VOXX International Corporation, Value Investing 4443 (3) – Group 6

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Screening

We began by looking at stocks which were underperforming in the past year and are being overlooked by analysts. After narrowing the search criteria to North American micro and small cap stocks with a long history of cash flows and operations. Voxx International Corp trades on the Nasdaq at a **$123M Market Cap**, far below our $1.3B limit. Furthermore, Voxx is only trading at **0.23x their book value**, and **5.5x earnings**. Given that the S&P500 is trading at 24x earnings and 3x book value, we hypothesize VOXX may be undervalued and presents itself as a bargain buy in an inflated market. Therefore, we will proceed with our analysis.

Business Risk Analysis

Voxx is a market leading and global manufacturer and distributor of Consumer Electronic Accessories, Automotive parts, and Premium Audio systems. Since they don't sell proprietary technology, their product line is not differentiated with their competitors. For that reason, the firm's automotive and premium audio segment faces intense competition from OEMs. If the firm's large clients like Volkswagen and BMW start producing their own technology systems in house, Voxx could be cut out of the supply chain. Furthermore, the firm's customers make purchase orders based on their current demand for the parts, they are not tied down to any purchasing contract and can therefore terminate Voxx as a supplier at any time. However, it is unlikely that Voxx's customers would shift away from their core competencies to produce their own audio systems, cables and antennas. Despite this list of risks associated with the firm's business model. The systemic risk of the business remains low and diverse. Since Voxx is a market leader in supplying these parts they benefit from economies of scale, something that is very challenging to replicate. The firm also has a portfolio of well-known brand names and trademarks which enhance the moat around their business. Lastly, while there is ongoing innovation in the industry, the type of products themselves have little risk of obsolescence. Manufacturers of several different products such as, TV's, Automobiles, Specialty Vehicles, and Home Theatre Systems will always require parts from companies like VOXX. However, despite the signs of low/medium risk from their brand names and sustainable products, their operating margins have also proven to be extremely volatile, and therefore we will assign a **high business risk** rating.

Financial Risk

As a company with a high business risk, VOXX's **optimal debt to capital structure is 10% to 29%** (Exhibit 1). In the last two years they fell within this range with an average debt to capital of 22%, however, with their recent sale of the Hirschmann subsidiary, they allocated most of their cash to paying off the majority of their remaining debt. This brings their **target debt to capital ratio to 4.17%,** meaning they have **low financial risk** (Exhibit 1). Given their high business risk and low financial risk, the company's rating should fall between AA-BBB. Although the company's debt to capital ratio may suggest a high rating of AA, their average EBIT interest coverage ratio of 0.98, in combination with their average operating income to sales ratio of -0.1% in the last 10 years, suggests that they would fall on the lower end of this range. Therefore, we have given them a **rating of BBB** (Exhibit 2). With US 10-year Government bonds currently carrying an interest rate of 2.84% and the spread for a BBB corporate bond at 1.42%, VOXX's **cost of debt is 4.26%** (Exhibit 3). The **ERP of a company with high business risk and low financial risk is 6%** (Exhibit 1), therefore the **cost of equity is 10.26%** (Exhibit 2). Given the cost of debt and cost of equity stated above, along with the most recent effective tax rate of 23.1%, the company's **WACC is 9.97%** (Exhibit 2). Next, the first pass ROIC was calculated by estimating the company's EBIT for Q4 based on previous years and taking the average of the last 8 years. The **first pass ROIC was 0.76%** (Exhibit 3). With WACC being much greater than first pass ROIC, there is a strong indication that NAV may be greater than EPV.

NAV & EPV

VOXX holds assets that have a **NAV of $616M or $31.22 per share** (Exhibit 4). The firms zero growth free cash flows amounted to 4.5M with an equity value of 79.2M. This translates into an **EPV of $4.02 per share** (Exhibit 5). Upon completion of the EPV, **ROIC second pass was calculated to be -1.14%** (Exhibit 6). This confirms that NAV is correctly much greater than EPV.

Strategic Analysis

The firm's management seems to be aging close to retirement and is likely planning a succession strategy. Current management is not shareholder driven, and is paying out millions in executive earnings when the firm is not profitable. Management has recently extinguished the majority of their debt and exited their optimal debt to capital ratio, further suggesting poor management. With a variety of other unprofitable acquisitions in the last 15 years **management seems to be the root of the problem**. The firm does not have excess capacity and is operating in a highly competitive market with a short-term advantage but long-term disadvantage because they do not have any proprietary technology, meaning a competitive advantage catalyst is unlikely. Because management is the root of the problem and the founder and majority shareholder is now age 83, a **catalyst value of 20%** has been assigned.

Recommendation

With an EPV of $4.02, a catalyst value of $27.20, and a catalyst probability of 20%, the **intrinsic value of VOXX is $9.46**. After applying a 33% margin of safety the **max entry price for this stock is $6.34**. With the stock currently trading at $5.10, it is recommended to **buy** VOXX (Exhibit 7).