

# The Thoughtful Skeptic

Greenwich Investment Research, Inc.

[www.hacketts.com](http://www.hacketts.com)

March 5, 2012

203. 550. 2853

We recently studied AVX Corporation (AVX, \$2.3 billion market capitalization) and Asahi Diamond Industrial Co. Ltd. (6140 on the Tokyo Stock Exchange, \$765 million market capitalization). We do not plan to purchase shares in either company – our comments follow.

## AVX Corporation (AVX)

AVX makes a broad line of capacitors<sup>1</sup> which it sells all over the world. We were initially attracted to AVX because of its modest valuation (1.2x tangible book value, 3.7x trailing EBITDA) solid balance sheet (\$1 billion of cash and no debt) and high returns on capital (after making some allowance for their cash hoard). The following table summarizes AVX's current valuation and capital structure:

(000 except per share data & dividend)			
Common shares outstanding, 2/3/12		169,719	
Options, 3/31/11		3,955	2.3% WASP= 14.08
	<b>diluted share count</b>	173,674	
Share price, 3/5/12		13.09	
<b>Market capitalization</b>		<b>2,273,399</b>	
Cash + securities, 12/31/11		1,048,696	
Operating lease obligations, 3/31/11		18,549	
Debt, 12/31/11		-	
<b>Enterprise value, net</b>		<b>1,243,252</b>	
Dividend, annualized		0.30	
Dividends yield		2.3%	
Net cash / share		6.04	

The table shows that AVX has net cash of \$6.04 per share (not bad for a stock selling for \$13). The following table summarizes AVX's capital returns since 1995.

	GAAP Balance Sheet		
	EBITDA / assets	EBIT / (assets - CL+ST debt)	Earnings / tan equity
2012 - 12/31/11	14.4%	15.2%	11.7%
FY 2011	16.3%	18.0%	14.0%
FY 2010	11.2%	10.7%	9.3%
FY 2009	9.1%	7.1%	7.7%
FY 2008	10.3%	9.9%	9.6%
FY 2007	12.2%	11.0%	9.8%
FY 2006	9.7%	6.8%	5.9%
FY 2005	9.3%	5.3%	4.1%
FY 2004	-1.7%	-8.8%	-6.6%
FY 2003	5.5%	-1.8%	-0.9%

<sup>1</sup> A capacitor is an electrical component used to store electricity in an electric field. Capacitors are used in a very broad range of consumer, commercial and industrial products including cell phones, cars, electrical motors, TVs, computers, radios, electrical instrumentation, HVAC equipment, etc.

FY 2002	7.9%	-0.3%	0.8%
FY 2001	51.0%	55.8%	39.6%
FY 2000	24.8%	23.3%	17.3%
FY 1999	14.2%	6.8%	5.5%
FY 1998	26.3%	21.9%	16.5%
FY 1997	26.9%	23.2%	17.4%
FY 1996	31.8%	31.8%	23.4%
FY 1995	25.6%	23.4%	17.9%

mean '01-'12	12.9%	10.7%	8.7%
median '01-'12	10.3%	9.9%	9.3%

Note the outstanding returns from 1995 – 2001 and lousy returns since. We think lower returns are explained by the company’s growing cash balance. The following chart shows AVX’s cash balance and book value growth since 1995.



The chart shows that AVX has grown cash from about \$100 million in 2000 to \$1 billion today. Interestingly, the company returned \$440 million (net of share issuance) to shareholders since 2000 in the form of share buybacks, dividends and debt reduction. If we adjust for the cash build, the company’s returns look much better. For instance, the data in the following table assumes that their cash remained at \$175 million (AVX’s 2001 cash balance).

<b>Adj. Cash Balance Sheet</b>				
	<b>EBITDA / assets</b>	<b>EBIT / (assets - CL+ST debt)</b>	<b>Earnings / tan equity</b>	
2012 - 12/31/11	22.7%	27.6%	21.6%	
FY 2011	25.5%	32.9%	26.0%	
FY 2010	17.5%	19.8%	17.7%	
FY 2009	13.3%	11.8%	13.1%	
FY 2008	14.8%	16.3%	16.2%	
FY 2007	20.9%	21.4%	19.9%	
FY 2006	15.5%	12.1%	10.8%	
FY 2005	13.7%	8.6%	6.8%	
FY 2004	-2.6%	-14.8%	-11.5%	
FY 2003	8.0%	-2.9%	-1.5%	
FY 2002	11.3%	-0.5%	1.3%	
FY 2001	61.5%	71.2%	51.1%	
FY 2000	24.8%	23.3%	17.3%	
FY 1999				
FY 1998				
FY 1997				
FY 1996				
FY 1995				
mean '01-'12	18.5%	17.0%	14.3%	
median '01-'12	15.5%	16.3%	16.2%	

So, adjusting for the company’s cash balance, the business generates excellent returns. To make things really interesting, note that at \$13 per share, the company is trading for less than 6x fully taxed earnings and free cash flow / enterprise value, i.e., if we subtract the cash from the market cap and eliminate interest income from the income statement. What is not to like about this business?

The obvious issue is that AVX has environmental liabilities which may be considerable. For instance, AVX settled with the EPA in 1991 and paid \$66 million to remediate New Bedford Harbor in Massachusetts. In December 2007, the EPA re-opened the case and claims AVX may be responsible for an additional \$430 million of remediation costs. AVX also has some environmental problems related to its Myrtle Beach plant – estimates for this are \$5 million. So, assuming the worst, the company may have to pay-out something less than \$500 million – but given the low valuation, the quality of their business and the \$1 billion of cash, this would not be the end of the world. Consider the data in the following table which summarizes AVX’s cash flows since 2000.

(000)	<b>Cash from operations</b>	<b>Cash from investing</b>	<b>Cash from financing</b>	<b>Totals</b>
9 ME 12/31/11	121,008	(25,042)	(36,904)	59,062
12 ME 3/31/11	152,095	(157,354)	(31,985)	(37,244)
12 ME 3/31/10	200,454	(278,473)	(29,105)	(107,124)
12 ME 3/31/09	64,991	(42,320)	(34,969)	(12,298)
12 ME 3/31/08	181,863	(257,976)	(43,114)	(119,227)
12 ME 3/31/07	245,029	(41,612)	(35,547)	167,870

12 ME 3/31/06	160,355	(104,363)	(35,935)	20,057
12 ME 3/31/05	57,100	(65,359)	(34,683)	(42,942)
12 ME 3/31/04	83,499	36,599	(31,384)	88,714
12 ME 3/31/03	122,368	(159,549)	(50,197)	(87,378)
12 ME 3/31/02	302,159	(155,162)	(41,120)	105,877
12 ME 3/31/01	584,785	(229,681)	(33,421)	321,683
12 ME 3/31/00	178,180	(175,630)	584	3,134
	<b>2,453,886</b>	<b>(1,655,922)</b>	<b>(437,780)</b>	<b>360,184</b>

AVX is probably still a bargain, even if they were to be stuck with \$500 million of environmental liabilities. So what else?

### Governance

As we studied AVX (on and off since last September) we were puzzled that its returns were so much better than other companies in its industry. For instance Kemet Corp (KEM, \$420 million market capitalization) makes products that are similar to AVX's products and it is also modestly valued, however, the company has lost money three out of the last five years. For comparison, here is a link to our KEM worksheet [www.hacketts.com/hackett-KEM.xls](http://www.hacketts.com/hackett-KEM.xls). Of course, maybe AVX is just better managed than its competitors.

Then a colleague forwarded to us a recent article regarding auditor irregularities at Kyocera Corp. (KYO, \$16 billion market capitalization). KYO is integral to AVX because it owns 72% of AVX's shares and AVX purchased \$506 million of goods and services (42% of COGS) from KYO during FY 2011. The auditor irregularities were found by the U.S. Public Company Accounting Oversight Board as a result of an inspection they performed on Kyoto Audit (KYO's auditor and an affiliate of PriceWaterhouseCoopers). Quoting from the report, Bloomberg's Jonathan Weil states that Kyoto Audit "at the time it issued its audit report had not obtained sufficient competent evidential material to support its opinion on the issuer's [Kyocera's] financial statements." There's more. It turns out that in 2006, Kyoto Audit's predecessor company (Chuo Aoyaa) was found guilty of helping Kanebo Ltd. falsify financial reports and three of its auditors plead guilty to criminal charges. Chuo Aoyaa changed its name to Misuzu then, after more scandals, changed its name to Kyoto Audit. One may wonder why PriceWaterhouseCoopers and KYO would continue their relationship with Kyoto Audit – prudence suggest that one should not assume KYO's financials are reliable. But what about AVX?

AVX is also audited by PriceWaterhouseCoopers and has consistently received clean opinions (though there were some control issues cited in 2004). John Gilbertson serves as AVX's chairman, CEO and president (he has been president since 1997 and was COO before that). From a governance perspective, it doesn't make sense to combine all three roles but that is how it is done at AVX. Mr. Gilbertson also sits on Kyocera's board, so he may bear some responsibility for the selection of Kyoto Audit. AVX's CFO, Kurt Cummings, also serves as AVX's treasurer and secretary (positions he's held for more than a decade). Another anomaly is that Mr. Gilbertson is typically the sole voice on the company's earnings calls. Finally, as mentioned above, KYO is AVX's largest supplier. The following table summarizes AVX's purchases from KYO over the last three years.

(000)	2011	2010	2009
COGS	1,195,790	1,027,368	1,158,196
Purchases from Kyocera	505,976	287,531	389,639
<b>% COGS purchased fro Kyocera</b>	<b>42%</b>	<b>28%</b>	<b>34%</b>

None of this contextual data suggests malfeasance; however, **it does suggest that the conditions are present for malfeasance**. Here is a link to our worksheet:

[www.hacketts.com/hackett-AVX.xls](http://www.hacketts.com/hackett-AVX.xls)

**Asahi Diamond Industrial Co. Ltd. (6140 on the Tokyo Stock Exchange)**

Asahi was established in 1937 and makes cutting and grinding tools that feature diamond and cubic boron nitride (CBN) – the hardest materials known. These tools are consumables (Asahi sells “razor blades”). By its own account, the company has a 10% market share (globally) for these diamond and CBN tools. These tools are used in a broad range of industries including semiconductor (for cutting silicon and sapphire wafers and dicing chips), automotive and general metal working, construction and stone cutting. At ¥1,052 per share, the company is valued at 1.3x tangible book value, 4.2x trailing EBITDA and 12.6x trailing earnings. The following table summarizes Asahi’s current valuation and capital structure:

(000 except per share data)		¥1.00	=	\$0.0123
Common shares outstanding net of treasury shares, 9/30/11	59,156			
<b>diluted share count</b>	<b>59,156</b>			
Share price, 03/05/12	¥1,052			
<b>Market capitalization</b>	<b>¥62,232,112</b>			<b>\$765,455</b>
Cash & securities, 12/31/11	¥13,854,000			\$170,404
Operating lease obligations, 3/30/11	¥185,000			\$2,276
Debt, 12/31/11	¥880,000			\$10,824
<b>Enterprise value, net</b>	<b>¥49,443,112</b>			<b>\$608,150</b>
2011 dividend	¥15.00			
Dividend yield	1.43%			
Net cash / share	¥216			
Net cash % of market cap	21%			

Note that Asahi pays a ¥15 dividend (yield is 1.4%) and has ¥216 per share cash (21% of its market capitalization). The following table summarizes Asahi’s returns on capital since 2003.

	EBITDA / assets	EBITDA / tangible assets	EBIT / (tan. assets - CL+ST debt)	Earnings / assets	Earnings / tangible assets	Earnings / equity	Earnings tangibl equit
9 ME 12/31/2011	20.2%	20.2%	17.0%	10.0%	10.0%	12.4%	12.4%
FY 2011	21.9%	21.9%	20.3%	11.6%	11.7%	15.5%	15.5%
FY 2010	7.2%	7.2%	3.3%	1.8%	1.8%	2.2%	2.2%
FY 2009	6.4%	6.4%	1.7%	2.1%	2.1%	2.5%	2.5%
FY 2008	13.1%	13.2%	10.3%	6.3%	6.3%	7.7%	7.7%
FY 2007	12.0%	12.0%	9.3%	5.0%	5.1%	6.2%	6.2%
FY 2006	11.7%	11.7%	10.2%	6.1%	6.1%	7.8%	7.8%
FY 2005	9.9%	9.9%	8.2%	4.3%	4.3%	5.5%	5.5%
FY 2004	6.8%	6.8%	4.5%	7.0%	7.0%	8.8%	8.8%
FY 2003	4.1%	4.2%	0.7%	0.1%	0.1%	0.2%	0.2%

Note that, except for the last two years, Asahi's returns have been poor. Part of this may be attributed to its overcapitalized balance sheet and part of the improvement over the last two years may be attributed to the company's Global 510 plan launched in 2009 to improve capital efficiency. Of course, another explanation may be that Asahi has been selling a lot of diamond cutting wire to photovoltaic manufacturers over the last few years.

The following table summarizes the company's revenue by market segment; note that their sales to the electronics industry (which includes the photovoltaic industry) has doubled since 2010.

(000)	9 ME 12/31/11		12 ME 3/31/11		12 ME 3/31/10	
Electronics & semiconductor	¥16,779,000	50%	¥21,923,000	51%	¥11,897,000	43%
Transportation	¥4,762,000	14%	¥5,849,000	14%	¥4,463,000	16%
Machinery	¥5,865,000	18%	¥7,372,000	17%	¥5,070,000	18%
Stone & construction	¥4,882,000	15%	¥6,189,000	14%	¥4,945,000	18%
Other	¥1,111,000	3%	¥1,376,000	3%	¥1,033,000	4%
	¥33,399,000		¥42,709,000		¥27,408,000	

Finally, the following table summarizes the company's revenue by geographic region in recent years.

(000)	9 ME 9/30/11		12 ME 3/31/11		12 ME 3/31/10	
<b>Japan</b>	¥17,865,000	53%	¥24,318,000	57%	¥16,676,000	61%
<b>Taiwan</b>	¥3,569,000	11%	¥4,175,000	10%	¥2,255,000	8%
<b>Asia ex Japan &amp; Taiwan</b>	¥7,922,000	24%	¥9,772,000	23%	¥5,279,000	19%
<b>Europe</b>	¥2,688,000	8%	¥2,911,000	7%	¥2,157,000	8%
<b>Other</b>	¥1,356,000	4%	¥1,532,000	4%	¥1,038,000	4%
<b>Total</b>	¥33,400,000		¥42,708,000		¥27,405,000	

In addition to the Asahi's modest valuation and the fact that it is selling consumables, we liked that it is leveraged to the photovoltaic industry but was modestly valued based on results prior to the great expansion of photovoltaic manufacturing capacity. For instance, the company is trading at 6.5x 2008 EBITDA and 7.2x 2006 EBITDA. We really liked this business and started interviewing distributors and studying competitors – then we hit a road block. As part of our investment process, we typically send a list of questions to the company we are studying. In the case of Asahi, we made several phone calls to Japan and emailed our questions to Tomoko Nishimura in Asahi's investor relations group. Here is the email we received in response:

Dear sirs

My name is Morio Kayama belonging to Business and Planning Division of Asahi Diamond Industrial Co.,Ltd and I am in charge of IR. Thank you for your concern to shares of Asahi Diamond Industrial Co.,Ltd. We are sorry but our company can not reply to any questions regarding to IR by e-mail, and also in case of question by telephone, brief conversation only in Japanese is available. We would like you to ask your question regarding to our company to the analyst of stock company who is covering our company not directly to us.

If you had opportunity to come to Japan, it is possible for us to meet to you at our head

office through the introduction by stock company.

Best regards.

\*\*\*\*\*

Asahi Diamond Industrial Co.,Ltd  
Business and Planning Division  
Deputy General Manager  
Morio Kayama

旭ダイヤモンド工業株式会社  
経営戦略企画本部 □□□  
香山盛夫  
〒102-0094  
東京都千代田区紀尾井町4番1号  
ニューオ□□□□□□□□□□11階  
TEL: 03-3222-6311  
FAX: 03-3222-6530  
.....

We continued to try to reach somebody at Asahi who would work with us and sent a letter to Kazou Kawashima, the company's president – we haven't heard back from him. We understand that there is a language barrier; however Asahi publishes its financials in English as well as Japanese so we assumed they had some interest in attracting non-Japanese investors – we assumed wrong. Regardless, we won't buy shares in a company in which management won't communicate directly with us. Here is our worksheet:

[www.hacketts.com/hackett-asahi.xls](http://www.hacketts.com/hackett-asahi.xls)

Please call or write if we may answer your questions regarding AVX, Asahi or any of the companies we currently own (Nakanishi, Circle K Sunkus, ASYS, CTRN, FLR, HDNG, SENE, and VPG).

Respectfully,

*Chris Hackett*

---

Greenwich Investment Research, Inc.  
75 Highline Trail  
Stamford, Connecticut 06902  
[chris@hacketts.com](mailto:chris@hacketts.com)  
[www.hacketts.com](http://www.hacketts.com)  
203. 550. 2853