



Date: 11/24/2020
Company Ticker: KE
Sector: IT
Industry: Semiconductors
All numbers in thousands

Firm P/E: 19.34
Sector Forward P/E: 24.5
Firm Book-to-Market: 1.09
Target Price: \$19.38
Current Price: \$16.11

Recommendation: HOLD

Company Summary

Kimball Electronics, Inc. provides contract electronics manufacturing services and diversified manufacturing services to customers in the automotive, medical, industrial, and public safety end markets. The company's manufacturing services include design services and support, supply chain services and support, and rapid prototyping and product introduction support services, as well as product design, and process validation and qualification services. Its manufacturing services also comprise industrialization and automation of manufacturing processes; reliability testing, including testing of products under a series of environmental conditions; production and testing of printed circuit board assemblies; assembly, production, and packaging of medical disposables and other non-electronic products; design engineering and manufacturing of automation equipment, test and inspection equipment, and precision molded plastics; software design services; and product life cycle management services. The company has operations in the United States, China, Mexico, Poland, Romania, Thailand, and Vietnam. Kimball Electronics, Inc. was founded in 1961 and is headquartered in Jasper, Indiana.

Industry Outlook

Between the U.S. and China trade tensions and the affect the coronavirus has had on the global supply chain, the semiconductor industry has been hit hard over the last year. The \$19 billion industry is expected to decline 10.5% in 2020 but is expected to rise 5% annually over the next five years, according IBISWorld. A vaccine arriving in the near future will help restore the global supply chain, but the speed of the recovery will be uncertain. With the world depending on technology more than ever, demand for semiconductors is not expected to slow down anytime soon. Industry value added (IVA) is expected to grow at a rate of 3.1% while U.S. GDP is to grow at a rate of 1.9%.

Earnings Forecast

	FY 2016A	FY 2017A	FY 2018A	FY 2019A	FY 2020A	FY 2021E	FY 2022E	FY 2023E
Revenue	\$ 842,060	\$ 930,914	\$ 1,072,061	\$ 1,181,844	\$ 1,200,550	\$ 1,224,561	\$ 1,249,052	\$ 1,274,033
COGS	\$ 777,522	\$ 855,319	\$ 986,031	\$ 1,093,438	\$ 1,116,709	\$ 1,139,043	\$ 1,161,824	\$ 1,185,061
Gross Profit	\$ 64,538	\$ 75,595	\$ 86,030	\$ 88,406	\$ 83,841	\$ 85,518	\$ 87,228	\$ 88,973
S&A Exp.	\$ 34,816	\$ 36,543	\$ 43,992	\$ 46,653	\$ 43,920	\$ 48,418	\$ 48,935	\$ 49,893
Other General Income	\$ -	\$ (4,005)	\$ -	\$ (307)	\$ -			
Goodwill Impairment	\$ -	\$ -	\$ -	\$ -	\$ 7,925			
Operating Income	\$ 29,722	\$ 43,057	\$ 42,038	\$ 42,060	\$ 31,996	\$ 37,100	\$ 38,294	\$ 39,079
Other Income (Expense):								
Interest income	\$ 79	\$ 64	\$ 73	\$ 62	\$ 60	\$ 65	\$ 65	\$ 63
Interest expense	\$ (80)	\$ (271)	\$ (527)	\$ (4,069)	\$ (4,421)	\$ (4,421)	\$ (4,421)	\$ (4,421)
Non-operating income	\$ 166	\$ 2,319	\$ 3,647	\$ 1,483	\$ 2,103	\$ 2,388	\$ 2,405	\$ 2,095
Non-operating expense	\$ (1,911)	\$ (914)	\$ (456)	\$ (1,051)	\$ (4,581)	\$ (1,083)	\$ (1,083)	\$ (1,666)
Other income (expense), net	\$ (1,746)	\$ 1,198	\$ 2,737	\$ (3,575)	\$ (6,839)	\$ (3,051)	\$ (3,034)	\$ (3,929)
Income before taxes on income	\$ 27,976	\$ 44,255	\$ 44,775	\$ 38,485	\$ 25,157	\$ 34,049	\$ 35,260	\$ 35,150
Provision for Income Taxes	\$ 5,689	\$ 10,076	\$ 28,023	\$ 6,927	\$ 6,961	\$ 7,150	\$ 7,405	\$ 7,382
Net income (loss)	\$ 22,287	\$ 34,179	\$ 16,752	\$ 31,558	\$ 18,196	\$ 26,899	\$ 27,855	\$ 27,769

IBISWorld projects the semiconductor industry to grow 5% annually over the next five years. We used a much more conservative projection of 2% revenue growth as opposed to the 5% revenue growth. With the combination of covid-19, trade tensions, and economies that will most likely take years to recover from the pandemic, we think a 2% growth rate is more realistic. We forecasted cost of goods sold as a percentage of revenue to stay right around the 93% mark as seen in the previous four years. We used a rolling average as a percentage of sales to forecast S&A expense. The forecast lead to a minimal growth in gross profit and operating income, similar to what has been seen in the past. Kimball entered into a credit agreement with its primary credit facility in 2019 and that debt is set to mature in July 2023 which is shown with the constant interest expense. We forecasted interest income, non-operating income, and non-operating expenses as a rolling average of previous years. The provision for income taxes is based on the 21% corporate tax rate.

Valuation

Net income (loss)	\$ 22,287	\$ 34,179	\$ 16,752	\$ 31,558	\$ 18,196	\$ 26,899	\$ 27,855	\$ 27,769
Depreciation & Amortization	\$ 19,869	\$ 23,904	\$ 26,376	\$ 28,873	\$ 30,872	\$ 25,979	\$ 27,201	\$ 27,860
CAPEX	\$ 33,664	\$ 33,254	\$ 25,876	\$ 24,665	\$ 38,364	\$ 31,165	\$ 30,665	\$ 30,147
Change in NWC	\$ (6,830)	\$ 1,508	\$ 19,501	\$ 71,986	\$ 5,399	\$ (17,569)	\$ 5,365	\$ 5,472
NetNewDebt	\$ 539	\$ 2,030	\$ (1,124)	\$ 97,283	\$ 3,512	\$ 3,512	\$ 3,512	\$ 3,512
FCFE	\$ 15,861	\$ 25,351	\$ (3,373)	\$ 61,063	\$ 8,817	\$ 21,397	\$ 22,539	\$ 23,522
Terminal Value								\$ 541,001
Sum of Discounted FCFE	\$ 57,808							
Discounted Terminal Value	\$ 429,464							
Discounted Equity Value	\$ 487,272							
Shares Outstanding	25,140,000							
Share Price	\$ 19.38							
Current Price	\$ 16.11							

We expect a long-term growth rate of 3.5% and used this percentage plus the industry forward P/E ratio of 24.5 to calculate the discount rate of 7.58% (However, we used an 8% discount rate decided on as a class). A rolling average was used for both depreciation & amortization and CAPEX as they have maintained stable in the past. Change in net working capital was calculated as the average percentage of net working capital as a percentage of sales in each respective year.

We expect net new debt to remain constant as other long term liabilities on Kimball’s financial statements slightly increase year over year and we do not expect them to take on additional debt from the debt they took on in 2019.

Sensitivity Analysis

Sensitivity Analysis		Growth Rate				
		1.50%	1.75%	2.00%	2.25%	2.50%
Discount Rate	5.00%	27.20	42.67	58.20	73.80	89.47
	6.00%	16.52	25.70	34.91	44.16	53.46
	7.00%	11.94	18.42	24.93	31.46	38.03
	8.00%	9.40	14.38	19.38	24.41	29.46
	9.00%	7.77	11.80	15.85	19.92	24.00
	10.00%	6.65	10.02	13.41	16.81	20.23

Revenue growth rate is one of the bigger assumptions in the model. The table illustrates that if we went with a larger growth rate, as research has predicted, our price target increases significantly.

Conclusion

We recommend holding (selling 1000 shares of the 3000 previously held) Kimball Electronics. Our model shows that their stock is undervalued by approximately 20%. Our sensitivity analysis shows that even with our conservative revenue projections that the stock is still undervalued.