



This 3DAdvisors Report Covers:

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

Accounting Concerns Make Insider Behavior Stand Out Synopsys, Inc. (NASDAQ:SNPS)

February 4, 2004

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

Synopsys, Inc. is a supplier of electronic design automation (EDA) software to the global electronics industry. During the fiscal year ended October 31, 2002, the Company offered customers a comprehensive suite of products used in the logic synthesis and functional verification phases of chip design, including a broad array of reusable design building blocks. It also offered a set of physical synthesis and physical design products and a number of physical verification products. The Company offers its customers products required to design a chip from concept to the point at which it is handed to the manufacturer for fabrication, as well as an array of design building blocks. It also offers a range of professional services, including turnkey design services, design assistance and methodology consulting. It is organized into four product development groups: Integrated Circuit Implementation, Verification Technology, Nanometer Analysis and Test and Intellectual Property and Design Services.

Summary of 3DAdvisors Findings for SNPS

- ▶ **Accounting:** Revenue recognition easily manipulated
- ▶ **Accounting:** Back-loading order expectations for 2004
- ▶ **Accounting:** Deferred revenue versus backlog
- ▶ **Insider Trading:** 9 out of 11 named executives selling
- ▶ **Accounting:** Option plans have huge impact
- ▶ **Other:** Noteworthy miscellaneous items

Discussion of 3DAdvisors Findings

Our review of Synopsys leaves us with the feeling that this is a Company where it becomes difficult to be comfortable with earnings quality. The Company's transition from a license-based revenue recognition policy (revenue recognized up front) to a subscription-based policy (revenue recognized ratably) has made the process quite subjective and difficult to analyze. Revenue recognition concerns, combined with several other accounting issues and some truly aggressive insider selling behavior have painted a picture where it would seem that multiple areas of risk are in play.

Accounting: Revenue recognition easily manipulated

Clearly, revenue recognition is a key element in any evaluation of this Company and it is very complex. Granted, Synopsys's revenue model transition (from a license to a subscription-based model) is one not unlike many going on in an industry where software is licensed. But given the subjective nature and *application* of such changes, however, and the ample opportunities they provide the Company to manipulate reported revenue and earnings, we feel very compelled to dig deep in this area.

Even though our research has not allowed us to quantify much or find specific "smoking guns", we remain concerned. One simple reason is that *application* of the Company's various revenue recognition schemes can take place all the way down to specific customer orders. The implications are clear. They can negotiate with customers the nature of the order with a view toward how the revenue is going to be recognized. So long as the total amount the customer has to pay is not affected by how the revenue is to be recognized, the customer has no concern about that aspect. So, in any given quarter the way each customer order is structured dictates how the related revenue is going to be recognized. To us, this is more important than most of the things Synopsys has to say about revenue recognition. We believe investors are well advised to pay close attention to accounting behavior in this area.

Accounting: Back-loading order expectations for 2004

Although the Company insists that changes in the revenue recognition policy have no real long-term effect on earnings we find it interesting that guidance (for 2004) was lowered a bit at the end of Q4. Consensus expectation for revenue was \$1.28 billion and the Company guided to \$1.2 to \$1.25 billion. Earnings consensus was for \$1.68 per share while the Company guided to \$1.50 to \$1.60. The recent revenue model change is cited as a reason for the lowered guidance. More interesting to us, however, is the fact that Synopsys is back-loading its booking expectations for F/Y 2004 with about 70% of the bookings to be done in the second half.

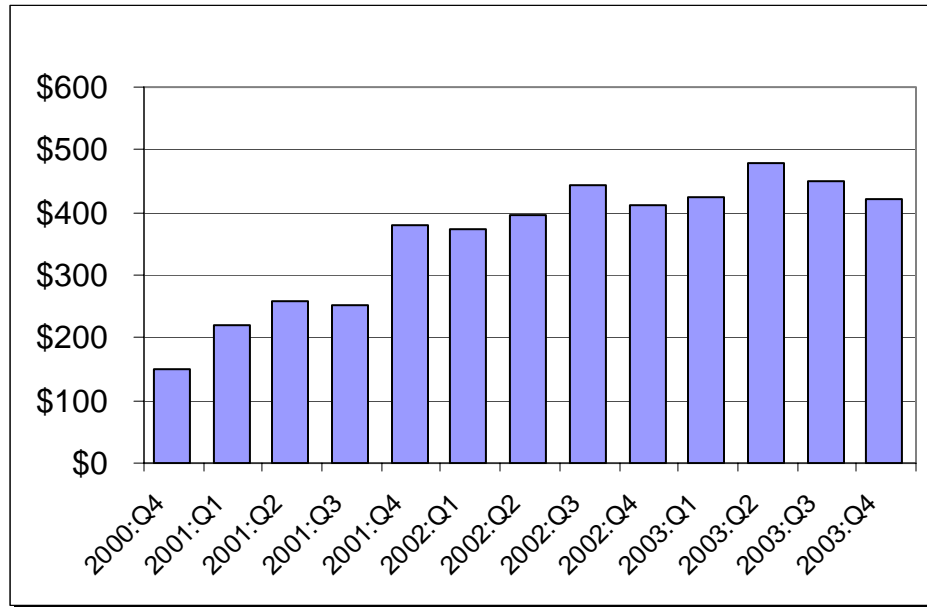
With this said, we find it interesting that Synopsys stresses that investors look at bookings over deferred revenues when attempting to gauge future earnings prospects. The Company claims that it does not historically experience significant order cancellations. This is not the case, however, in its declining service sector, where revenues decreased 9% in 2003 (from \$288 million to \$261 million). Here, Synopsys cites that "customers deferred or cancelled a number of projects in our consulting backlog" as one of the reasons for the decline.

Accounting: Deferred revenue versus backlog

Since the revenue model shift, this is the first time Synopsys' deferred revenues have dropped for two sequential quarters. The Company wants investors to believe that this doesn't matter. When asked (in the related earnings conference call) about the Q3 (2003) drop, the Company explained that deferred revenue is less than one-third of the overall backlog and that the decline was "due to a higher percentage of orders being invoiced quarterly in advance as opposed to annual in advance." Interestingly enough, there were no questions related to the second sequential deferred revenue drop (in Q4).

We also note that nowhere does the Company provide a breakdown (read: aging) as to when deferred revenue is expected to hit the income statement other than to show current vs. long term components of the total. Not only does this offer ample opportunity for revenue management, quarter-to-quarter, but also raises the question as to whether related costs and expenses are being booked out of period, thus providing additional opportunities for earnings management.

Figure 1. SNPS Deferred Revenue (Millions \$). Source: SNPS SEC Filings



Clearly, the license mix has resulted in a very cloudy picture with regards to understanding the true revenue mix going forward. Synopsys states its goal, repeatedly, that the target mix is 25% up front revenue, 75% time-based revenue. Actual results, however, meander around this mix and, now two years into the transition, have yet to settle down to management's stated goals. And now, this quarter, the Company is introducing a new term license. This is a renewable license that "has the attributes of both time based and perpetual licenses." In these cases, revenue is recognized "either up front by a perpetual license or thereafter like the current ratable licenses." This more flexible license is designed to both expand the Company's abilities to dovetail with customer budgets while at the same time maintain the 25/75 mix of up front to time-based orders, which, of course, adds yet another dimension to the mix and provides Synopsys with further opportunities for earnings management.

The magnitude of the revenue subjectivity is such that much opportunity exists for earnings management for any given period. The point to consider here is that since the license mix change remains in a transition mode and is not yet complete, and with its attendant effect on deferred revenue and cash, getting a feel for future results remains tenuous.

Insider Trading: 9 of 11 named executive officers selling

We have been monitoring Synopsys insider sales since a burst of them last May-June when the shares first broke out of the \$20 to \$25 area to move into a new trading range. December marked the second round of aggressive selling from Company executives. This makes the insider sales, since the late-May breakout, the highest-ever for Company insiders and far more than the amount of shares sold by insiders during the previous peak period in 1999.

We should point out that Synopsys has an extraordinarily complex options picture. The Company typically grants multiple option series (with separate strike prices and expiration dates) to insiders each year. Making the matter confusing, the Proxy does not break out the amount, from each series, granted to individuals, choosing instead to report one total granted to each named executive. Consequently, the only options information lies buried in the Form 3 and 4 filings. The vesting schedules utilized by Synopsys are uniform throughout each series: 48 month schedule for each (3/48 vesting on the first anniversary of the grant with 1/48 each additional month until fully vested). After wading through the extensive option detail, we have been able to put the pieces together and have identified key officers who have reduced their holdings in a material manner since the May breakout.

- **Vicki Andrews (47)** – Sr. V.P. Worldwide Sales. Andrews is one of the four named executives in the Proxy. She has been with the Company since 1993 and has rarely sold shares. More importantly, with the exception of 430 shares, she has always held her equity position in the form of options, making it all the more important to dig into her options holdings to understand the magnitude of her sales, which have been very active in the past two quarters. The Proxy is not helpful either since options vest monthly and she held them in seventeen separate series as of early December. Because of the monthly vesting schedules, her portion of exercisable options moves up each month, making the older Proxy data unreliable. Working off the option data, we have been able to determine that, since May, **she has cleared out of 52% of her actionable holdings (stock plus exercisable options)**. She did this by exercising options for, and selling 204,905 shares since May at prices between \$26.50 and \$33. (In the Insider Bulletin of 1/12/04, where we had reported on SNPS selling behavior, we had indicated a higher percentage reduction for her as we had missed a split calculation.) Her December sales accounted for 88,785 (prices in the \$31 to \$33 range) of the total. Making matters more interesting, her options had a very long time left until expiration (her entire options position, including already-exercised ones) does not expire until between 2009 and 2013. These were her largest-ever sales. We continue to regard her holdings reductions as truly significant for a person so central to the sales picture.
- **Sanjiv Kaul** - Sr. VP. CAM. Kaul manages the New Ventures group, responsible for strategic areas including analog/mixed-signal design and verification, and design for manufacturing. Although his age is not disclosed, recent pictures on the Company's web site suggest that he is far from retirement. He has been with the Company since 1994. In a fashion similar to Andrews (above) Kaul began exercising options and selling Synopsys shares in an unprecedented fashion after the May/June breakout. In May/June, he exercised options for 274,824 shares across eight separate series, selling them immediately at prices between \$29 and \$32. He followed these up in December, with option exercises (this time across seven

separate series) totaling 68,653 shares, which he then sold at \$32.60. So, between the May/June sales and those of December, **Kaul has dropped 342,277 shares which represents 55% of his actionable holdings.**

- **Chi-Foon Chan (52)** - President and COO. Prior to recent sales Chan had not sold a Synopsys share since back in 1999 when the shares last were at current levels. His recent sales are more aggressive than back then. In June, he exercised options for, and sold, 184,000 shares at prices in the \$30 range. He followed these up with December sales totaling 200,000 shares at prices around \$33. Though his holdings remain significant, these are the largest sales we've seen by him.
- **Aart J. de Geus (48)** – Chairman and CEO. Company co-founder, de Geus has not sold a share since 1999. In December, he sold the largest amount of shares in the past five years: 162,000 shares at \$33.43 each. This sale eclipses the 30,000 he sold back at the 1999 peak. His holdings remain significant.

Furthermore, a group of Synopsys executives joined the Section 16 filing ranks this past August. This group, mostly GM's of various divisions, had not been filers prior. Consequently, we have no record of previous transaction activity. Nevertheless, we consider their convergence, occurring at the same time as the others, to be important, especially given the fact that some of them seem to be clearing out big chunks of their long-held options positions as well.

- **Manoj Gandhi** – GM. Gandhi's group is responsible for Synopsys' synthesis and physical design solutions, test automation, signal integrity, power analysis and timing. He has been with Synopsys since 1997. He has no common shares, choosing instead, to hold his entire position in the form of options. In December he exercised options across no less than 12 of the 16 options series that he held positions in, exercising for, and selling, 33,500 shares. He exercised some of the highest-priced options of the entire insider group, converting his \$28.09's, his \$28.06's, his \$27.19's and his \$27.16's (along with lower-priced options) and selling the shares in the \$33 range. Although we cannot decipher his vesting schedule (due to his new filing status), we are confident that his activity is representative of a situation where an insider is clearing out almost every available option, then selling. He has, most likely, dropped the majority of his actionable position.
- **John Chilton** – GM, Solutions Group. He joined the Company in 1995. His December sales totaled 42,371 shares at prices in the \$33.50 range. His sales cleared out 19% of his actionable holdings.
- **Antun Domic** – GM, Implementation Group. He has been with the Company since 1997. His December sales totaled 32,133 shares in the \$33.50 range. His sales dropped his actionable holdings by 14%.
- **Raul Camposano** – Sr. VP, Chief Technology Officer. Camposano started selling in December, exercising options for, and selling, 70,000 shares.

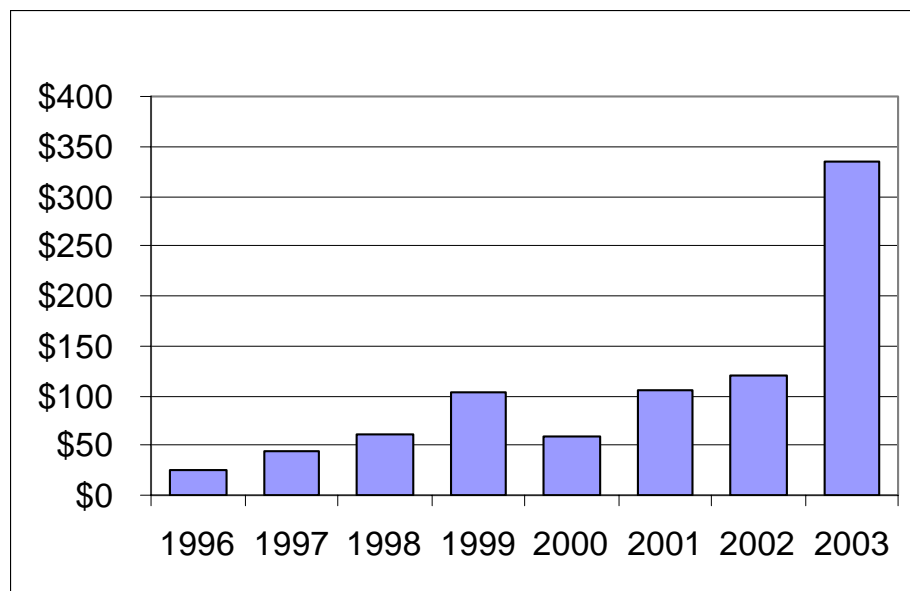
There are some other, smaller sellers as well. In all, nine of the eleven top officers listed on the Synopsys website as "Executive Management" have been recent sellers. Although we acknowledge that Synopsys shares are up, the fact stands that they have

rallied in the past, with no such convergence of significant insider sales the likes of which we see now.

Accounting: Option plans have huge impact

Thanks to its aggressive options compensation program, Synopsys is in a position to be materially affected by proposed changes that would require the expensing of stock options. In F/Y 2003, options expensing would have reduced the Company's basic EPS number from \$.99 to \$.36, a reduction of 63%. In addition, the Company's option program has been creating significant tax benefits as well, generating \$65 million in tax benefits in 2003. Consequently, cash from employee stock option exercises brought in \$325 million in cash during F/Y 2003, the highest amount on record. This cash infusion, as you know, is a dual-edged sword as it reveals the level of broad employee (both Section 16 filing insiders and rank and file option plan participant) stock option exercising. It has been our experience, in observing insider behavior for 22 years that most option exercises are accompanied by sales of all or most of the underlying securities. This certainly has been the case with Synopsys over the years. Consequently, it is a safe assumption that, in addition to regular Section 16 insider sales, broad-based employee stock sales at the Company are at record levels.

Figure 2. Cash Received From Employee Option Exercises (Millions \$)
Source: SNPS SEC Filings



Other: Noteworthy miscellaneous items

- **Customer Contract Intangible Assets.** Due to the 2002 acquisition of Avant! and that of Numerical in 2003, Synopsys carries about \$97 million in Customer Relationship assets in Intangible Assets (net of accumulated depreciation) as of Y/E 2003. We acknowledge the fact that in a business such as Synopsys's, customers, once imbedded in R&D projects, are not likely to switch products in mid-stream.

However, given the fact that most of Synopsys' new term contracts are for three years, the six-year amortization schedule the Company utilizes for this seems a bit long. It appears that the majority of this asset has five years remaining before fully amortized.

- **Foreign Revenues and Expatriated Earnings.** Synopsys has about \$177 million in expatriated earnings representing an unrecognized deferred tax liability of \$49 million. This may be going up however, as Synopsys' portion of foreign earnings is increasing. As of F/Y end 2003, foreign revenues represented 43% of Synopsys' total revenue, up from 35% in 2002.
- **Some Related-Party Dealings Stand Out.** Synopsys reveals certain related-party dealings. Some raise eyebrows more than others:
 - ▶ The related party dealing that concerns us the most is that involving Synopsys Director Richard Newton who is also a member of the Company's Governance Committee. In addition to his director fees, Newton received \$180,000 in consulting fees from Synopsys during 2002 and 2003. It would seem that this type of arrangement violates the spirit of Sarbanes-Oxley.
 - ▶ The Company reveals that about 10% of revenues come from Intel. Intel's CFO, Andy Bryant sits on Synopsys' board and, until recently, was a member of Synopsys' Audit Committee. The emergence of Sarbanes-Oxley prompted the removal of Bryant from the Audit Committee but the Company has received criticism, in certain camps for continuing to have him serve on the board as a member of both the Synopsys Compensation and Governance committees. It is a natural that Synopsys is doing plenty of business with Intel. Though some would doubt that that Bryant's involvement has much to do with the relationship, we are somewhat intrigued that, in the post-Sarbanes-Oxley world, he remains on the Synopsys board.
 - ▶ Synopsys also indirectly reveals that the Chairman of Synopsys' Audit Committee, Deborah Coleman, is also Chairman of Tesada Corporation where Synopsys has invested \$800,000. To this we would note that other investors in Tesada include Synopsys archrivals Cadence Design and Mentor Graphics. It would seem that Tesada's technology is important to all three competitors and that Coleman is not driving Synopsys' interest as much as it is by the fact that it's competitors are involved as well.
- **Synopsys repurchases accelerating at higher stock prices.** Coincident with the high level of stock sales by Synopsys employees and insiders is the equally high level of Company repurchases. Synopsys spent \$261 million in 2003 buying back shares, paying an average price of \$27.72 in the process. This far exceeded the \$171 million spent in 2002 when the shares traded at lower prices, clear evidence that there may be motivations other than "increasing shareholder value".
- **A CFO switch in early 2003.** We note that current Company CFO, Steve Shevick, is relatively new, having stepped up into the position when former CFO, Robert Henske, left for Intuit in January of 2003.

Copyright © 2004 by 3DAdvisors, LLC. **ALL RIGHTS RESERVED.** Your possession and use of this report is subject to the terms and conditions of the 3DA Product License Agreement, and any unauthorized use or access constitutes theft and 3DA will prosecute violators to the full extent of applicable State and Federal Law. This research report may not be reproduced, stored in a retrieval system, or transmitted, in whole or in part, in any form or by any means, without the prior written consent of 3DAdvisors, LLC. The information in this report was based on sources believed to be reliable and accurate, but no warranty regarding its accuracy or suitability for any purpose is expressed or implied. Nothing contained in this report is or should be construed to be a recommendation to sell, hold or purchase any security.