3D ADVISORS

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✓ **Insider Trading**: Insider Trading Behavior
✓ **Accounting**: Quality of Earnings Issues
Governance: Corporate Governance Issues

Insider and Accounting Issues Tied to Production Shift Analog Devices, Inc. (NYSE:ADI)

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Contact: Bob Gabele (954) 779-3974 or bgabele@3DAdvisors.com

Analog Devices, Inc. is engaged in the design, manufacture and marketing of high-performance analog, mixed-signal and digital signal processing (DSP) integrated circuits (ICs). The Company's products play a fundamental role in converting real-world phenomena, such as temperature, motion, pressure, light and sound, into electrical signals to be used in a wide array of electronic equipment, ranging from industrial process control, factory automation systems equipment, smart munitions, base stations, central office equipment, wireless telephones, computers, cars, computer-aided tomography (CAT) scanners, digital cameras and DVD players.

Summary of 3DAdvisors Findings for ADI

- **Insider Trading:** Timing of insider sales a break from past behavior
- **Accounting:** Inventory build-up, recording special charges and other issues

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Discussion of 3DAdvisors Findings

Insider Trading: Timing of insider sales a break from past behavior

We remain intrigued at the timing of certain Analog Devices insider sales last month. They came between late November and mid December. The December sales were about a month after the disappointing Q4 release where the Company missed its EPS guidance (as outlined in the Q3 "Q") and issued cautious guidance going into Q1 of '03. The stock dropped to new lows during the month following the news. Q1 began in early November. So, since the Q4 release, three insiders had dropped 125,000 shares at prices between $26.74 and $30. What originally interested us is that ADI insiders don't have a history of selling regularly after earnings announcements. Based on the clustering of the sales, we wouldn't be surprised if the Company has established trading windows for its executives. Even in the presence of a window, the fact that they sold at this time, with the stock price so depressed, leads us to suspect that they see more pain ahead.

This is an interesting situation, as most of Wall Street knows that the industry is in the tank. At least two houses, Merrill and Deutsche Securities, had downgraded ADI shares to “Sell” prior to the disclosure of this insider selling. The Company is in the midst of a significant production transition, which may have something to do with the insider behavior. For the past three quarters, ADI has been transitioning its old, four inch wafer fabrication plants to newer, six and eight inch fabrication facilities. The Company has been building up its inventories in anticipation of the changeover. Inventories now stand at $306 million, up from $241 million just three quarters ago. This has brought ADI's inventory levels to 135 days, up from 111 days last year. During the same period of time, industry peers have been reducing inventory. The averages have dropped from 103 days (last year) to just 85 days currently. The company explains this inventory bulge as a planned one due to the transitioning from the old four-inch wafer manufacturing plants to the new eight-inch facilities. They want to build up an inventory of chips, built in the old facilities, in order to have them on hand for product use while the quality control process stabilizes at the new manufacturing facilities. According to an industry expert that we know, this strategy insures a supply of usable chips and allows time for them to get the quality control up in the new plant before relying on it for such supply.

We find all this especially interesting because the selling insiders are tied to production. One is a Senior V.P. of the Company's DSP and Systems Products Group and the other is the General Manager of Micromachined Products. The other seller, interestingly enough, is the CFO.

Accounting: Inventory build-up, special charges and other issues

The manufacturing switch over strategy described is such that it appears that they are not running redundant operations and are planning to shut down most of the four-inch plants by Q1 '03 (the current quarter). The Company has been recording special charges, associated with fringe benefit costs, employee terminations, equipment write-downs, facilities and lease terminations. In Q2 of '02, ADI recorded $25.7 million of these special charges. In Q3 of '02 (which ended August 3), the Company recorded another $12.8 million in these special charges. In Q4, another $8.4 million. In addition, in Q3 ADI recorded $3.2 million in extra, accelerated depreciation costs associated with the now-shortened remaining service lives of two of the three four inch fabrication facilities. In the Q3 "Q", the Company indicated that, in Q4, it would record another $3.2 million in accelerated depreciation charges due to this. It also indicated that Q4 would be the final quarter of these accelerated depreciation charges. By the time of the Q4 release however, the accelerated depreciation charges had risen by another $5.5 million. This was $2.3 million over Q3 guidance and cost about one cent/share in the Q4 EPS number. The Company indicates that the transition to the new eight-inch facilities will be essentially complete in Q1 of '03 (the current quarter).

All this leaves the Company with lots of chip inventory for production, in the interim period, while the new fabrication facilities are being stabilized. We discussed this with Doug Peltzer, former insider with Chips and Technologies and Fairchild Semiconductor and now an industry consultant. Doug tells us that transitions like this involve a significant amount of risk. If a company keeps both plants running, it can keep from building inventory levels as it can manufacture enough reliable chips for production from its older, stable, facilities. Once the new facilities stabilize, the old ones can be shut down, avoiding the inventory build-up. The problem with this approach is that it taps management and engineering talent while both sets of facilities are being managed. Obviously there is an expense element as well. The tack that ADI has taken - to build up chip inventory from the old facilities, close them down and gamble on the inventory level being sufficient enough to cover for the transition - has merit, but carries other risks as well. One glaring one is the finite level of inventory available for production until the new facilities stabilize. Also, if the new plants come online sooner than expected, or if the product demand remains stagnant, the company would face the need for a significant work down of inventory (not to mention the associated drain on working capital). In the Q4 release, ADI's outlook, for Q1 of '03 (the current quarter) indicated an essentially flat climate. Should this continue, the Company could be saddled not only with the excess inventory issue but one of over capacity as well. Since ADI owns over 70% of its wafer manufacturing facilities, over capacity issues would definitely have a much more dramatic effect than they would for companies who outsource a greater percentage of their requirements.

What we are getting at is that the Company is at a high-risk inflection point. In a possibly long-overdue move, it is closing down old manufacturing plants that may have been in place since the early '80's and a lot is riding on the transition. It has to go well. The strategy is critical to the Company in the long run. Some of the product people (by this, we mean those whose compensation is tied to sales volumes) may be adversely affected by the strategy (according to our industry guy) if things don't go smoothly and production from the new plant is delayed. We found at least one reference to this potential problem in a news release (issued in May of '02) from a competitor, NVE Corp. The release touted the fact that, due to its transfer of wafer processing, ADI was discontinuing one product (Product number AduM1100). It would take nine to 12 months to bring the new process on line. Since there are no guarantees that the new production line will be qualified (according to NVE), there could be no guarantee that the part will not be discontinued again. In other words, no need to wait, buy from NVE. This is precisely the type of risk, outlined by Doug Peltzer, that comes with ADI's current strategy and what has probably prompted them to tie up working capital by building up inventories during an industry slowdown.

As we have seen in other cases, there seems to be an inverse relationship between Share Repurchases and Capex. Analog Devices is no exception. Capex was earlier estimated, by the Company to come in at $70 million in '02, way below the $247 million spent in '01. By the end of Q3, the Company had reduced this estimate to $60 million. The Q4 release showed the final Capex numbers to be at about $57 million. In Q4, the Company spent $98 million to buy 4.4 million of its shares. These were the only repurchases of the year and, by far, topped the $22 million spent in '01 (none was spent in '00 or '02). With the stock price so near the lows, the timing of the recent repurchases is difficult to criticize. Only time will tell however, whether the capital preserved by not running redundant operations was better spent buying back stock.

Another interesting piece of information about the company is that they are now doing over 61% of sales overseas. This high percentage caused us to look into what the amount of expatriated earnings they had generated where no U.S. income taxes had been provided for. The number was pretty staggering: As of Y/E '01 (the last filed 10K) which was October 30, '01, no U.S. income taxes have been provided for $908.7 million in earnings of international subsidiaries. In the event of any policy change, with regards to the IRS's position on expatriated earnings, ADI's exposure here should not be forgotten.

One final item that will be getting attention, in the months to come, is the issue of expensing options. ADI has pretty big exposure here. The Company estimates that the effect of options on both net income and diluted EPS would have been material in '01. Net Income would have dropped to $192 million from the reported $356 million. Diluted EPS would have dropped to $.50 instead of the reported $.93.