>555.80</b>	<b>600.68</b>	<b>647.92</b>	<b>683.74</b>
Consolidated Effective Income Tax Rate	33.1%	24.4%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%
Provisions for Income Tax	193.2	100.9	113.1	79.3	100.2	110.2	125.4	133.4
+ Tax Shield on Intrest Exp	14.86	17.67	16.03	12.08	22.98	22.98	17.83	17.83
- Tax on Investment Income	0.30	0.02	0.35	0.08	0.08	0.09	0.09	0.09
- Tax on Gain (loss) on extinguishment of debt	-3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Tax on Other income (expense), net	-2.15	-4.29	-4.94	-2.07	-2.22	-2.48	-2.62	-2.84
- Tax on Gain on disposition of business	0.00	0.00	5.01	0.00	0.00	0.00	0.00	0.00
- Tax on Multi-employer pension charge	0.00	0.00	1.96	0.00	0.00	0.00	0.00	0.00
+ Tax Shield on Op Leases	1.10	0.72	0.98	0.99	1.00	1.02	1.04	1.07
<b>Total Adjusted Taxes</b>	<b>214.36</b>	<b>123.56</b>	<b>127.73</b>	<b>94.37</b>	<b>126.36</b>	<b>136.60</b>	<b>146.81</b>	<b>155.02</b>
Deferred Tax Liability	17.4	113.6	120.6	120.6	120.6	120.6	120.6	120.6
<b>Change in Deferred Taxes</b>	<b>-13.3</b>	<b>96.2</b>	<b>7.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Invested Capital (IC):</b>	<b>1307.09</b>	<b>1738.45</b>	<b>1657.69</b>	<b>1531.97</b>	<b>1563.69</b>	<b>1528.63</b>	<b>1493.61</b>	<b>1448.90</b>
<i>Current Operating Assets</i>	<i>1287.98</i>	<i>1535.13</i>	<i>1469.82</i>	<i>1172.26</i>	<i>1369.33</i>	<i>1431.08</i>	<i>1502.72</i>	<i>1582.66</i>
Normal Cash (2% Sales)	73.38	89.63	91.82	71.62	84.33	88.31	92.93	98.09
Accounts Receivable	540.3	725.4	683.0	521.9	614.5	643.5	677.2	714.8
Inventory	634.7	651.0	633.0	516.8	608.5	637.3	670.6	707.8
Other Current Assets	39.6	69.1	62.0	62.0	62.0	62.0	62.0	62.0
<i>Current Operating Liabilities</i>	<i>638.00</i>	<i>783.20</i>	<i>779.50</i>	<i>624.58</i>	<i>701.76</i>	<i>725.94</i>	<i>756.29</i>	<i>798.26</i>
Accounts payable	326.5	393.7	347.7	286.8	337.7	353.6	372.1	392.8
Accrued salaries, wages & employee benefits	76.6	101.6	101.5	90.9	97.9	100.2	103.4	109.1
Accrued insurance	60.0	61.3	68.1	59.5	64.1	65.6	67.6	71.4
Other accrued liabilities	174.9	226.6	262.2	187.5	202.0	206.6	213.2	225.0
<b>Net Operating Working Capital</b>	<b>649.98</b>	<b>751.93</b>	<b>690.32</b>	<b>547.68</b>	<b>667.57</b>	<b>705.14</b>	<b>746.43</b>	<b>784.40</b>
<b>Net PPE</b>	<b>458.3</b>	<b>502.1</b>	<b>505.2</b>	<b>510.9</b>	<b>518.8</b>	<b>529.3</b>	<b>539.7</b>	<b>554.4</b>
<b>Other L-T Operating Assets</b>	<b>578.32</b>	<b>981.22</b>	<b>1053.77</b>	<b>870.04</b>	<b>804.88</b>	<b>731.43</b>	<b>658.58</b>	<b>586.24</b>
PV of Operating Leases	66.8	95.6	97.7	97.7	97.7	97.7	97.7	97.7
Intangible assets, net	460.4	819.5	781.5	704.3	627.0	549.8	472.5	395.3
Other long-term assets	51.1	66.1	174.6	68.1	80.2	84.0	88.4	93.3
<b>Other L-T Operating Liabilities</b>	<b>379.50</b>	<b>496.80</b>	<b>591.60</b>	<b>396.69</b>	<b>427.54</b>	<b>437.21</b>	<b>451.12</b>	<b>476.15</b>
Other non-current liabilities	379.5	496.8	591.6	396.7	427.5	437.2	451.1	476.2
<b>Free Cash Flow (FCF):</b>								
	\$	\$	\$	\$	\$	\$	\$	\$
NOPLAT	279.36	532.50	480.10	318.43	429.44	464.08	501.11	528.72
Change in IC	61.21	431.36	-80.76	-125.72	31.72	-35.06	-35.02	-44.71
<b>FCF</b>	<b>218.15</b>	<b>101.14</b>	<b>560.86</b>	<b>444.15</b>	<b>397.72</b>	<b>499.14</b>	<b>536.13</b>	<b>573.43</b>
<b>Return on Invested Capital (ROIC):</b>								
NOPLAT	279.36	532.50	480.10	318.43	429.44	464.08	501.11	528.72
Beg. IC	1245.89	1307.09	1738.45	1657.69	1531.97	1563.69	1528.63	1493.61
<b>ROIC</b>	<b>22.42%</b>	<b>40.74%</b>	<b>27.62%</b>	<b>19.21%</b>	<b>28.03%</b>	<b>29.68%</b>	<b>32.78%</b>	<b>35.40%</b>
<b>Economic Profit (EP):</b>								
Beg. IC	1245.89	1307.09	1738.45	1657.69	1531.97	1563.69	1528.63	1493.61
x (ROIC - WACC)	14.47%	32.78%	19.66%	11.25%	20.07%	21.72%	24.82%	27.44%
<b>EP</b>	<b>180.22</b>	<b>428.49</b>	<b>341.76</b>	<b>186.52</b>	<b>307.54</b>	<b>339.65</b>	<b>379.47</b>	<b>409.87</b>

## Hubbell Inc.

### Weighted Average Cost of Capital (WACC) Estimation

#### Cost of Equity:

Risk-Free Rate	0.65%
Beta	1.40
Equity Risk Premium	6.16%
<b>Cost of Equity</b>	<b>9.27%</b>

#### ASSUMPTIONS:

10 yr UST  
Yahoo Finance  
Implied Equity Risk Premium (April 2020)

#### Cost of Debt:

Risk-Free Rate	0.65%
Implied Default Premium	3.77%
Pre-Tax Cost of Debt	3.63%
Marginal Tax Rate	23%
<b>After-Tax Cost of Debt</b>	<b>2.79%</b>

10 yr UST  
Pre-tax cost of debt - RF  
Senior note 2022

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		MV Weights
<b>Market Value of Common Equity:</b>		
Total Shares Outstanding	54.4	
Current Stock Price	\$120.47	
<b>MV of Equity</b>	<b>6,553.57</b>	<b>79.70%</b>
<b>Market Value of Debt:</b>		
Short-Term Debt	65.4	
Long-Term Debt	1506	
PV of Operating Leases	97.66704	
<b>MV of Total Debt</b>	<b>1,669.07</b>	<b>20.30%</b>
<b>Market Value of the Firm</b>	<b>8,222.64</b>	<b>100.00%</b>
<b>Estimated WACC</b>		<b>7.96%</b>

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## Hubbell Inc.

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

#### Key Inputs:

CV Growth of NOPLAT	2.75%
CV Year ROIC	35.40%
WACC	7.96%
Cost of Equity	9.27%

Fiscal Years Ending Dec. 31	2020E	2021E	2022E	2023E	CV 2024
<b>DCF Model:</b>					
Noplat	\$ 318.43	\$ 429.44	\$ 464.08	\$ 501.11	\$ 528.72
IC	1531.97	1563.69	1528.63	1493.61	1448.90
FCF	\$ 444.15	\$ 397.72	\$ 499.14	\$ 536.13	\$ 573.43
ROIC	19.21%	28.03%	29.68%	32.78%	35.40%
EP	186.52	307.54	339.65	379.47	409.87
CV (t=4)					\$ 9,364.50
FCFF to Disc	444.1	397.7	499.1	536.1	9364.5
Periods to Disc	1.0	2.0	3.0	4.0	4.0
PV of FCF	411.4	341.2	396.7	394.7	6894.1
Value of Operating Assets:	8438.1				
(+) Excess Cash	90.2				
(+) Short Term Investments	14.2				
(+) Long Term Investments	55.7				
(-) Total Debt	-1571.4				
(-) PV of Operating Leases	-97.7				
(-) Non-Controlling Interests	-13.4				
(-) Underfunded Pension	-195.3				
(-) Employee Stock Options	-32.5				
Value of Equity	6687.9				
Shares Outstanding	54.4				
Intrinsic Value of Last FYE	\$ 122.94				
<b>Implied Price as of Today</b>	<b>\$ 125.24</b>				
<b>EP Model:</b>					
NOPLAT	318.43	429.44	464.08	501.11	528.72
Beg. IC	1657.69	1531.97	1563.69	1528.63	1493.61
ROIC	19.21%	28.03%	29.68%	32.78%	35.40%
EP	186.52	307.54	339.65	379.47	409.87
CV (t=4)					\$ 7,870.89
EP to Disc	186.5	307.5	339.6	379.5	7870.9
Periods to Disc	1.0	2.0	3.0	4.0	4.0
PV of EP	172.8	263.9	269.9	279.4	5794.5
Total PV of EP	6780.4				
Invested Capital (last FYE)	1657.7				
Value of Operating Assets:	8438.1				
(+) Excess Cash	90.2				
(+) Short Term Investments	14.2				
(+) Long Term Investments	55.7				
(-) Total Debt	-1571.4				
(-) PV of Operating Leases	-97.7				
(-) Non-Controlling Interests	-13.4				
(-) Underfunded Pension	-195.3				
(-) Employee Stock Options	-32.5				
Value of Equity	6687.9				
Shares Outstanding	54.4				
Intrinsic Value of Last FYE	\$ 122.94				
<b>Implied Price as of Today</b>	<b>\$ 125.24</b>				



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

<b>Fiscal Years Ending Dec. 31</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
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EPS	\$ 5.03	\$ 6.27	\$ 6.78	\$ 7.61	\$ 7.98
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**Key Assumptions**

CV growth of EPS	4.82%
CV Year ROE	24.21%
Cost of Equity	9.27%

**Future Cash Flows**

P/E Multiple (CV Year)					17.97
EPS (CV Year)					\$ 7.98
Future Stock Price					\$ 143.41
Dividends Per Share	2.56	3.20	3.46	3.88	4.07
Discounted Cash Flows	2.35	2.68	2.65	2.72	\$ 100.581

Intrinsic Value as of Last FYE	\$ 110.98
<b>Implied Price as of Today</b>	<b>\$ 113.04</b>

**Hubbell Inc.***Relative Valuation Models*

Ticker	Company	Price	EPS 2020E	EPS 2021E	P/E 20	P/E 21
EMR	Emerson Electric Co.	\$50.84	\$3.23	\$3.50	15.74	14.53
KEYS	Eeyesight Technologies, Inc.	\$89.59	\$5.10	\$5.46	17.57	16.41
GNRC	Generac Holdings, Inc.	\$90.28	\$4.74	\$5.50	19.05	16.41
BWXT	BWX Technologies, Inc.	\$51.25	\$2.80	\$3.07	18.30	16.69
AYI	Acuity Brands, Inc.	\$87.19	\$7.36	\$8.08	11.85	10.79
RBC	Regal Beloit Corporation	\$67.71	\$4.72	\$6.04	14.35	11.21
				Average	<b>16.14</b>	<b>14.34</b>
HUBB	Hubbell Inc.	\$120.47	\$5.03	\$6.27	24.0	19.2

**Implied Relative Value:****P/E (EPS20)****\$81.12****P/E (EPS21)****\$89.90**

**Hubbell Inc.**

*Key Management Ratios*

<i>Fiscal Years Ending Dec. 31</i>		2017	2018	2019	2020E	2021E	2022E	2023E	CV 2024
<b>Liquidity Ratios:</b>									
Current Ratio	Current Assets/Current Liabilities	2.27	1.96	1.86	2.29	2.33	2.49	2.65	2.78
Quick Ratio	(Current Assets - Inventories)/Current Liabilities	1.37	1.18	1.11	1.53	1.52	1.67	1.82	1.94
Cash Ratio	Cash and Marketable Securities/Current Liabilities	0.55	0.24	0.23	0.67	0.63	0.76	0.90	1.03
<b>Asset-Management Ratios:</b>									
Asset Turnover	Net Sales/Total Assets	0.99	0.92	0.94	0.81	0.93	0.97	1.02	1.06
Inventory Turnover	COGS/Average Inventory	4.31	4.95	5.04	4.29	5.16	4.88	4.89	4.90
Inventory Conversion Ratio	365/Inventory Turnover	84.63	73.76	72.36	85.09	70.73	74.77	74.59	74.48
<b>Financial Leverage Ratios:</b>									
Debt Ratio	Total Liabilities/Total Assets	0.56	0.63	0.60	0.56	0.56	0.56	0.57	0.57
Debt to Equity Ratio	(Total Debt + PV of Leases)/Average Shareholders Equity		0.69	1.10	0.89	0.79	0.78	0.76	0.74
Long-Term Debt to Equity Ratio	Long-Term Debt/Average Shareholders Equity	0.61	1.01	0.80	0.72	0.70	0.68	0.67	0.65
<b>Profitability Ratios:</b>									
Gross Margin	Gross Profit/Net Sales	31.40%	29.02%	29.46%	31.13%	31.13%	31.13%	31.13%	31.13%
Profit Margin	Operating Income/Net Sales	13.73%	12.43%	12.99%	11.41%	13.08%	13.50%	13.85%	13.85%
ROE	Net Income/Average Shareholders Equity	15.37%	21.24%	21.67%	14.59%	18.37%	20.13%	22.84%	24.21%
ROA	Net Income/Average Total Assets	6.90%	8.52%	8.34%	6.12%	8.06%	8.76%	9.94%	10.49%
<b>Payout Policy Ratios:</b>									
Dividend Payout Ratio	Dividend Payment/Net Income	64.93%	47.95%	46.67%	51.02%	51.02%	51.02%	51.02%	51.02%
Total Payout Ratio	(Dividends + Repurchases)/Net Income	100.08%	57.99%	54.39%	101.96%	82.17%	76.13%	68.15%	65.30%

**Hubbell Inc.***Present Value of Operating Lease Obligations*

<b>Fiscal Years Ending Dec. 31</b>		<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Year	1	12.3	15.5	13.3	13.3	18.7	18.0	23.5	32.7
Year	2	9.4	11.4	10.4	10.3	16.7	15.6	21.0	24.6
Year	3	6.9	8.6	6.8	8.7	13.0	10.8	16.5	15.8
Year	4	4.6	5.7	5.3	6.7	9.3	8.2	13.2	13.2
Year	5	2.8	4.4	3.5	4.5	7.0	6.2	10.5	8.4
Thereafter		13.8	17.0	13.4	13.3	23.1	18.8	26.5	15.9
Total Minimum Payments		49.8	62.6	52.7	56.8	87.8	77.6	111.2	110.6
Less: Cumulative Interest		7.4	9.1	7.4	7.9	12.7	10.8	15.6	12.9
<b>PV of Minimum Payments</b>		<b>42.4</b>	<b>53.5</b>	<b>45.3</b>	<b>48.9</b>	<b>75.1</b>	<b>66.8</b>	<b>95.6</b>	<b>97.7</b>
<b>Implied Interest in Year 1 Payment</b>		<b>54.5</b>	<b>1.9</b>	<b>2.4</b>	<b>2.0</b>	<b>2.2</b>	<b>3.3</b>	<b>3.0</b>	<b>4.2</b>
Pre-Tax Cost of Debt		4.42%	4.42%	4.42%	4.42%	4.42%	4.42%	4.42%	4.42%
Years Implied by Year 6 Payment		4.9	3.9	3.8	3.0	3.3	3.0	2.5	1.9
Expected Obligation in Year 6 & Beyond		2.8	4.4	3.5	4.5	7	6.2	10.5	8.4
Present Value of Lease Payments									
PV of Year 1		11.8	14.8	12.7	12.7	17.9	17.2	22.5	31.3
PV of Year 2		8.6	10.5	9.5	9.4	15.3	14.3	19.3	22.6
PV of Year 3		6.1	7.6	6.0	7.6	11.4	9.5	14.5	13.9
PV of Year 4		3.9	4.8	4.5	5.6	7.8	6.9	11.1	11.1
PV of Year 5		2.3	3.5	2.8	3.6	5.6	5.0	8.5	6.8
PV of 6 & beyond		9.8	12.3	9.7	9.8	17.0	13.9	19.8	12.0
Capitalized PV of Payments		42.4	53.5	45.3	48.9	75.1	66.8	95.6	97.7

**Hubbell Inc.***Valuation of Options Granted under ESOP*

Current Stock Price	\$120.47
Risk Free Rate	0.65%
Current Dividend Yield	2.85%
Annualized St. Dev. of Stock Returns	22.70%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Range 1	1.57	110.66	6.80	\$ 20.71	\$ 33
Total	1.57	110.66	6.80	\$ 32.88	\$ 32.55



**Hubbell Inc.***Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding*

Number of Options Outstanding (shares):	1.57
Average Time to Maturity (years):	<u>6.80</u>
Expected Annual Number of Options Exercised:	0.23

	\$
Current Average Strike Price:	110.66
Cost of Equity:	9.27%
Current Stock Price:	\$120.47

<b>Fiscal Years Ending Dec. 31</b>	<b>2020E</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>CV 2024</b>
Increase in Shares Outstanding:	0	0	0	0	0
	\$	\$	\$	\$	\$
Average Strike Price:	110.66	110.66	110.66	110.66	110.66
<b>Increase in Common Stock Account:</b>	<b>25.5820</b>	<b>25.5820</b>	<b>25.5820</b>	<b>25.5820</b>	<b>25.5820</b>
Change in Treasury Stock	-65.00	-100.00	-100.00	-100.00	-100.00
	\$	\$	\$	\$	\$
Expected Price of Repurchased Shares:	120.47	131.64	143.85	157.19	171.77
<b>Number of Shares Repurchased:</b>	<b>(0.5396)</b>	<b>(0.7596)</b>	<b>(0.6952)</b>	<b>(0.6362)</b>	<b>(0.5822)</b>
Shares Outstanding (beginning of the year)	54.4000	55.1707	56.1615	57.0879	57.9552
Plus: Shares Issued Through ESOP	0.2312	0.2312	0.2312	0.2312	0.2312
Less: Shares Repurchased in Treasury	-0.5396	-0.7596	-0.6952	-0.6362	-0.5822
<b>Shares Outstanding (end of the year)</b>	<b>55.1707</b>	<b>56.1615</b>	<b>57.0879</b>	<b>57.9552</b>	<b>58.7686</b>

**Hubbell Inc.**

*Sensitivity Tables*

CV Growth of NOPLAT

	125.24	2%	2.25%	2.50%	2.75%	3%	3.25%	3.50%
WACC	7.66%	119.19	123.91	129.08	134.78	141.09	148.11	155.98
	7.76%	116.55	121.06	126.01	131.45	137.46	144.13	151.59
	7.86%	113.99	118.32	123.05	128.24	133.97	140.32	147.40
	7.96%	111.58	115.73	120.27	125.24	130.71	136.77	143.50
	8.06%	109.13	113.11	117.45	122.20	127.41	133.17	139.57
	8.16%	106.81	110.64	114.80	119.34	124.33	129.82	135.90
	8.26%	104.57	108.25	112.24	116.59	121.36	126.60	132.39

CV Growth of NOPLAT

	125.24	2%	2.25%	2.50%	2.75%	3%	3.25%	3.50%
CV ROIC	32.40%	110.94	114.98	119.40	124.23	129.56	135.45	142.00
	33.40%	111.17	115.25	119.71	124.59	129.97	135.92	142.53
	34.50%	111.40	115.52	120.02	124.96	130.39	136.40	143.08
	35.40%	111.58	115.73	120.27	125.24	130.71	136.77	143.50
	36.40%	111.77	115.96	120.53	125.54	131.06	137.16	143.94
	37.40%	111.95	116.17	120.77	125.82	131.38	137.53	144.36
	38.40%	112.12	116.37	121.01	126.09	131.69	137.88	144.76

Marginal Tax Rate

	125.24	21.60%	22.10%	22.60%	23.10%	23.60%	24.10%	24.60%
Pre-Tax Cost of Debt	2.92%	124.53	124.64	124.75	124.86	124.97	125.08	125.19
	3.42%	124.66	124.77	124.88	124.99	125.10	125.21	125.33
	3.92%	124.79	124.90	125.01	125.12	125.23	125.34	125.45
	4.42%	124.91	125.02	125.13	125.24	125.35	125.46	125.58
	4.92%	125.03	125.14	125.25	125.36	125.47	125.58	125.70
	5.42%	125.14	125.25	125.36	125.48	125.59	125.70	125.81
	5.92%	125.25	125.36	125.48	125.59	125.70	125.81	125.92
	6.42%	125.36	125.47	125.58	125.69	125.81	125.92	126.03

CV ROIC

	125.24	32.40%	33.40%	34.40%	35.40%	36.40%	37.40%	38.40%
WACC	7.66%	133.70	134.08	134.44	134.78	135.10	135.40	135.69
	7.76%	130.39	130.76	131.11	131.45	131.76	132.05	132.34
	7.86%	127.21	127.58	127.92	128.24	128.55	128.84	129.11
	7.96%	124.23	124.59	124.92	125.24	125.54	125.82	126.09
	8.06%	121.21	121.56	121.89	122.20	122.49	122.76	123.03
	8.16%	118.38	118.72	119.04	119.34	119.63	119.90	120.15
	8.26%	115.65	115.98	116.29	116.59	116.87	117.13	117.38

