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Corning

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After the market rose over the past several years, many investors now complain about the lack of bargain stocks. With thousands of individual stocks trading in the U.S. market, there are always some stocks that are being unjustifiably maligned, neglected, ignored or temporarily out of favor. Corning is one such stock that continues to be undervalued, notwithstanding its recent appreciation.

Corning began as a glass manufacturer more than 160 years ago and has evolved to become a leading global technology firm with products for the display, telecommunications, emission control, and life sciences markets. This innovative company has experienced plenty of ups and downs throughout its history, including the fiber optics boom and bust between late 1990s and early 2000s, the liquid crystal display ("LCD") boom in mid-2000s, the Great Recession and most recently a severe inventory correction. In this article, we discuss Corning's strengths and weaknesses, and explain why the stock should continue appreciating in the coming year.

Strengths

Corning has 5 operating segments. We first discuss Corning's largest segment, which is the display technology division that manufactures glass substrates for LCDs, and represented 32.5% of total revenues in 2013. This is a mature business which nevertheless can generate a lot of free cash flow and solid profits, provided the price deflation that afflicts all consumer electronic devices remains at moderate levels. During the second half of 2011 to first quarter of 2012, this segment suffered through an inventory correction and accelerating price erosion, severely pressuring the stock. After the firm navigated through that turbulent period successfully, this segment is now poised to benefit from the following favorable industry trends and dynamics:

- Glass volume will continue to grow because of unit growth (especially in emerging markets/China) as well as increasing screen size. Corning estimated that the overall LCD glass retail market in 2014, as measured in square feet of glass, will increase by 10%, and noted that an upper single-digit volume growth for 2015 is very possible.[1] It further expects LCD TV units to grow at the compound annual growth rate of *at least 4%* through 2018.[2]

- Ultra High Definition ("UHD" or "4K") TVs will likely trigger a huge replacement cycle and larger screen sizes in 2015-2016. This is because the existing TV cycle is very long in the tooth, caused by the failure of 3D TVs and a lack of innovation since HDTVs became mainstream. Corning thinks UHDTVs will start making a significant impact when prices come down to around 1.5 times the standard HD to trigger mass adoption.[3] IHS recently reported that worldwide shipment of UHDTVs in the third quarter of 2014 jumped 500% year-over-year to 6.4 million units.[4] Adoption of UHDTVs will also be helped by increasing availability of 4K content. DirecTV in mid-November became the first pay-TV provider to deliver 4K video-on-demand and recently launched a satellite that will increase its capacity for 4K programming delivery beginning in early second quarter of 2015.[5,6] Also, 4K streaming became available at Netflix in April and Amazon Instant Video in early December.[7,8]

- Glass price declines will likely continue to moderate due to strong LCD TV demand and tightening glass supply. In anticipation of these developments, Corning recently upgraded its outlook for the Display Technologies segment for 2015.[9]

Thanks for your referrals!

As we conclude our twentieth year of publishing *Observations*, we would like to take this opportunity to express our gratitude and appreciation to all our clients and friends for their client referrals over the past year. We always welcome the opportunity to be of service to relatives, friends, and acquaintances of our clients. As many of you know, we do not market our services to people with whom we are not acquainted. Our business has grown over the past twenty years primarily due to satisfied clients adding business and through their referrals. We hope you'll think of us if you come across someone who would benefit from our services. Thanks again!

Inside This Issue:

- The weak Japanese Yen, while hurting Corning by reducing its reported sales in US dollar terms, helps lower the cost of glass for panel makers that buy from Corning. In turn, this lowers prices for consumers and boosts demand for LCD TVs.

The Optical Communications division, Corning's second largest operating segment, provides fiber optic and copper product solutions to telecommunications networks and represented 29.7% of total revenue in 2013. This segment offers substantial growth potential because of the following:

- The need to expand "pipes" in order to accommodate the trend of exploding content and cloud expansion should drive demand for Corning's innovative optical products. These include bendable fiber components/cables that can speed up not only wide-area networks and the cloud, but also local area networks as well. A good example is Intel's MXC connector systems for datacenters. These systems use Corning's components that can support data transfer at distance up to 300 meters, three times farther than the current technologies.[10]

- Corning's wireless optical distributed antenna system ("DAS"), which enables high-bandwidth and reliable wireless connectivity in large buildings, has the potential to penetrate many more commercial buildings. This could be a significant opportunity for Corning since currently less than 10% of approximately 5 million commercial buildings in the U.S. have such systems.[11]

- Corning's acquisition of Samsung Electronics' fiber optics business, which is expected to be completed by the end of the first quarter of 2015, will improve economies of scale for Corning. Further, via this transaction Corning will be better able to penetrate Asian markets, which offer huge growth potential for optics networks and last-mile infrastructure.

The high-profile Specialty Materials segment, which manufactures customized glass, glass ceramics and fluoride crystals, represented 15% of Corning's total revenues in 2013. It is the segment with the highest growth potential because of the following:

- Corning's Gorilla Glass, the cover glass of choice for just about every major mobile phone and tablet in the market today, has potential to grow by penetrating massive markets, including construction (e.g. laminates to hurricane windows, wall structures, and greenhouses), interior architectural applications in commercial buildings (e.g. wall systems, area lighting panels, and elevator walls and ceilings), and autos (e.g. lighter-weight windows, sun/moon-roofs, windshield, and console touch panels). Application to the automobiles sector could be a particularly meaningful opportunity as the global annual auto glass market is about 5.5 billion square feet.[12] The company is also looking to extend Gorilla Glass into rail and aviation applications. In January 2014, Corning announced that it can manufacture 3D Gorilla Glass for curved form factors, such as wearable devices.[13] Some smartwatches in the market today, like the Pebble Steel and Moto 360, are already using Gorilla Glass as cover glass.

- Corning is exploring additional capabilities of Gorilla Glass, such as chemical sensor and noise isolation, to further expand its application in existing and additional markets. For instance, antimicrobial, fluid and temperature-sensing capabilities can open up Gorilla Glass for medical use, another mega market.

- Gorilla Glass 4, the most updated version of Gorilla Glass that was launched in November 2014, will likely continue as the preferred cover glass for mobile devices. Gorilla Glass 4 is up to two times tougher than competitive cover glass and survives up to 80% of drop tests.

- Growth opportunities are also available for Corning's other forms of specialty glass. These include Willow Glass which is potentially useful for solar paneling due to its thinness, strength, flexibility, and high temperature processing capability, as well as Lotus Glass which is suitable for high-performance displays.

- Corning is also developing energy efficient architectural glass for commercial buildings, which has the potential to address a significant portion of the 25-plus billion square foot commercial windows market.[14]

The Environmental Technologies division, which manufactures ceramic substrates and filter products for emission control, is Corning's third largest operating segment representing 11.8% of total revenues in 2013. The growth potential of this segment is extremely strong because of the following global developments and trends:

- With constant assault by worldwide regulators on emission reduction, Corning can profit from recurring replacement cycles as standards get increasingly stringent over time. The global market for Corning's emission control products is huge since there are lots of vehicles needing emission-control parts (especially in places like China which for political and policy reasons has to cut down drastically on pollution). Corning noted in early 2014 that the tighter emission standards in China and Europe could drive an annual compound growth rate of 15% to 20% for the company's heavy-duty diesel products through 2017.[15] India, another potentially huge market, is also starting to focus seriously on reducing pollution. In addition to the demand from replacement cycles, Corning can also benefit from increase in automobile sales around the world, which are expected to grow by 21 million units by 2021 according to IHS.[16]

- Corning's ceramic substrates and filters can also be used in stationary applications such as power plants, refineries, and chemical processing plants, another potentially huge market.

The smallest operating segment is the Life Science division, which develops and manufactures scientific laboratory products. This segment is currently going through a period of low growth, but Corning has hinted that it has a new major initiative that could be very material to profits.[17]

In addition to the substantial growth potential of Corning's operating segments, the company possesses a number of other highly positive attributes, as follows:

- **Productive Research and Development ("R&D").** The company has invested heavily in R&D throughout its 160-plus years of history, with life-changing innovations in glass, ceramics, and fiber optics. Corning's long history of productive R&D offers opportunities for both new and adjacent markets.

- **Acquisition of Samsung Corning Precision.** In the first quarter of 2014, Corning completed the acquisition of Samsung Corning Precision (SCP), a joint venture between Corning and Samsung which manufactures LCD glass in Korea. With the full ownership of SCP, Corning can now better utilize its manufacturing capacity, reallocating the capacity from the joint venture to different product lines (e.g. to manufacture Gorilla Glass for global customers instead of LCD glass for only the Korean market). This has the added benefit of reducing the need for large capital expenditures to meet demand as well as improving free cash flow.

- **Significant cash return to shareholders.** Corning has strong free cash flows that enable it to return substantial cash to shareholders via aggressive share buybacks and dividends. Between October 1, 2013 and September 30, 2014, the company bought back a massive 12.16% of its total outstanding shares. In early December of 2014, Corning announced a 20% increase in its quarterly dividend and a new $1.5 billion share repurchase program that expires in 2016.[18]

- **Equity earnings rebound from Dow Corning.** Dow Corning, of which Corning owns 50%, is a global leader specializing in silicone and silicon-based technology. In 2011 and 2012, Dow Corning's polysilicon business suffered from significant price declines in polysilicon due to the over-capacity of the solar industry supply chain, pressuring Corning's equity earnings from Dow Corning. The polysilicon industry is now recovering, as noted by IHS in April 2014.[19] In October 2014, Dow Corning announced that its sales increased for the fourth consecutive quarter, with record silicone sales recorded in the third quarter of 2014 and the polysilicon segment continuing its strong performance.[20] Corning's equity earnings from Dow Corning should rebound as silicone and polysilicon businesses continue to improve.

Risks

No investment is without risk; Corning is no exception. The following risks should be taken into consideration when contemplating an investment in Corning common stock.

Declining glass price

The glass substrate market is an oligopoly led by 3 players, Corning, Asahi Glass and Nippon Electric Glass (the latter two are Japanese manufacturers), in which Corning is by far the dominant firm. Sometimes the oligopoly competes on price to achieve market share gains, leading to more severe glass price drops than the normal 8% a year.[21] Corning has addressed this risk by signing some "stable share" supply agreements of varying durations.[22] Additionally, Corning claims that at prevailing prices competitors are close to selling at a loss, making it difficult for them to start another price war.[23] Corning can still make money at current prices because of its size, economies of scale and dominance. The company has also indicated that "normal" price declines are expected and manageable via higher glass volumes, resulting in flatish sales.[24] With flatish sales and projected cost reductions over time, profits should grow.

Tablets growth slowing

IDC and Gartner both recently lowered their estimates for tablets shipments in 2014, as consumers hold on to their tablets longer than expected and some turn to alternative devices.[25, 26] Slowing tablets growth especially hurts Corning because tablets use more glass volume than smartphones. However, it remains to be seen how much of such expected loss in glass volume will be picked up by touch-screen enabled new form factors and large-screen smartphones.

Weak Yen versus US Dollar

Because of the weak Yen, Corning has to rely on effective, costly forex hedging, which also makes it difficult to determine the company's normalized earnings. Corning has hedged almost all its exposure to the Yen for 2015, roughly 80% for 2016 and 70% for 2017, primarily with respect to impact on reported net income.[27]

Concentrated customer base

Despite its diversified business segments, Corning can still go through some violent cycles because its Display Technologies, Optical Communication, and Environmental Technologies segments all have concentrated customer bases, resulting in unpredictable demand and inventory cycles, at least in the short run.

Conclusion

In our view, the investment risks associated with Corning are vastly outweighed by its strong financials, innovative R&D, good growth prospects for most of its businesses, and the likelihood of significant earnings per share ("EPS") growth over the next few years. According to Yahoo Finance, the average projected EPS growth rate for Corning over the next 5 years is about 14%, which is more than double the growth rate of an average company. With a forward price-to-earnings ("P/E") ratio (after excluding net cash) that is below the market p/e multiple, it is our view that Corning continues to be undervalued notwithstanding its recent appreciation. Further, the company is likely to generate strong free cash flows over the next few years which can support higher dividends as well as continued aggressive share repurchases that will boost EPS. Corning common stock appears to have meaningful upside potential in the coming year.

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