NYGS NEW YORK GLOBAL | SECURITIES

April 10, 2006

Economic Research

AMAT 2Q06 Tracking Below Guidance: CEFA Industrial Machinery Data Readthrough

Companies Mentioned

Not Rated Companies

Applied Materials (AMAT, $18.04)

Philip L. Miller
philip@nygsresearch.com
1-646-218-8631

Summary:
We used our Cross-section Economic Factor Analysis (CEFA) model to analyze February's Industrial Machinery data from the Commerce Department. The results indicate that **Applied Materials's 2Q06 (ending in April) revenue is tracking below the company's guidance and consensus expectations**. In this report, we provide a detailed walk-through of the CEFA model. As new data becomes available we will continue to update our model and report when the data indicates some deviations from expectations.

Key Points:

- **February new orders for Industrial Machinery were down –38.5 % m/m:** The department of Commerce reported that in February new orders for Industrial Machinery had declined by -38.5 % m/m. In January, new orders had increased by 32.8% m/m. We believe that January's increase was a one time event, which resulted from several large purchases from Applied Materials. The procurements were for machinery related to the production of flash memory, which had been in short supply.
- **Elaboration of CEFA Model:** We elaborated our CEFA model in detail throughout this report. We began with the process of identifying significant data points. We proceeded to explain how we connect the government data to the companies which we believe are consistent with those data points. Then we specified our regression equation estimated our dependent variable, which in this instance was revenues for Applied Materials.
- **CEFA currently tracking revenues below guidance and consensus:** Currently, our CEFA model is tracking Applied Material's 2Q06 revenues at below guidance and consensus. While we expected a low figure for February, we were surprised by the sharp downturn of bookings, or new orders, a portion of which will be billed in the later weeks of the same quarter.
- **Greater probability of underperforming expectations for 2Q06:** We believe that there is a currently a greater probability of Applied Materials's 2Q06 revenues to underperform current guidance and consensus expectations.
- **New Data & Model Updates**: As new data becomes available, we will continue to update our model and report when the data indicates some deviation from expectations.
- **To be added to the Economic Research distribution list** email research@nygsresearch.com or contact your NYGS sales representative.

Analysis

I. Introduction

On March 31st, 2006 the Department of Commerce reported its February Shipment, New Order, and Inventory data. Shipments of Industrial Machinery were down -17.7% and new orders were down -38.5 percent. New orders in January were up a very respectable 32.8% preceded by a 14.2 % increase m/m for December. However, the January growth was more than offset by the -38.5% decrease in February.

Through a process of elimination and channel checks, to be discussed below, we have determined that the vast majority of this sector is a product of the Semiconductor machinery sub-sector, with Applied Materials (**AMAT**) being the dominant company in the semi-conductor machinery manufacturing sub-sector.

Based on the current data and our analysis, we believe that there is a clear risk that Applied Materials may not be able to meet the current April (fiscal 2Q06) quarter consensus revenue expectations. However, since we only have data for the first month of the quarter, we will be closely tracking the data for the next two months to see if the weakness continues.

II. Implications

Increased Guidance

On February 15th Applied Materials reported 1Q06 (January quarter) financial results. During their conference call they issued new guidance projecting that "Orders would be up approximately 15% to 20% from Q1 levels and revenues should be up 13% to 15% from Q1 levels, while earning per share would be at $0.22 to $0.23." They continued that: "this is up from $0.17 per share after asset impairments and restructuring charges....For the first fiscal quarter, orders of 2.04 billion surpassed our target and were 21% higher than the fourth quarter of 2005. Revenues were 8% higher and operating income was also 8% higher." This compares with their provided guidance on November 16th of new orders of 7% to 10%, revenues of 3% to 5% and earning of $0.14 to $0.15" (Conference call).

Nancy Handel, CFO of Applied Materials, stated that: "we expect strong customer demand for flash, DRAM and logic orders this quarter, with service and parts below last quarter's seasonally high contract renewals...They also reported that Flash memory had grown by 179.1% q/q and that DRAM orders had declined -5.2% over the quarter with logic growing modestly at 5.6%" (company and calculations). Much of this growth was a result of wireless communications, and the ipod and similar products.. We have highlighted the communications trends in two reports from February (*Durable Orders Hot Spot: Communication Equipment*, February 24, 2006 and *Communication Equipment New Orders up 16.7% m/m*, February 27, 2006),

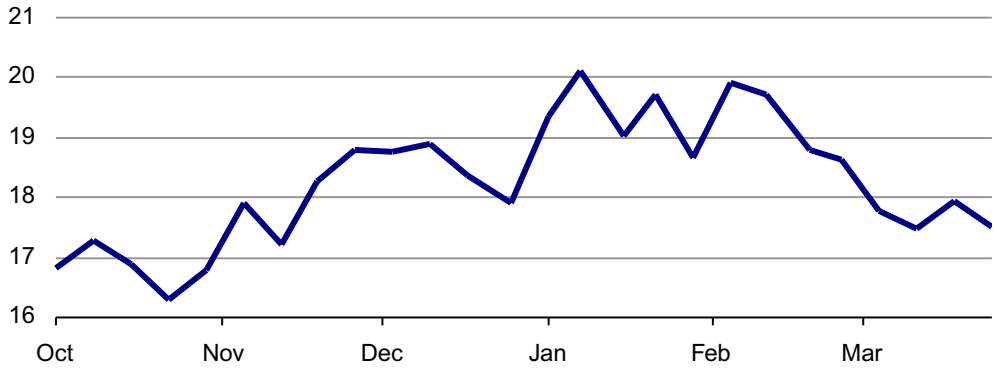
Increased Consensus

Within days of the conference call consensus earnings estimates were increased commensurate with the guidance. Consensus estimates for 2Q06 were increased by analysts equal to the company guidance of $0.23 from $0.18 (Reuters).

Lower Stock Price

On February 15th AMAT closed at $ 20.46, the last closing price was $18.04, down more than two dollars despite increased guidance. The morning after the announcement AMAT reached a multiyear high and since then the stock is down almost 11%.

Chart1: Stock Price for Applied Materials, October 2005 to April 2006



Source: Stockval

The price of AMAT has come down in recent weeks, we believe, because of investor belief that the second half of the year may not be sufficiently strong, relative to the first half of the year. Specifically, we believe that AMAT has declined because much of the growth in 4Q05 came from flash memory, which accounted for 8% of revenues in the quarter. By 1Q06 that segment increased to 19% of revenues. The remainder of the company's business has not had much growth, so we believe that the critical question for investors is: Will the growth rate in the flash business be strong enough able to sustain the top line growth for the company?

With the recent purchases from Applied Materials that lead to the surge in new orders in January, the supply shortage in flash memory may be coming to an end. In addition, we believe that computers manufacturers are not looking to ramp up production for perhaps another 9 to 12 months, until Microsoft's new Vista operating system comes to market driving flash memory demand for the notebook market. Therefore, we believe that for Applied Materials there will not be any significant drivers in the computer semiconductor space until there is a ramp up in the computer hardware industry.

In fact, for the second half of 2006 we cannot currently identify any significant growth driver. Given that there is a 3 to 5 month lag from ordering to completed instillation we are not yet able to identify where new growth will come from, which bodes poorly for the lagging sub-sectors of computer makers and semiconductor chip makers - which are driven principally by DRAM chips and CPU processors. And although Applied Materials's flash memory business is still growing, we believe the second derivative is negative, indicating that it may not be until 2007 when Applied Materials will begin to see significant growth from flash memory driven by notebook computers.

In this regard, Applied Materials can be viewed as a leading indicator for a major segment of the broader technology sector. New orders coming to Applied Materials invariably will lead to growth in those sectors where the OEM's are purchasing equipment. To the extent that we can identify growth trends from the different segments of Applied Materials business our understanding of both Applied Materials will be greatly enhanced, as will our ability to capture changes much earlier within the larger technology sector as a whole.

Implications Relative to Guidance

Our revenue model has uncovered the possibility that Applied Materials's revenue for the March quarter is tracking below their guidance. If the results from the February data are reflected in the March data, we believe that Applied Materials will not be able to meet their revenue guidance for the March quarter. However, we believe that it is still too early to make a clear read-through.

We believe that if our initial model results are correct, and Applied Materials is not able to substantially

improve during the quarter from what we have observed during the first month, meeting near-term guidance will become an even more acute concern than second half growth.

III. Method

We begin our analysis by looking at data reported by the government. In this instance, we used the Department of Commerce Report on Durable Goods Manufacturers' Shipments, Inventories, and Orders as our starting point. We looked inside the numbers at specific trends in each of the underlying data sets to see if any data points were worthy of further analysis. To define this statistically, we were looking for a move (up or down) in any particular line item greater than a standard deviation from the prior month's value. For this report, our methodology identified new orders for industrial machinery as being well beyond our minimum criteria.

Once we identified a sector of interest from the economic data we attempt to find the appropriate companies that are significant participants in this sector. We define significant participants as those company's whose revenues or stock price can to correlated or regressed against the government's reported data with a statistically significant level.

If we are able to identify such companies then we use all appropriate measures to value that sector or company. We are not ideologically constrained by discipline or approach and simply look for information wherever it may come from to understand the dynamics of the original data points of interest. We may approach the information from a traditional economic perspective top down, a bottom-up accounting perspective, or other forms of data resources and information. Our bias is toward real industry data as opposed to conjecture from either companies or suppliers. We are not opposed to contacting companies for information but we attempt to steer clear of filtered interpretations.

IV. Significance of Data point of Interest

The February durable goods report for New Orders for Industrial Machinery decreased -38.5% m/m preceded by a 32.8% increase. For some volatile sectors we would not consider this volatility significant. However for a relatively stable sector like industrial machinery that is relatively stable these were rather large contrasting movements. The decrease in new orders for industrial machinery is 2.3 standard deviations from the mean, with a decrease of $1.39 Billion dollars over the prior month. The 14 year standard deviation for a change in new orders is 608.5 million, with the February decline being the largest in the 14 year history of the Durable Report. The January increase of 893 million was significant but so was the drop-off in orders.

Table 1: Industry Machinery New Orders and Standard Deviation Mean and Standard Deviation

Month	New Orders	Change	Std. Deviations
Nov 05	2,385	26	0.0
Dec 05	2,723	338	0.6
Jan 06	3,616	893	1.5
Feb 06	2,223	(1,393)	2.3

Mean = 2708

Standard Deviation 608.5

Source: Commerce Department

V. Identification of the Companies Represented Within Sub-Sector

Examination of NAICS CODES

The first step in looking at the government data is to clearly understand what sectors and companies are included in the sector data. The Commerce department defines Industrial Machinery Manufacturing not as the machine tool makers, but machinery makers of various other forms. What we traditionally think of as the conventional notion of industrial machinery comes from other areas in the manufacturing report. The Commerce department defines the category of industrial machinery as the following machinery makers:

1. Sawmill and woodworking Machinery (3333210)
2. Plastics and Rubber Industry Machinery (333220)
3. Paper Industry Machinery (333291)
4. Textile Machinery (333292)
5. Printing Machinery and Equipment (333293)
6. Food Product Machinery (333294)
7. Semiconductor Machinery (333295)

The commerce categorization, as expected, is quite precise, and initially left us to wonder where an increase and subsequent decrease of nearly $900 million m/m and decrease of $1.3 billion m/m in monthly new orders could have come from. These are large monthly numbers, so we were looking for large companies in this space.

The source used for the below information is Thompson's Business & Company Resource Center. We broke all these categories down to their component parts and for significant sub industries this resource has a short summary. In addition, we also have broken out all 1500 companies in the S&P 1500 into their dominant North American Industry Classification System (NAICS) codes.

Sawmill and Woodworking Machinery

Sawmill and Woodworking Machinery includes two major companies. Delta International Corp and Unique Machine and Tool Co. Neither are publicly traded. Delta has revenues of approximately $1.4 Billion annually, and Unique $107 million (source: Ward's Business directory of US Private and Public Companies). There were no listings for this NAICS code among the S&P 1500 companies.

Plastics and Rubber Industry Machinery

Although there was no summary report for Plastics and Rubber Industry Machinery, we did identify one significant company: Milacron Inc. (**MZ**). Milacron had revenues last year of under a billion dollars.

Paper Industries Machinery

There was a Paper Industries Machinery report which highlighted the industry leaders as Kadant Inc. and Marquip. Both companies had annual revenues of around $100 million. There were no other companies with this NAICS code as their dominant code, nor were there any companies in the S&P 1500.

Textile Machinery Industry

The Textile Machinery Industry contained a summary report in the database but here again there were no significant public companies. The Singer Sewing Co was the largest company according to the Wards directory. Again there were no S&P 1500 companies in this space.

Printing Trades Machinery and Equipment

The Printing Trades Machinery and Equipment sector did have a industry report and indicated that one of the leading companies was Heidelberg USA with revenues of $500 million. There are no S&P 1500 companies in this space.

Food Product Machinery

For Food Product Machinery there was no summary industry report, nor are there any companies in this sector in the S&P 500.

Semiconductor Machinery Manufacturing

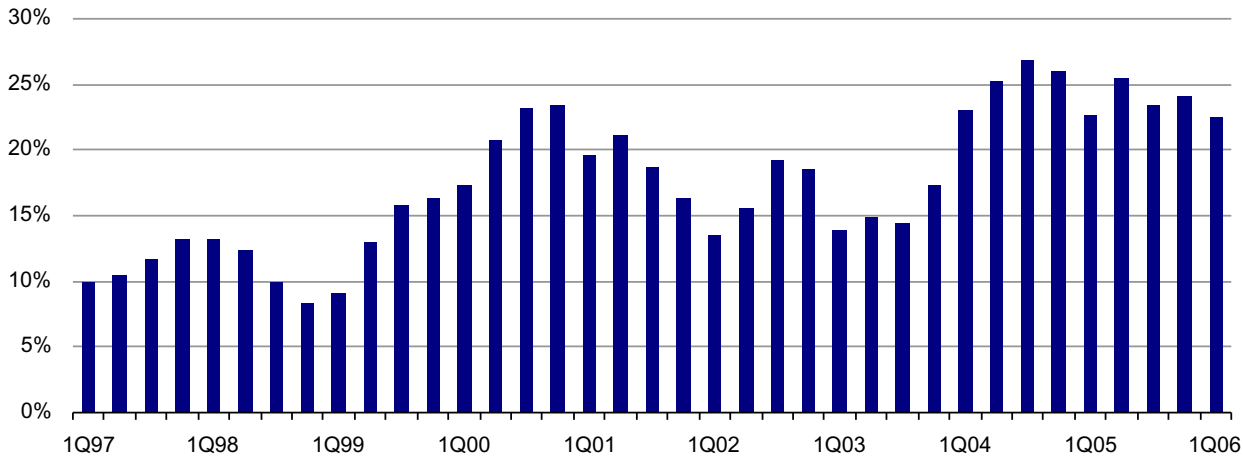
Upon review we concluded that these first six categories likely did not produce the needed level of new orders. There were no companies in the six sectors above that could be driving 3.6 billion m/m in new orders . This leads us to believe that most of the activity must have come from the Semiconductor Machinery Manufacturing space. The dominant companies in this space are Applied Materials, Kla-Tencor Corp (**KLAC**), Novellus Systems (**NVLS**) and Teradyne Inc. (**TER**).

Once we narrowed our expectations down to the Semiconductor Machinery Manufacturing sub-sector, we investigated further to confirm of our expectations. We worked with the Commerce Department through a process of elimination and came to the same conclusion as the above, i.e. that the new order increase and decrease much has come from the Semiconductor Machinery Manufacturing sub-sector.

Dominance within Sector

As indicated we decided to concentrate exclusively on Applied Materials. Our decision was based on our assessment of the impact that Applied Materials has on this sector. To determine this we looked at the percentage of new orders reported by the company and the percentage of new orders for the entire sector as reported by the government data. Chart 2 reports our finding and indicates that in recent years the percentage of Applied Materials new orders to those reported by the government, has been as high as 25%. This indicated to us that Applied Materials was indeed a significant component of this sector and probably has the ability to move the numbers within the sector by the magnitude that we were looking for.

Chart 2: Applied Materials Revenues as a Percentage of Total Segment Shipments



Source: NYGS Estimates and Commerce Department

VI. The CEFA Model: Revenue Projections for Applied Materials Using Economic Data

CEFA was originally developed as a tool to identify those companies which are most responsive to the economic data. Once the companies that best fit the data were identified, it was intended to serve as a predictive revenue model, essentially attempting to identify companies most likely to deviate from consensus and guided revenue expectations. The third objective of CEFA is to use it as a forecasting model. Once the associated sub-sector factors are correctly identified it is possible to project revenue growth by attempting to forecast the growth of these secondary sectors.

Generalized Form of Model: As Derived from APT

CEFA is a derivative of Arbitrage Pricing Theory (APT). Traditional APT attempts to determine the impact of specified factors on the return on specific assets or on an asset class. We use this as a basis to derive the revenue of a company or sector using identified specified factors.

Traditional APT attempts to isolate factors that affect security returns. In the generalized form this becomes:

$$R_{it} = E(R_i) + \sum_{k=1}^{n} bik\, F_{kt} + E_{it}$$

Where:

R_{it} = the rate of return for asset i;

E(Ri) = expected return for asset i;

b_{ik} = the sensitivity (or exposure) of asset I to factor K;

F_{kt} = the return of factor K with E(Fk) = 0

E_{it} = the residual return on asset I, that is not explained by the factors

In traditional APT the factors that are specified are often industrial production, interest rates, oil prices, differences in bond ratings and various other market factors.

We use this general model and government data at the cross-sectional level as the specified factors for that sector. We expect to get a reasonable read through to that sector. For example, in our Applied Materials model, we can look at shipments, new orders, PPI, employment, and various other data points as our factors to determine the return to Applied Materials.

When dealing with the broader market it is possible to use these factors in a manner similar to the way that Chen, Rolls, and Ross (Chen, Roll, Ross 1991) developed their work around this framework. Their objective was to determine what factors caused excess returns for the entire market. Our objective is more modest. We are looking to isolate the factors that affect either Applied Materials or the Semiconductor machinery sub-sector.

Different Agenda

Although our agenda is different, the methodology is very similar to the APT. Our interest is in understanding if changes in given factors will enable us to project future activity in the sector of interest.

We are provided with two quarters of data and our objective is to determine if that data can help us understand what is happening with the sector. When dealing with a sub-sector of the economy or a specific company we are not really looking to arbitrage returns or understand where excess returns are coming from. Our goal is to understand simply the growth rate of that company, and how our expectations deviate from consensus and guidance.

In the traditional APT model the objective is to understand CAPM pricing anomalies, with the factors determining the cause of these inconsistencies. In our approach we are interested in projecting the companies or sectors revenues with the independent variables (the factors) providing guidance on where the revenue drivers can be found. To the extent that we can provide guidance as to the price of the security, in this instance, AMAT, our abilities to make these assessments are constrained by the closeness of our projections to the actual revenue figure, and how closely and consistently does the stock price move in relation to actual and expected revenues and earnings.

It is for this reason that instead of using the asset return as our dependent variable we take the approach of looking at sector revenues or company revenues as our dependent variable. We use the component data that we have to make the best estimate of the actual revenues of sectors or specific stocks, and make read-throughs based on the expected deviance from consensus or guidance.

The Revenue Model Generalized Form

In our factor model we specify either the revenues, new orders or bookings, or gross margins as our dependent variable. Since we are not concerned with the difference between the CAPM expected return and actual returns we exclude that variable from our model. In the generalized form we use the following specification.

$$Rev_{it} = C + \sum_{k=1}^{n} bik + E_{it}$$

Where:

Rev_{it} = the rate of return for asset i

C = Constant

b_{ik} = the sensitivity (or exposure) of asset I to factor K

E_{it} = the residual return on asset I, that is not explained by the factors

The Applied Materials CEFA Revenue Model

As noted above, CEFA was developed as a tool to identify which companies are responsive to economic data, as a predictive revenue model, and to identify changes in existing trends which is essentially the second derivative. In order to achieve all three objectives, we will attempt to maximize the R^2 of the regression equation with respect to revenues. This will require that we not only look at the obvious components of shipments and new orders as possible independent variables, but also the broader supply and shipment horizon that will affect the orders coming to Applied Materials.

Some of these key independent variables will include shipments, new orders, inventories, and unfilled orders for:

1. Computer manufacturers
2. Semiconductor manufacturers
3. Communication equipment manufacturers

4. Storage equipment device manufactures
5. Audio and video manufacturers
6. Electronic component manufacturers and
7. Electrometrical measuring, and control instruments

In our analysis, we either lead or lag the variables by six months to develop the best possible regression predictor for revenues, new orders, and gross margins. The regression equation becomes a combination of all the variables above and all the supply chain variables with both leads and lags. Prior to simply running these indicators it is desirable to review some historical trends and various lead/lag correlations in order to better understand the interactive relationships between these components.

We tested numerous models with Applied Materials actual revenues being the dependent variable. The model that best specified the R^2 was the following:

RevAmat = f (indmachas, storas, indmachnoa, mednoa, elecufa)

Where:

RevAmat = Actual Revenues for Applied Materials (Y).

Indmachas = Shipments of Industrial Machinery Seasonally Adjusted (X1).

Storas = Shipments of Computer Storage Devices Adjusted (X2).

Indmachnoa = New Orders for Industrial Machinery Adjusted (X3).

Mednoa = New Orders for Electro-medical Instruments Adjusted (X4).

Elecufa = Unfilled Orders for Electronic Components (X5).

Our results were as follows:

Table 2: Results from Regression Equation 2002 to 2006

Variable	Coefficients	t-statistic	Significance
constant	-3803.712	-8.84	0.000
indmachas	0.151	2.24	0.047
storageas	-0.328	-4.09	0.002
inmachnoa	0.123	2.84	0.016
mednoa	0.179	16.40	0.000
elecufa	0.025	2.56	0.026

Dep Variable: Actual Revenues for Applied Materials R^2 =.977

Source: NYGS, Company reports and Commerce Dept.

These results appear quite strong with an R2 of .977. We tested the regression equation for the period 2002 first quarter to 2006 first quarter.

Table 3 reports the actual, projected and the absolute value difference between the actual and the projected revenues. Our estimates on average had a difference of $52 million while using only government data against actual revenues of the company. For the second quarter 2006 we are projecting only $1,451 based on one month of data, when while guidance is for revenues of $2,099 to $2,136 million. Table 3 provides the summary results indicating that our average difference is $52.5 million with a standard deviation of $30.9 million, further indicating that statistically 82% of the time our estimate will be within $52.2 million dollars assuming that we had all three months of data. Unfortunately, we have only two months of data going into each earnings period which makes this

estimation task somewhat less certain.

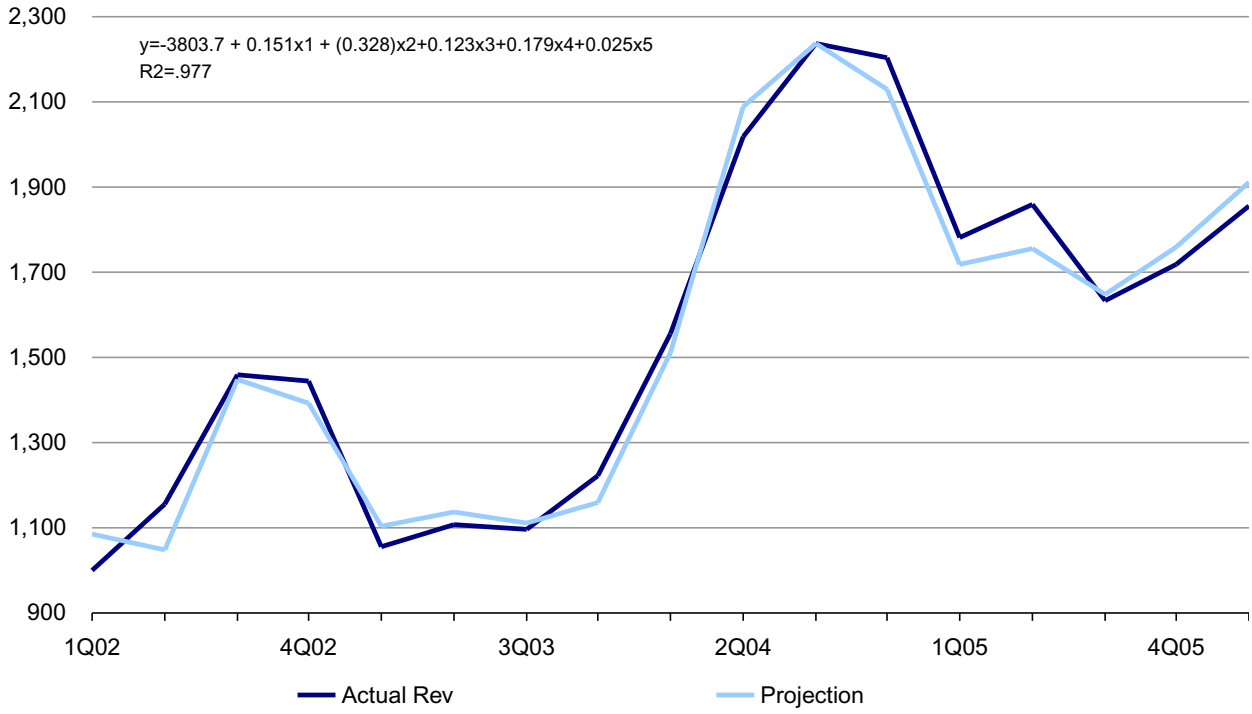
Table 3: Actual and Projected Applied Materials Revenues ($Millions)

Date	Actual Rev	Projection	Difference
1Q02	1,000	1,086	86
2Q02	1,156	1,050	106
3Q02	1,460	1,447	13
4Q02	1,446	1,391	55
1Q03	1,054	1,105	51
2Q03	1,107	1,138	31
3Q03	1,095	1,112	17
4Q03	1,221	1,161	60
1Q04	1,556	1,513	43
2Q04	2,018	2,090	72
3Q04	2,236	2,237	1
4Q04	2,203	2,131	72
1Q05	1,781	1,717	64
2Q05	1,861	1,754	107
3Q05	1,632	1,650	18
4Q05	1,718	1,758	40
1Q06	1,857	1,910	53
2Q06		1,451	
Average Difference			52
Standard Deviation			31

Source: NYGS, Company reports and Commerce Dept.

In Chart 3 we plotted the same data as a visual of our estimation accuracy. We expect this model to anticipate a major revenue deviation prior to the company reporting results.

Chart 3: Actual Revenues Applied Materials vs. Projected Revenues 2002 to 2006



Source: NYGS, Company reports and Commerce Dept.

VII. Applied Materials Revenue Expectations

Last month, Applied Materials reported January quarter results. Applied Materials's revenues for the past quarter were $1,857.6 million. They projected that their revenues would be 13% to 15% higher in the coming quarters 2Q06. That translates to $2,099 to $2,136 million. The current First Call consensus for the quarter is from $2,099 to $2,200 million.

Our model using just the February data projects second quarter revenue total of only $1,451 million. This is clearly low since much of the large increase in new orders from last quarter will get filtered into shipments within the next two months of the quarter. However, with the first month new orders data down significantly, and with a portion of first month new orders having the ability to impact quarterly results we believe that there a risk to Applied Materials not reaching their current expectations.

Based on the company's revenue recognition policy, revenues are recognized when the product is billed which for semis is approximately three months, for services, upon completion of service provided, and for flat panels eight to nine months. Since much of the new orders that occurred last quarter are for communication related flash memory, we would expect that to show up in the third month of the current quarter, 2Q06. Our concern lies in the new orders which were anemic for this past month, and how much of those orders booked in the first month tend to show up as revenues by the end of the quarter in which they are booked. For services we would expect to see a prorated portion, for semiconductor and communication equipment we would expect a lesser amount. To the extent that new orders were lackluster, we are a bit concerned.

The third month unquestionably will be the critical month for Applied Materials, and right now unless some major new orders come in within the next several weeks, we believe they are unlikely to meet the $2.12 revenue mark, nor the 15% to 20% new order growth which would be critical for them to grow at these rates throughout the remainder of the year. We believe that they will need a bit more than good shipments from the new orders that they generated last quarter to meet their new order and revenue guidance.

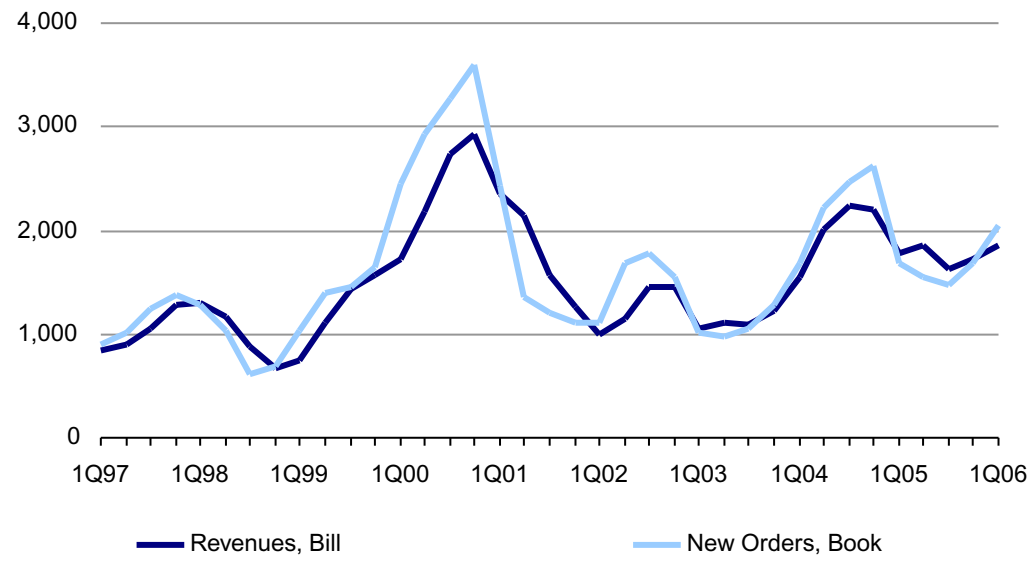
When the new data becomes available early in May we will revise our forecast, and make a more refined revenue projection. At this point the most we can say is that the first month was worse than we had expected but much of what will determine the success of Applied Material to meet their numbers will occur in the last month of the quarter, and this we can only estimate.

Centrality of Applied Materials to other Technology Sub-Sectors

While it is still too early to predict, we expect that the large January increase may have been a one time occurrence, and not the emergence of a new continuing trend. In past years many of the large increase were followed by prolonged technology sector upturns, but in this instance we believe this will not the case.

As shown in Chart 4 the two significant positive book to bill crossovers in 1998 and in 2003 coincided with major movements in the broader technology sector as seen in Chart 5.

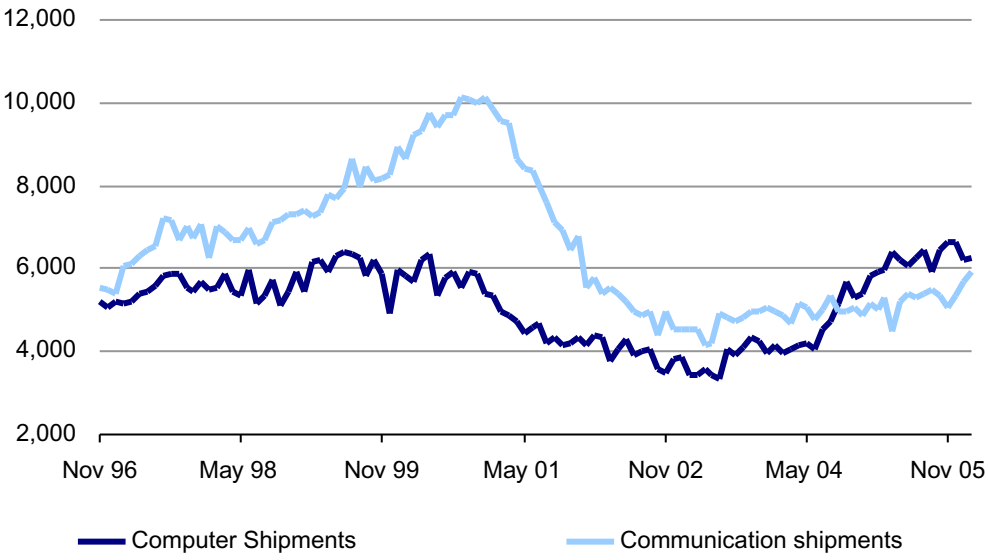
Chart 4: Applied Materials Book to Bill Ratio 1997 to 2006



Source: Company Reports

Comparing Chart 4 with Chart 5, we can see that the 1998 book to bill crossover occurred just prior to the communication equipment buildout and the 2003 crossover occurred with the market growth of laptop computers. The late 2001 crossover following the 9-11 attacks was a false start, and we believe like the late 2001 crossover, the current crossover is a result of one time purchases to eliminate shortages within the flash memory sub-sector, and not a new major up turn in the broader technology sector. Currently, we do not have any data indicating that there are segments which will drive substantial growth in the technology sector for the near term.

Chart 5: Computer and Communication Equipment Shipments 1996 to 2006



Source: Department of Commerce

Conclusion

Throughout this report we have argued that Applied Materials may have difficulty meeting their current quarters guidance, let alone growing sequentially for the remainder of the year. In addition, our implications for the larger technology sector are also somewhat bearish, since except for flash memory, and wireless communications, there are few obvious drivers.

We detailed our CEFA model which has three primary goals. First, CEFA is intended to identify which companies track the government data well. Second, CEFA was devised as an revenue surprise model, to help us anticipate revenue anomalies for the upcoming quarter. Third, our intent was to use the factors from the regression model to help us better understand which elements contributed to the dependent variable, which in this instance was revenues for Applied Materials.

We believe that there is a currently a greater probability of Applied Materials's 2Q06 revenues to underperform current guidance and consensus expectations. As new data becomes available, we will continue to update our model and report when the data indicates some deviation from expectations.

Risk Factors

There are numerous risk factors to this analysis. First and foremost is the nature of the best regression fit which is ever-changing. The model requires constant attention, especially in the field of technology where everything is changing so rapidly. Secondly, with only one or two months of data, estimation of the second or third month becomes essential, and a poor estimate on our part, will significantly increases the risk that our results are not meaningful.

No quantitative based model is ever completely accurate; it is always premised on a probability of reasonable results. This model is no exception to that rule. We believe that investors should approach our model as a cross check on solid fundamental analysis, highlighting possible inconsistencies that need to be resolved for a best effort at understanding the dependent variable.

Important Disclosures and Certifications

Distribution of Ratings/IB Services
New York Global Securities

Rating	Count	Percent	IB Serv./Past 12 Mos. Count	IB Serv./Past 12 Mos. Percent
BUY [Buy]	5	62.50	0	0.00
HOLD [Neutral]	2	25.00	0	0.00
SELL [Sell]	1	12.50	0	0.00

Ratings Definitions:

Buy: We have a positive outlook on the stock and expect it to outperform the implied one year discount rate of the broad U.S. equity market. We believe that investors should be long this stock based on expected stock and/or sector catalysts over the coming year.

Neutral: We expect the stock to perform in line with the implied one year discount rate of the broad U.S. equity market.

Sell: We have a negative outlook on the stock and expect it to underperform the implied one year discount rate of the broad U.S. equity market. We believe that investors should reduce their current holdings of this stock based on expected stock and/or sector catalysts over the coming year.

Prior to August 2005, NYGS used the following the ratings: Buy: We believe the company has strong fundamentals and is undervalued relative to its market, and we expect the stock to deliver returns of at least 20% in a 12 month time horizon. Accumulate: We believe the long run prospects of the company are positive, but short term visibility is still uncertain so there is more investment risk relative to companies with the buy rating. Stocks under the accumulate rating are expected to generate returns of at least 10% in a 12 month time horizon. Hold: We believe the company's long term fundamentals are stable, but we can not identify any meaningful catalysts that can drive the stock higher. Stocks under the hold rating ire expected to show no substantial price movement in a 12 month time horizon. Sell: We believe the company's fundamentals are poor and we expect minimal or negative stock returns over a 12 month time horizon.

Analyst Certification - According to Reg AC, I/we, as (a) research analyst(s) of NYGS, certify that the research opinion(s) expressed in this research comment/report accurately reflect(s) my/our personal view(s) and that no specific payment was received for this particular research product.

Other Disclosures

Disclaimer

Additional information on recommended securities is available upon request.

The information in this report has been obtained from sources deemed reliable, but it is not guaranteed, and it, together with all estimates and forecasts, is subject to change without notice. This report does not purport to be a complete analysis of any security, issuer, or industry, and it is not an offer or a solicitation of an offer to buy or sell any securities. This research report is prepared for general information purposes only and does not consider the specific investment objectives, financial situation and particular needs of any individual. Investors should seek financial advice as to the appropriateness of investing in any securities or investment strategies mentioned or recommended. Investors should note that each security's price or value may rise or fall and that income from such securities, if any, may fluctuate.

New York Global Securities analysts do not own securities issued by companies in the industries they cover. NYGS analysts are compensated in part on the basis of overall company revenue generation. Analysts do not receive direct compensation for specific investment banking transactions.

The technical patterns and price targets mentioned in this report are for general information purposes only and are not intended as a solicitation to take action. Investors who are considering buy and sell transactions of securities mentioned in this report should not do so based solely on the information contained in this report. Prior to making an investment decision about an equity security, investors should review with their Financial Advisors information concerning the issuer's fundamentals.