Investment Report Corning Inc. (GLW) (Industrial Materials) Date: 08/03/12

Investment Thesis BUY Current Price: 13.30 Target Price: 18.65 – Upside 40.23%

Investment Case

Corning is a 71-cent dollar assuming zero growth in its free cash flows. It has compelling fundamental factors such as a 7 year average profit margin of 22% and 3 year average ROE of 21.67%. It has little debt with total debt to capital at 10%, market cap of 19.5B and a quick ratio of 3.32. Conservative assumptions for the valuation methods yield values significantly above market price. It is currently trading at 0.93 P/B and 7.48 P/E. GLW has initiated a 1.5billion share repurchase and has spent half of that so far. Its current dividend yield is 2.30%

These factors combined creates a valuable investment opportunity where there is little downside and significant upside even with conservative valuation methods.

Donald Yacktman has recently purchased shares in GLW and Oakmark holds GLW shares, both are high performing value-oriented funds. **Gordon Gund, director, purchased shares for 1.9 million March 6th 2012. Last time he bought shares was in Nov. 2008.**

Margin of Safety

- Base Scenario
  - Assuming 2011 EBIT declines with 30%
    - Guidance is 30% reduction in subsidiary EBIT, not on a consolidated basis
  - Tax rate is 35%
    - Management assumes 20%
  - With FCF of 2284.49M, assumed growth rate of 0% and using required return of 10% the upside is 40.23%
  - It takes a required return of 15.5% to eliminate the EPV(earnings power value) upside
- Reducing EBIT by 65% is required to get to an equal value to today’s share price with the EPV method, using a 10% required return

Factors that is depressing the price

- **Psychology**
  - There has been a barrage of bad news for GLW regarding the excess capacity in the LCD substrate market. This combined with a significant inventory trimming in the supply chain to levels not seen since the market crash in 08-09 have caused reduced profitability and sales for the SCP subsidiary and GLW`s display segment
- **Complex financial structure**
  - Corning has two large subsidiaries, which is not included in its consolidated financial statements. These two are important to GLW; however only their revenues are reported through other income in GLW’s consolidated statements. Their impact on a truly consolidated cash flow, balance sheet and income statement is less available for the lazy analyst/investor.
- **Short term focus**
  - The issues that have emerged within the polysilicon industry and the excess capacity within the LCD substrate market are serious; however, they are short-term problems that are not causing losses for GLW. This combined with the high degree of uncertainty in the world is causing investors not to see through the fog that clouds the intrinsic value of GLW
    - Expected decline in subsidiary EBIT of 30%
  - Gorilla glass appears unprofitable due to an impairment write down of 130million.

Company Profile

Corning is a global, technology-based corporation that operates in five reportable segments and has two material subsidiaries:

- Display Technologies
  - Produces glass for screens(LCD/OLED/AMOLED).Tablets, computers, TVs, Cars, Architectural opportunities are markets for Corning’s Glass
- Telecommunications
  - Producer of fiber optics and wireless internet equipment
- Environmental Technologies
  - Manufactures emission filters for diesel engines and other end users.
  - The world’s fleet of trucks and cars will be requiring emission filters until a different fuel source is developed.

- Regulations worldwide is tightening to fight CO2 emissions
- Specialty Materials
  - Gorilla Glass is a durable and scratch resistant type of glass currently used by more than 30 major brands, designed into hundreds of product models, and featured on more than 600 million devices
  - Is used in iPhones and iPads and has 20% of the phone market.
- Life Sciences
  - Corning have been a leading developer, manufacturer and global supplier of scientific laboratory products for more than 90 years
- Dow-Corning (50% ownership)
  - Dow Corning provides performance-enhancing solutions to serve the diverse needs of more than 25,000 customers worldwide. A global leader in silicones, silicon-based technology and innovation, Dow Corning offers more than 7,000 products and services via the company's Dow Corning® and XIAMETER® brands.
  - Dow-Corning is involved in the research and sales of silicone material for solar cell manufacturing, assembly and installation
  - Hemlock Semiconductor Group (GLW`s ownership 31.5%)
    - It is the third largest polysilicone producer worldwide. A supply gut has currently started and is estimated to last a few years as the industry has entered a shakeout period. Hemlock is one of the lowest cost producers and is expected to weather the period.
- Samsung Corning Precision(SCP) (50% ownership)
  - SCP is a leading LCD high quality glass-substrate producer. Joint venture with Samsung, one of the world's leading LCD TV producers.
  - Corning newly formed an equity venture with Samsung that plans to produce OLED glass solutions using Corning's Lotus™ Glass substrate technology.

Valuation

In valuing GLW, I have used three methods: Replacement Value, Earnings Power Value (EPV) and Value of Growth. These methods are ideal as forecasting is kept to a bare minimum.

Replacement Value: This is what it would cost to create a clone of GLW. What an entrant would have to spend to create an equal to GLW in other words. Below is the book values found for GLW on a consolidated basis. I have included my assumptions for each adjustment I have made. The replacement value of GLW is 30 Billion, or 19.8 per share. This is an upside of 48.83% from the current price of 13.3.

Replacement Value	2011	Book Value	Adjustment
Current assets:			
Cash and cash equivalents	$ 6,542.53	$ 6,542.53	None
Short-term investments, at fair value (Note 3)	$ 1,733.67	$ 1,733.67	None
Total cash, cash equivalents and short-term investments	$ 8,276.20	$ 8,276.20	None
Trade accounts receivable, net of doubtful accounts and	$ 1,903.51	$ 1,884.51	Add bad debt allowance 19m
Inventories (Note 5)	$ 1,589.34	$ 1,589.34	None
Deferred income taxes	470.007727	$ 517.01	Discounted to PV using 10% WACC
Other current assets	$ 464.58	$ 464.58	None
Total current assets	$ 12,703.63	$ 12,893.57	
Investments (Note 7)			
Property, net of accumulated depreciation	$ 17,910.46	$ 16,135.66	Added 7 years' worth of surplus deprec after subtracting maint. Capex. Took 2011 maint cap of 600 and figured out the surplus percentage in 2011 deprec, 36% used for the past 7 years for a total of 1774.8
Goodwill and other intangible assets, net	$ 1,007.47	$ 1,007.47	Corning has 4750 patents and 7400 pending patent applications - I am not capable of assigning a value to it. However, it is likely it will be a material figure
Deferred income taxes (Note 6)	$ 2,191.42	$ 2,916.78	Discounted to PV over 3 years using 10% DF
Other assets	$ 624.63	$ 624.63	None
R&D	$ 2,663.00		5 Years' worth of R&D depreciated over 5 years
Marketing	$ 1,070.00		3 Years' worth of R&D depreciated over 3. years Corning uses ca. 20% of SG&A on marketing and selling
Total Assets	$ 38,170.61	$ 33,632.66	
Debt	$ 2,342.35	$ 2,342.35	None
Liabilities	$ 2,614.58	$ 5,640.24	Reduced Implant Reserve by already paid benefits of 1264 and subtracted all of deferred revenue as a liability
Current Liabilities	$ 3,164.82	$ 3,164.82	None
Replacement Value	$ 30,048.86		
Replacement Value per Share	$ 19.80		

Outstanding Shares	1518m

The second valuation method was calculating the earnings power value for GLW assuming 0% growth. The numbers for EPV and assumptions are in the table below. I use a required return of 10%, which yields, after adding cash and subtracting debt, a value of 18.65 per share for GLW, an upside of 40.23%.

EPV	2011	2010	2009	2008	2007	2006
EBIT	$ 3,576.64	$ 4,138.22	$ 2,221.48	$ 3,274.31	$ 2,368.88	$ 2,004.94
Non-Recurring Charges	$ 129.00					
*Reduced Profitability	$ 1,381.99					
Add Back 25% R&D	$ 177.84	$ 159.08	$ 148.74	$ 163.41	$ 146.72	$ 133.16
Add Back 25% SG&A	$ 366.93	$ 362.11	$ 314.01	$ 316.15	$ 311.72	$ 287.94
EBIT Adjusted	$ 2,868.42	$ 4,138.22	$ 2,221.48	$ 3,274.31	$ 2,368.88	$ 2,004.94
**Tax Rate 35%	$ 1,003.95	$ 1,448.38	$ 777.52	$ 1,146.01	$ 829.11	$ 701.73
EBI	$ 1,864.47	$ 2,689.84	$ 1,443.96	$ 2,128.30	$ 1,539.77	$ 1,303.21
Amortization	47.2					
Depreciation	$ 1,319.87	$ 1,165.57	$ 1,029.66	$ 965.24	$ 863.22	$ 808.78
***Maintenance Capex	$ 840.62	$ 742.35	$ 655.79	$ 614.76	$ 549.78	$ 515.11
EBI Adjusted	$ 2,390.92	$ 3,113.06	$ 1,817.83	$ 2,478.78	$ 1,853.21	$ 1,596.88
Interest	$ (106.43)	$ (109.18)	$ (82.00)	$ (93.13)	$ (70.96)	$ (76.45)
Net Income	$ 2,284.49	$ 3,003.88	$ 1,735.83	$ 2,385.66	$ 1,782.24	$ 1,520.43

*Assumes a 30% reduction in overall EBIT going forward due to a tougher environment for display, SCP, Dow-Corning and Hemlock and subtracts 309 million of currency exchange gains

**Assumes a 35% tax charge going forward, however management estimates taxes around 20% for 2012

*** Maintenance capex for Corning is 600M, I assume the ratio holds for GLW`s subsidiaries.

The final valuation method assumes profitable growth from the base scenario created for the EPV method. I assume that GLW will be able to grow at a rate equal to the 20-year US GDP moving average growth rate of 2.5%. ROC is derived from the base scenario laid out for the EPV method above. This method gives GLW a value of 19.44 per share, an upside of 46%.

Value of Growth	2011
Sales	$ 13,188.83
Net Income	$ 2,284.49
Profit Margin	17.32%
Equity	$ 22,562.64
Debt	$ 2,149.90
Capital	$ 24,712.54
Excess Cash	$ 7,616.76
Less Debt	$ 2,149.90
Adjusted Capital	$ 19,245.69
ROC	11.87%
Growth Rate	2.50%
Distributable to Investors	$ 1,666.68
Cost of Capital	10.00%
EPV	$ 28,311.77
PV	$ 29,511.51
PV/EPV	$ 1.04
Price/Replacement Value	0.67
Price/EPV	0.71
Price/PV	0.685

Consolidated income statement and balance sheet for GLW with subsidiaries are included in the appendix.

Catalysts

- **The effect of the decline in the LCD segment materializes – Uncertainty of its effect is removed**
  The uncertainty that is depressing the price currently will be retreating as the next quarterly reports are released. They will shed light on the results of the decline in LCD profitability and show unencumbered earnings due to restructuring charges
- **Free cash flow is utilized to increase dividends or buy back shares**
  GLW`s free cash flow is strong, even during a ramp up in capital expenditures to finish several new plants to meet demand. As time progresses this will enable GLW to increase its dividend and maintain a healthy balance sheet. If the price stays at where it

is the board has signaled that it is willing to commit funds to buy back shares as the share price is significantly below intrinsic value.

Management

- Wendel P. Weeks CEO/Chairman
- Current management has a clean record.
- Management is developed internally; current CEO has been with GLW for 29 years.
- Proven long-term commitment – See appendix 3 for analysis of 10 years shareholder letters.
- Focused on the factors that increases value for the shareholders
    - Increased FCF
    - Higher profitability
    - Stability in financials
    - Profitable growth
- They have launched a share repurchase program, in the last half of 2011, for 1.5 billion USD that they intend to utilize while their stock price is below its intrinsic value.
- Increased dividends and share repurchases remains an option, they have more than 8 billion in cash and securities, as the fog of uncertainty is lifted its likely that either one of these will be selected by the board.
- Management has a good share of their compensation in form of long-term options.
- **Gordon Gund, director, purchased shares for 1.9 million March 6th 2012. Last time he bought shares was in Nov. 2008.**

Competition

Below is an overview of the 3 key players in the glass industry, which is GLW`s main business segment (+80% of income derives from it). It is clear that GLW is in a completely different position than Nippon and Asahi based on the margins. GLW has been able to charge a premium on its products due to the quality. It holds also a majority market share in the glass market it supplies.

Glass Industry	**Gross Margin**				
Key Players	2011	2010	2009	2008	2007
Nippon	36.70%	35.81%	30.12%	34.40%	33.05%
Asahi	32.16%	34.98%	29.04%	27.97%	28.63%
Corning - SCP	70.54%	76.83%	71.84%	69.34%	70.04%
	EBIT Margin				
Key Players	2011	2010	2009	2008	2007
Nippon	30.10%	29.61%	22.77%	27.39%	25.14%
Asahi	13.64%	17.78%	7.55%	7.60%	11.74%
Corning - SCP	59.11%	66.61%	60.77%	57.70%	58.22%
	Profit Margin				
Key Players	2011	2010	2009	2008	2007
Nippon	17.58%	16.60%	6.50%	13.76%	12.00%
Asahi	7.85%	9.55%	1.74%	2.71%	4.14%
Corning -SCP	49.45%	60.81%	52.04%	51.38%	49.69%

Franchise

- **Moat 1**: Formidable Research Capacity –
    - Invented Edison light Bulb, Television Tube, Glass ceramic, Low loss optical fiber, Ceramic filters for diesel/gasoline engines, LCD glass and in 2007 the Gorilla Glass.
    - Excerpts from http://www.patentboard.com/
    - Corning Inc. (Corning, New York, USA) continues to dominate and extend its lead over the industry with another strong performance this quarter. While the industry average increase in patent count was 15.6%, **Corning increased its patent count by 19% and holds twice as many patents granted in the last year than its closest competitor**. **The company also improved its Science Strength™ by 37%, and maintains an Industry Impact™ almost double the industry average**. **2009**
    - This week's Industrial Materials Patent Scorecard sees a few shake-ups in the top ten, but the top five companies remain unchanged. **(1st Place) Corning Inc(Corning, New York, USA)**, NGK Insulators Ltd (Nagoya, Japan) and Fujikura Ltd (Tokyo, Japan) maintain the top three ranks. **Corning and NGK hold a wide lead over their competitors, with Technology Strength™ scores over twice as high as the other players in the top ten and over eight times the industry average – Corning, in particular, enjoys a strong position on the Patent Scorecard, with a Technology Strength twice that of 2nd-ranked NGK**. **2010**

- Corning Inc. (Corning, New York, USA) and NGK Insulators Ltd. (Nagoya, Japan) continue to hold onto the top two spots again this Scorecard. Corning had an increase in patent count of almost 6% and Science Strength™ of over 9%. **With an Industry Impact™ more than double the industry average, it will be difficult for any company to knock them out of the top spot anytime soon**. **2010**
- From GLW Annual Report:
  - At the end of 2011, Corning and its wholly owned subsidiaries owned over 4,750 unexpired patents in various countries of which about 2,500 were U.S. patents. Between 2012 and 2014, approximately 8% of these patents will expire, while at the same time Corning intends to seek patents protecting its innovations. Worldwide, Corning has over 7,400 patent applications in process, with about 1,700 in process in the U.S.

- **Moat 2:** Economies of Scale
  - "You`ve never outsourced manufacturing. How come? We are the world's lowest-cost producer of everything we make, so manufacturing is a significant competitive advantage for us. Much of our competition is based in Asia, and 70 percent of our revenue comes from outside the U.S. We have plants in most areas where we have customers." (GLW CEO, March 2010)
  - GLW is constantly moving its glass production towards producing thinner glass while keeping the quality of it the same. Combine this with the cost of producing glass is measured by the pound and you have GLW`s ability to keep its margins high while average selling price for LCD TV's and other products are declining steadily. The trend is also for larger and larger screens, which functions as a tailwind for GLW.
  - Holds significant market share in diesel filter market, potentially +50%.
- **Moat 3:** Brand – Superior Quality
  - In its optical fiber, LCD glass substrate, scratch resistant glass, ceramic filter markets, it is the leading manufacturer with first mover advantage, furthest along the learning curve, have the products with the highest quality in the market and is the original inventor of the product itself.
  - This enables GLW to charge premiums in many of its markets compared to its competitors. These are defended with superior quality compared to its competitor and its position ahead of them in research and know how.
- **Moat 4:** Customers' requirements continue to ramp up
  - The products GLW produces may seem from an initial glance as commodity products; however, every year customers for these products demand improvements and increased standards. It is very hard for an entrant to be able to set up the necessary business operations and stay up to date on the newest standard that GLW constantly is improving. An entrant cannot just beat GLW`s current products and start producing them, as by the time they become fully operational to deliver to customers the product they were beating GLW on will be outdated.

Risk

- GLW and its subsidiary Dow-Corning are involved in several lawsuits regarding different health issues. Corning through another subsidiary is exposed to an asbestos lawsuit and Dow-Corning is exposed to a lawsuit from former creditors before they went in chapter 11 in the 1990`s.
  - The potential losses they could incur if they were to lose these lawsuits are not material in the way that they will <u>not</u> interfere with GLW`s business operations. It could be a non-recurring loss in the magnitude of 200-800 million depending on the result of the lawsuits.
- The setback in LCD business that started in 4th quarter 2011 could change the profitability level in the business.
  - There is likely to be a reduced level of profitability and I have considered this in the analysis. Assuming a 30% decline EBIT across the whole business to be on the conservative side.
  - Management has estimated that net income could be reduced by 30% from the SCP subsidiary due to this slowdown.
  - A positive note is that supply chain inventory levels have been reduced to 2008-2009 levels, 12-13 weeks of inventory, a level where the LCD industry experienced stock outs due to lack of glass when demand picked up again.
    - I see the likelihood of a reduction in supply chain inventory as being low.
    - LCD demand will have to be flat or negative going forward if there is to be no improvement in this business segment.
    - An improvement in the US housing market could generate significant demand for LCD TV`s.
- Currency Risk
  - A plus or minus 10% movement in the USD – JPY exchange rate would result in a change to net income of 146 million and a plus or minus 10% movement in the USD – EUR exchange rate would result in a change to net income of 34 million for 2011.
  - The effect of currency movements can have adverse effects on GLW`s bottom line, however it is not enough to make it incur losses or decrease its FCF to an unattractive level based on the current price.

- At the end of 2011, they had 309 million in foreign exchange gains due to favorable rates. Therefore, this buffer would first have to be eliminated before it would have a negative effect on the business. I have excluded the exchange gain from my valuation of GLW to be conservative.

Below is a table outlining the potential dollar gain per dollar at risk one have at different scenarios for max downside. RV: Using replacement value as target price, EPV: Using earnings power value as target price and PV: Using EPV with assumed growth of 2.5%, equal to 20-year moving US GDP growth.

I am not going to try forecast the economy or the degree GLW is able to execute its business plans, but I will point out the assumptions that is necessary for GLW`s price to stay where it is or decline further. Below each downside scenario are the implied assumptions for the GLW in terms of growth and discount rate. These are generated using a reverse DCF model

Implied Assumptions at different levels of downside		Reward/Risk Ratio RV	Reward/Risk Ratio EPV	Reward/Risk Ratio PV
Current Price	13.3	1.488	1.402	1.462
Growth 10 Yrs	0.00%			
Discount Rate	10.00%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	10.50%			
5% Decline	12.635	1.414	1.332	1.389
Growth 10 Yrs	0.00%			
Discount Rate	10.50%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	11.00%			
10% Decline	11.97	1.340	1.262	1.316
Growth 10 Yrs	-0.25%			
Discount Rate	11.00%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	11.00%			
15% Decline	11.305	1.265	1.192	1.242
Growth 10 Yrs	-0.25%			
Discount Rate	11.50%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	11.50%			
20% Decline	10.64	1.191	1.122	1.169
Growth 10 Yrs	-0.50%			
Discount Rate	12.00%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	12.00%			
25% Decline	9.975	1.116	1.052	1.096
Growth 10 Yrs	-1.30%			
Discount Rate	12.00%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	12.00%			
30% Decline	9.31	1.042	0.982	1.023
Growth 10 Yrs	-2.25%			
Discount Rate	12.00%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	12.00%			
32.8% Decline - Matches Replacement Value	8.94	1.000	0.942	0.982
Growth 10 Yrs	-2.80%			
Discount Rate	12.00%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	12.00%			
28.7% Decline - Matches EPV 0 Growth	9.48	1.061	1.000	1.042
Growth 10 Yrs	-2.05%			
Discount Rate	12.00%			
Long Term Growth Rate	0.00%			
Long Term Discount Rate	12.00%			
Fundamental Assumptions	Millions			
Free Cash Flow	2284.49			
SharesOut	1518			
Long Term Debt	2342.35			

- Underfunded Pension Plan
  - Currently the combined pension plans are underfunded by 1650 million. The obligations are spread out over time so this is not a lump sum that needs to be paid in the short term. Majority of their plan assets are in US corporate bonds or

investment funds. Due to this, there is a small likelihood that the plan will have large increases in plan assets due to a recovery in the stock market. The investment funds performance depends on their degree of fixed income to equity.

- I expect GLW will need to contribute to the plans to fund them going forward. However, the contributions will not be beyond 100 million, per annum, and will not affect the underlying business strength.

There is a low risk of default for Corning as they have been at an average Z score of double the safe ratio for the last 6 years.

Their statements also carry a low likelihood of earnings manipulation according to the Beneish M score as well as I found no indication of it reading through the last 10 years of financial reports.

Year	2011	2010	2009	2008	2007	2006
Ratios						
Altman Z Score	6.05	11.38	6.58	3.53	8.19	6.16
Beneish M Score	-2.73	-2.96	-2.50	-2.51	-2.77	

They are capable of paying off their total debt in less than 1.5 years using their free cash flow of 2284.49M, assuming the do not use cash, as cash to debt is: 3.77. Therefore, there is little risk from a financial leverage standpoint.

The risk that remains then is what the future holds for the world economy and GLW`s execution of their business strategies. From a macro glance there will be rough weather as Europe struggles with finding a solution to its debt problems, the US economy is improving, though very slowly and the Chinese economy is going in for a soft landing. None of GLW`s business segments will vanish and its more than likely that they will see healthy growth going forward as emission regulations become tougher, more advanced TV`s become the norm and reduce the replacement cycle of them, more tablets, smartphones using Gorilla Glass, increased demand for bandwidth, in other words wireless solutions and optical fiber.

Conclusion - Pay off -Target Price: 18.65 – Upside 45.82%

- Corning is a 71-cent dollar assuming zero growth in its free cash flows. It has compelling fundamental factors such as a 7 year average profit margin of 22% and 3 year average ROE of 21.67%. It has little debt with total debt to capital at 10%, market cap of 19.5B and a quick ratio of 3.32. Conservative assumptions for the valuation methods yield values significantly above market price. It is currently trading at 0.93 P/B and 7.48 P/E. GLW has initiated a 1.5billion share repurchase and has spent half of that so far. Its current dividend yield is 2.30%

- **How asymmetrical is the reward/risk ratio?**
  - Even with a downside of 32.8% that requires a 10-year negative growth of 2.80% in FCF replacement value reward/risk is 1, EPV is 0.942 and PV is 0.982 - Assuming required return of 12% for the investor.
  - In the range of 15% downside to current price as max downside the potential return ranges from: 26.5%-46.2%
    - These returns are based on very conservative assumptions regarding GLW`s ability to grow profitable and the effect of the current slowdown in the LCD segment and Dow-Corning subsidiary
    - This conservative assumption is 30% decline in consolidated EBIT across all segments
    - 35% tax rate is assumed while GLW is expecting 20% for 2012
  - Relaxing the assumptions to 15% decline in EBIT across all segments and 25% tax rate with a profitable growth rate of 3.5% gives this range:
    - 26.5% - 102.3% for 15% downside to current price
  - **Margin of safety - Is it an investment where: Virtually everything must go wrong, or gains may be induced?**
  - Base Scenario
      - Assuming 2011 EBIT declines with 30% - Guidance is 30% reduction in subsidiary EBIT, not on a consolidated basis. Tax rate is 35% whereas management assumes 20%
    - With FCF of 2284.49M, assumed growth rate of 0% and using required return of 10% the upside is 40.23%
    - It takes a required return of 15.5% to eliminate the EPV(earnings power value) upside
  - Reducing EBIT by 65% is required to get to an equal value to today’s share price with the EPV method, using a 10% required return

Corning will have to experience an extreme decline in its business fundamentals for intrinsic value to decline to or below its current market price.

Appendix:

1.

*Balance Sheet: Consolidated across GLW and Subsidiaries	2011	2010	2009	2008	2007	2006
Cash and cash equivalents	$ 6,542.53	$ 6,656.13	$ 4,649.47	$ 2,853.22	$ 2,675.20	$ 1,361.08
Short-term investments, at fair value (Note 3)	$ 1,733.67	$ 2,195.91	$ 1,067.54	$ 1,127.06	$ 2,102.17	$ 2,815.14
Total cash, cash equivalents and short-term investments	$ 8,276.20	$ 8,852.04	$ 5,717.01	$ 3,980.28	$ 4,777.37	$ 4,176.22
Trade accounts receivable, net of doubtful accounts and	$ 1,884.51	$ 1,575.07	$ 1,281.79	$ 900.69	$ 1,349.41	$ 1,156.61
Inventories (Note 5)	$ 1,589.34	$ 1,271.51	$ 974.15	$ 1,325.80	$ 1,022.08	$ 944.33
Deferred income taxes (Note 6)	$ 517.01	$ 517.46	$ 337.27	$ 226.41	$ 135.45	$ 111.46
Other current assets	$ 464.58	$ 461.02	$ 418.92	$ 445.44	$ 274.45	$ 257.30
Total current assets	$ 12,893.57	$ 12,732.11	$ 8,787.41	$ 6,973.01	$ 7,658.11	$ 6,718.80
Property, net of accumulated depreciation -	$ 16,135.66	$ 13,816.18	$ 12,130.14	$ 11,609.10	$ 8,955.04	$ 7,253.03
Goodwill and other intangible assets, net (Note 10)	$ 1,007.47	$ 805.12	$ 757.39	$ 363.89	$ 368.39	$ 371.95
Deferred income taxes (Note 6)	$ 2,916.78	$ 3,111.79	$ 3,353.56	$ 3,366.77	$ 591.90	$ 518.90
Other assets	$ 624.63	$ 469.91	$ 300.59	$ 250.66	$ 492.85	$ 191.13
Total Assets	$ 33,632.66	$ 31,241.36	$ 25,910.18	$ 23,117.93	$ 18,137.58	$ 15,114.61
Liabilities and Equity						
Current liabilities:						
Current portion of long-term debt (Note 12)	$ 192.45	$ 478.05	$ 415.40	$ 523.25	$ 35.15	$ 41.90
Accounts payable	$ 1,352.46	$ 1,136.56	$ 821.62	$ 1,101.02	$ 884.18	$ 821.31
Other accrued liabilities (Note 11 and 14)	$ 1,164.41	$ 1,197.82	$ 986.27	$ 1,206.28	$ 2,035.21	$ 1,767.31
Total current liabilities	$ 3,357.27	$ 3,477.85	$ 2,764.89	$ 3,283.65	$ 3,501.51	$ 2,988.36
Long-term debt (Note 12)	$ 2,149.90	$ 2,262.00	$ 1,930.00	$ 1,527.00	$ 1,514.00	$ 1,696.00
Postretirement benefits other than pensions (Note 13)	$ 1,650.53	$ 1,484.75	$ 1,407.89	$ 1,376.05	$ 1,034.95	$ 1,047.29
Other liabilities (Note 11 and 14)	$ 1,430.45	$ 1,330.65	$ 1,450.40	$ 1,444.55	$ 973.85	$ 1,084.35
Deferred Revenue	$ 1,761.66	$ 1,684.32	$ 1,250.03	$ 827.01	$ 488.92	$ 219.91
Implant Reserve	$ 797.60	$ 783.40	$ 790.15	$ 798.80	$ 804.15	$ 818.60
Total liabilities	$ 11,070.01	$ 10,312.46	$ 9,001.35	$ 8,296.51	$ 7,716.65	$ 7,356.45
Retained earnings	$ 14,399.10	$ 11,318.28	$ 7,854.80	$ 5,475.85	$ (288.45)	$ (2,872.61)
Total Corning Incorporated shareholders' equity						
Total equity	$ 22,562.64	$ 20,928.90	$ 16,908.83	$ 14,821.42	$ 10,420.93	$ 7,758.16
Total Liabilities and Equity	$ 33,632.66	$ 31,241.36	$ 25,910.18	$ 23,117.93	$ 18,137.58	$ 15,114.61

*Numbers do not add up to the totals as some small accounts lines in the different balance sheets were left out, since they were deemed not material.

Continues

2.

* (In millions, except per share amounts)	2011	2010	2009	2008	2007	2006	2005
Income Statement							
Net sales	$ 13,188.83	$ 12,058.82	$ 10,066.04	$ 10,490.77	$ 9,531.71	$ 8,427.20	$ 7,348.49
Cost of sales	$ 7,157.16	$ 6,076.88	$ 5,566.36	$ 5,515.71	$ 5,068.58	$ 4,625.25	$ 4,091.87
Gross margin	$ 6,031.68	$ 5,981.94	$ 4,499.69	$ 4,975.05	$ 4,463.13	$ 3,801.95	$ 3,256.62
Gross Margin Percentage	45.73%	49.61%	44.70%	47.42%	46.82%	45.12%	44.32%
Operating expenses:							
Selling, general and administrative expenses	$ 1,467.74	$ 1,448.44	$ 1,256.03	$ 1,264.59	$ 1,246.88	$ 1,151.75	$ 1,061.11
Research, development and engineering expenses	$ 711.35	$ 636.33	$ 594.94	$ 653.65	$ 586.86	$ 532.62	$ 462.69
Operating income	$ 3,576.64	$ 4,138.22	$ 2,221.48	$ 3,274.31	$ 2,368.88	$ 2,004.94	$ 1,499.20
EBIT Margin	27.12%	34.32%	22.07%	31.21%	24.85%	23.79%	20.40%
Interest income	$ 82.23	$ 71.45	$ 53.37	$ 143.74	$ 191.88	$ 151.20	$ 75.87
Interest expense	$ (106.43)	$ (109.18)	$ (82.00)	$ (93.13)	$ (70.96)	$ (76.45)	$ (112.01)
Income before income taxes	$ 3,852.22	$ 4,254.06	$ 2,342.00	$ 3,314.27	$ 2,626.23	$ 2,163.88	$ 1,510.40
(Provision) benefit for income taxes (Note 6)	$ (408.00)	$ (287.00)	$ 74.00	$ 2,375.00	$ (121.00)	$ (55.00)	$ (578.00)
Net income attributable to Corning Incorporated	$ 2,805.00	$ 3,558.00	$ 2,008.00	$ 5,257.00	$ 2,150.00	$ 1,855.00	$ 585.00
Profit Margin	21.27%	29.51%	19.95%	50.11%	22.56%	22.01%	7.96%

*Numbers do not add up to the totals as some small accounts lines in the different income statements were left out, since they were deemed not material.

3.

- Foresight & Long term commitment – Information from shareholder letters 2001-2011
    - 2001: Talked about their commitment towards ceramic substrates for emission control.
    - 2001: Mentioning the LCD technology as potential growth opportunity
    - 2002: Wendel becomes president and COO, Houghton, Chairman, steps in as CEO
    - 2002: Focus on creating a strong balance sheet – Reduce debt to capital from 46.7% and increase their cash position
    - 2002: They reduced their focus on telecom and returned to a focus on being a technology company by working to expand their environmental, LCD and semiconductor optics divisions
    - 2002: They understood that fiber would be an important market in the future and thus reduced short term focus on it, but kept their low cost leader position as they invested in research (10% of revenue) to deliver them new markets for profitable growth
    - 2002: Focus on increasing profitability and making sure that growth is profitable
    - 2003: Returned to profitability
    - 2003: Remains focused on the growth opportunities from earlier letters
    - 2004: The same focus issued in earlier letters is reiterated
    - 2004: Focus on growing FCF is mentioned
    - 2005: Wendel becomes CEO
    - 2005: GLW returned to investment grade credit – a target mentioned in 2002-3 letters and reiterated in each letter since.
    - 2005: First time in 25 years where they have more cash than debt
    - 2005: Innovations is delivering products for life sciences
    - 2005: Mentions the strategy to make GLW a balanced technology company that serves different markets fueled by their laboratories, to avoid the cycles in the different technologies- 10year horizon
    - 2005: The same focus issued in earlier letters is reiterated
    - 2006: Credit rating is increased
    - 2006: Aims to create 4 new business from innovations per decade instead of 2
    - 2006: Micro reactor technology is mentioned as future growth opportunity
    - 2006: The same focus issued in earlier letters is reiterated
    - 2007:Wendel becomes chairman
    - 2007: The same focus issued in earlier letters is reiterated
    - 2007: Gorilla Glass is launched
    - 2008: The same focus issued in earlier letters is reiterated

- 2008: R&D was kept flat, not cut as the financial crisis was rearing its ugly head
- 2009: The same focus issued in earlier letters is reiterated
- 2010: The same focus issued in earlier letters is reiterated

4.

Fischer`s 15 points

- Does the company have products or services with sufficient market potential to make possible a sizeable increase in sales for at least several years?
    - Glass for screens (LCD/OLED/AMOLED) are likely to be in high demand for the foreseeable future. Tablets, computers, TVs, cars, glass for architectural uses are all markets for Corning's Glass
    - The world's fleet of trucks and cars will be requiring emission filters until a different fuel source is developed. Regulations worldwide is tightening to fight CO2 emissions
        - Corning invented the ceramic filter and is producing filters for trucks and cars
    - Bandwidth need is increasing at a healthy pace as more and more devices are connected to the internet, which drive data consumption.
        - Corning invented fiber connections and is continuing to develop new solutions that will enable increased bandwidth
        - They have also acquired a strong wireless capacity
    - Dow-Corning is involved in the research and sales of silicone material for solar cell manufacturing, assembly and installation
    - In conclusion – a brief overview of Corning's Products reveals that there is a healthy potential for growth.
- Does the management have a determination to continue to develop products or processes that will still further increase total sales potentials when the growth potentials of currently attractive product lines have largely been exploited?
    - GLW spend around 10% of revenues on R&D and aims to create 4 new markets with new products each decade.
    - Yes, they are working to expand their Gorilla glass into other uses such as automotive and architectural uses
    - Designing bacteria and virus killing glass surface for the medical industry
    - Develop glass as material for solar cells
- How effective are the company`s development efforts in relation to its size?
    - Basic overview – They have an efficient research & development team as they have had a string of successful products and internal process developments in the last years.
    - Long history of extraordinary research results
- Does the company have an above-average sales organization?
    - From my research there is little evidence that they have a superior sales organization.
- Does the company have a worthwhile profit margin?
    - Yes, even under the worst scenarios their profit margin stays above 10%.
- What is the company doing to maintain or improve profit margins?
    - Focused research efforts and moving to thinner and thinner glass as that increases their gross margins.
    - Building economies of scale within their new strategic business units such as – Emissions, Gorilla Glass
    - Maintaining the ability to charge premiums compared to the competition
- Does the company have outstanding labor and personnel relations?
    - From my research, their labor and personnel relations are good.
- Does the company have outstanding executive relations?
    - Yes, all of the C-level executives have been employed in the company for several decades and have long tenures as C-level executives. The CFO has served under four CEO`s.
- Does the company have depth to its management?
    - The company has a focus on developing managers and do not fire them based on external influences that they cannot control such as recessions and similar. The current CEO was the head of the optical fiber division in the dotcom crash and was tasked with turning the company around as that crisis unfolded.
    - Most of the management has worked their way up from the bottom.
- How good are the company`s cost analysis and accounting controls?
    - There is no evidence that they are incompetent at this. It is hard to say anything more as this form of information is close to impossible to attain without being an insider.

- Are there other aspects of the business, somewhat peculiar to the industry involved, which will give the investor important clues as to how outstanding the company may be in relation to its competition?
  - GLW has had a constant leadership in engineering and research over their competitors the last decade and remains well positioned to continue doing so.
  - They have also a significant patent portfolio, which dwarfs their competitor's portfolios.
- Does the company have a short-range or long-range outlook in regard to profits?
  - Yes, short term the profitability of its display segment and its Dow-Corning subsidiary will decline and reset at a lower level than seen before
  - Long term they are aiming for 10 billion dollars in revenue by 2014
- In the foreseeable future will the growth of the company require sufficient equity financing so that the larger number of shares then outstanding will largely cancel the existing stockholder's benefit from this anticipated growth?
  - No, they have a strong balance sheet and a healthy free cash flow.
- Does the management talk freely to investors about its affairs when things are going well but "clam up" when troubles and disappointments occur?
  - No, they have been candid with what they are doing to remedy the external influences and their actions internally. They have not had troubles admitting errors in their research and development efforts.
- Does the company have a management of unquestionable integrity?
  - There is nothing to indicate lack of integrity in the current management from my research.

5.

Ratios	2011	2010	2009	2008	2007	2006
FCF	$ 2,284.49	$ 3,003.88	$ 1,735.83	$ 2,385.66	$ 1,782.24	$ 1,520.43
Net Margin	21.27%	29.51%	19.95%	50.11%	22.56%	22.01%
Gross Margin	45.73%	49.61%	44.70%	47.42%	46.82%	45.12%
EBIT Margin	27.12%	34.32%	22.07%	31.21%	24.85%	23.79%
ROE	19.08%	28.42%	17.49%	30.02%	36.55%	48.93%
ROA	10.88%	15.58%	9.81%	27.19%	15.81%	16.64%
ROCE	14.74%	22.96%	14.88%	44.06%	23.38%	25.17%
ROFA	17.38%	25.75%	16.55%	45.28%	24.01%	25.58%
TL/TA	32.91%	33.01%	34.74%	35.89%	42.55%	48.67%
Interest Coverage	26.36	32.59	24.49	56.45	30.30	24.27
Current Ratio	3.84	3.66	3.18	2.12	2.19	2.25
Quick Ratio	3.32	3.28	2.80	1.69	1.87	1.91
TL/FCF	4.85	3.43	5.19	3.48	4.33	4.84
DSO	52.15	47.67	46.48	31.34	51.67	50.10
DPO	37.43	34.40	29.79	38.31	33.86	35.57
DIO	43.98	38.49	35.32	46.13	39.14	40.90
CCC	58.71	51.76	52.01	39.16	56.95	55.42