

TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD

Form 6-K

April 27, 2005

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**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, DC 20549**

**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER  
PURSUANT TO RULE 13a-16 OR 15d-16 OF  
THE SECURITIES EXCHANGE ACT OF 1934**

For the month of April 2005

**Taiwan Semiconductor Manufacturing Company Ltd.**

(Translation of Registrant's Name Into English)

**No. 8, Li-Hsin Rd. 6,  
Science-Based Industrial Park,  
Hsin-Chu, Taiwan**

(Address of Principal Executive Offices)

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.)

Form 20-F

Form 40-F

(Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.)

Yes

No

(If "Yes" is marked, indicated below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82: \_\_\_\_\_.)

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**FOR IMMEDIATE RELEASE**

**1Q05**

**Quarterly Management Report  
April 26, 2005**

**CONTACT IN TAIWAN**

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TSMC

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Topics in This Report

Revenue Analysis

Utilization & Capacity

Profit & Expense Analysis

Financial Condition Review

Cash Flow & CapEx

Recap of Recent Important Events & Announcements

**Operating Results Review:**

**Summary:**

| <i>(Amount in NT\$ billion except noted otherwise)</i> | <b>1Q05</b> | <b>4Q04</b> | <b>1Q04</b> | <b>QoQ</b> | <b>YoY</b> |
|--|-------------|-------------|-------------|------------|------------|
| EPS (NT\$ per com. shr.)                               | 0.72        | 0.96        | 0.80        | -25.3%     | -10.0%     |
| (US\$ per ADR unit)                                    | 0.11        | 0.15        | 0.14        |            |            |
| Net Sales  | 55.65       | 63.87       | 57.51       | -12.9%     | -3.2%      |
| Gross Profit   | 21.65       | 27.15       | 22.73       | -20.3%     | -4.8%      |

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|                                     |        |        |        |        |        |
|-------------------------------------|--------|--------|--------|--------|--------|
| Operating Expense                   | (5.57) | (6.12) | (5.19) | -9.0%  | 7.4%   |
| Non-Operating Items                 | 0.19   | 1.07   | 0.90   | -82.3% | -78.9% |
| Net Income                          | 16.82  | 22.18  | 18.79  | -24.2% | -10.5% |
| Wafers Shipped (kpcs 8 inch-equiv.) | 1,113  | 1,220  | 1,172  | -8.8%  | -5.1%  |
| Capacity Utilization                | 78%    | 88%    | 105%   |        |        |
| Net Profit Margin                   | 30.2%  | 34.7%  | 32.7%  |        |        |

**Remarks:**

The first quarter EPS of NT\$0.72 represents a 25.3% decrease compared with 4Q04. The unconsolidated operating results of 1Q05 are summarized below:

Net sales declined 12.9% to NT\$55.7 billion compared with NT\$63.9 billion in the fourth quarter of 2004. The decrease mainly reflected an 8.8% decrease in wafer shipments and a 4.4% depreciation of the US dollar against local currency, while the wafer average selling price (ASP) remained at the same level as in the fourth quarter last year.

Gross profit decreased to NT\$21.6 billion, representing a 20.3% decline from the previous quarter. Gross margin declined to 38.9% from 42.5% in 4Q04 due mainly to lower levels of wafer output and an unfavorable exchange rate movement.

Operating expenses decreased to NT\$5.6 billion, representing 10% of revenue. The decrease was the result of lower expenses of R&D and SG&A.

The combined result from non-operating income and long-term investment was a gain of NT\$188 million, which was NT\$878 million lower than the NT\$1,066 million registered in the previous quarter.

Income before tax declined 26.4% sequentially to NT\$16.3 billion. The Company's provision for tax expenses of NT\$2.1 billion was more than offset by an investment tax credit of NT\$2.6 billion. TSMC's 1Q05 net income was NT\$16.8 billion with a net margin of 30.2%.

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**I. Revenue Analysis****I 1. Wafer Sales Analysis**

| By Application    | 1Q05 | 4Q04 | 1Q04 |
|-------------------|------|------|------|
| Computer          | 34%  | 35%  | 32%  |
| Communication     | 41%  | 41%  | 45%  |
| Consumer          | 17%  | 16%  | 17%  |
| Industrial/Others | 6%   | 6%   | 4%   |
| Memory            | 2%   | 2%   | 2%   |

| By Technology | 1Q05 | 4Q04 | 1Q04 |
|---------------|------|------|------|
| 0.13um-       | 45%  | 36%  | 20%  |
| 0.15/0.18um   | 31%  | 34%  | 44%  |
| 0.25um        | 12%  | 14%  | 18%  |
| 0.35um        | 6%   | 9%   | 11%  |
| 0.50um+       | 6%   | 7%   | 7%   |

| By Customer Type | 1Q05 | 4Q04 | 1Q04 |
|------------------|------|------|------|
| Fabless          | 68%  | 66%  | 69%  |
| IDM              | 31%  | 33%  | 30%  |
| System           | 1%   | 1%   | 1%   |

| By Geography  | 1Q05 | 4Q04 | 1Q04 |
|---------------|------|------|------|
| North America | 79%  | 75%  | 74%  |
| Asia Pacific  | 8%   | 10%  | 13%  |
| Europe        | 6%   | 7%   | 7%   |
| Japan         | 7%   | 8%   | 6%   |

**Revenue Analysis:**

Net sales decreased 12.9% to NT\$55.7 billion compared with NT\$63.9 billion in the fourth quarter 2004. The decrease in first quarter revenue mainly resulted from an 8.8% decrease in wafer shipments and a 4.4% depreciation of the US dollar against local currency. Wafer average selling price (ASP) remained at the same level as in 4Q04.

Revenues declined across computer, communication, and consumer applications in this quarter due mainly to continuing inventory digestion in the industry and low seasonality. Revenue mix by application remained similar to

last quarter.

Demand from advanced technologies defined as 0.13-micron and below strengthened further amid a relatively weak business environment in 1Q05. Revenue contribution from advanced process technologies increased to 45% of total wafer sales from 36% previously. Sales from 90nm accounted for 4% of total wafer sales.

IDM accounted for 31% of wafer sales during the quarter, compared to 33% in the previous quarter. Geographically, North America accounted for 79% of wafer sales, compared to 75% previously.

***ASP Trend:***

ASP remained at the same level as in 4Q04. This is the result of product mix improvement, offset by price erosion.

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**II. Utilization & Capacity****Utilization Rate:**

Overall capacity utilization decreased to 78% in this quarter from 88% in 4Q04 due mainly to the soft demand that resulted from customers' inventory digestion and low seasonality.

**II 2. Capacity**

| <b>Fab / (Wafer size)</b>                         | <b>1Q05<br/>(Est.)</b> | <b>1Q05<br/>(Act.)</b> | <b>2Q05<br/>(Est.)</b> |
|---|------------------------|------------------------|------------------------|
| Fab-2 (6") <sup>1</sup>                           | 238                    | 238                    | 249                    |
| Fab-3 (8")  | 234                    | 234                    | 245                    |
| Fab-5 (8")  | 119                    | 119                    | 125                    |
| Fab-6 (8")  | 203                    | 203                    | 214                    |
| Fab-7 (8")  | 36                     | 36                     | 39                     |
| Fab-8 (8")  | 215                    | 222                    | 217                    |
| Fab-12 (12") <sup>2</sup>                         | 85                     | 85                     | 103                    |
| Fab-14 (12") <sup>2</sup>                         | 18                     | 18                     | 36                     |
| <b>TSMC owned capacity<br/>8"-equivalent Kpcs</b> | <b>1,172</b>           | <b>1,180</b>           | <b>1,292</b>           |
| WaferTech (8")                                    | 95                     | 95                     | 96                     |
| SSMC (8")   | 41                     | 41                     | 42                     |
| TSMC (Shanghai) (8")                              | 9                      | 9                      | 22                     |
| <b>Total TSMC managed<br/>8"-equivalent Kpcs</b>  | <b>1,317</b>           | <b>1,324</b>           | <b>1,451</b>           |

Note: 1. Figures represent number of 6" wafers. Conversion to 8"-equivalent wafers is by dividing this number by 1.78

2. Figures represent number of 12" wafers. Conversion to 8"-equivalent wafers is by multiplying this number by 2.25

**Capacity:**

Total TSMC managed capacity in 1Q05 was 1,324K 8-inch equivalent wafers, slightly higher than the 1,317K wafers forecasted in our 4Q04 quarterly management report. The difference was a result of the rescheduling of annual maintenance for Fab 8 to 2Q05 from 1Q05.

TSMC managed capacity in 2Q05 is estimated to increase to 1,451K wafers, representing a 9.6% sequential growth. The newly added capacity in 2Q05 will be mainly for the continuing ramp up of Fab 12 and 14, totaling 36K 12-inch wafers.

Overall installed capacity for year 2005 is expected to reach 5.97 million 8-inch equivalent wafers, a 25% year-on-year growth.

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**III. Profit & Expense Analysis****III 1. Gross Profit Analysis**

| (Amount: NT\$ billion) | 1Q05        | 4Q04        | 1Q04        |
|------------------------|-------------|-------------|-------------|
| <b>COGS</b>            | <b>34.0</b> | <b>36.7</b> | <b>34.8</b> |
| Depreciation           | 15.2        | 14.9        | 13.4        |
| Other MFG Cost         | 18.8        | 21.8        | 21.4        |
| <b>Gross Profit</b>    | <b>21.6</b> | <b>27.2</b> | <b>22.7</b> |
| <b>Gross Margin</b>    |             |             |             |
| - TSMC                 | 38.9%       | 42.5%       | 39.5%       |
| - TSMC w/o affiliates  | 42.1%       | 47.8%       | 44.3%       |

**Gross Profit Analysis:**

Gross profit decreased 20.3% from the previous quarter to NT\$21.6 billion. Gross margin declined to 38.9% from 42.5% in 4Q04 mainly due to lower levels of wafer output and an unfavorable exchange rate.

During the quarter, the gross margin from TSMC's own fab manufacturing activities declined to 42.1% from 47.8% in 4Q04.

**III 2. Operating Expense Analysis**

| (Amount: NT\$ billion)      | 1Q05        | 4Q04        | 1Q04        |
|-----------------------------|-------------|-------------|-------------|
| <b>Total Operating Exp.</b> | <b>5.57</b> | <b>6.12</b> | <b>5.19</b> |
| SG&A                        | 2.22        | 2.56        | 2.33        |
| Research & Development      | 3.35        | 3.57        | 2.86        |

**Operating Expenses:**

Operating expenses decreased to NT\$5.6 billion in this quarter. As Fab 14 continually increased commercial production volume, fewer engineering wafers were required and, as a result, R&D expenditures were sequentially lower. As Fab 12 (Phase II) commenced commercial production, it stopped incurring opening expenses, which led to lower SG&A expenditures. During this quarter, operating expenses represented 10% of net sales, compared to last quarter's 9.6%.

**III 3. Non-Operating Items**

| (Amount: NT\$ million)             | <b>1Q05</b>  | <b>4Q04</b>  | <b>1Q04</b> |
|------------------------------------|--------------|--------------|-------------|
| <b>Non-Operating Income/(Exp.)</b> | <b>386</b>   | <b>457</b>   | <b>92</b>   |
| Net Interest Income/(Exp.)         | 197          | 227          | (74)        |
| Other Non-Operating                | 190          | 230          | 166         |
| <b>L-T Investments</b>             | <b>(198)</b> | <b>609</b>   | <b>803</b>  |
| WaferTech*                         | 195          | 891          | 817         |
| SSMC                               | 104          | 31           | 145         |
| Vanguard                           | 293          | 423          | 323         |
| TSMC (Shanghai)                    | (280)        | (359)        | 0           |
| Miscellaneous                      | (510)        | (377)        | (483)       |
| <b>Total Non-Operating Items</b>   | <b>188</b>   | <b>1,066</b> | <b>895</b>  |

\* Operation results only; does not include amortization of impaired assets.

***Non-Operating Items:***

Combined result from non-operating income and long-term investment decreased to a gain of NT\$188 million from NT\$1,066 million in the previous quarter.

During the quarter, non-operating income decreased to NT\$386 million from last quarter's NT\$457 million. This decrease was due mainly to higher revaluation losses of short-term investments in marketable securities and foreign exchange losses from hedging activities, offset partially by the receipt of payment from the settlement of the lawsuit against SMIC.

Long-term investment incurred a loss of NT\$198 million in this quarter, compared to a gain of NT\$609 million in 4Q04. The differences were mainly attributable to lower levels of profit at WaferTech and VIS, offset partially by the improvement in SSMC and TSMC (Shanghai).

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**IV. Financial Condition Review****IV 1. Liquidity Analysis**

| (Amount: NT\$ million)           | <b>1Q05</b>  | <b>4Q04</b>  | <b>1Q04</b>  |
|----------------------------------|--------------|--------------|--------------|
| Cash & S-T Investments           | 111.9        | 118.5        | 126.3        |
| Accounts Receivable Trade        | 22.4         | 27.2         | 27.0         |
| Inventory                        | 13.4         | 14.2         | 11.0         |
| <b>Total Current Assets</b>      | <b>159.7</b> | <b>173.7</b> | <b>175.7</b> |
| Accounts Payable                 | 19.1         | 40.8         | 25.3         |
| Accrued Liabilities and Others   | 18.8         | 19.8         | 12.8         |
| <b>Total Current Liabilities</b> | <b>37.9</b>  | <b>60.6</b>  | <b>38.1</b>  |
| Current Ratio (x)                | 4.2          | 2.9          | 4.6          |
| <b>Net Working Capital</b>       | <b>121.9</b> | <b>113.0</b> | <b>137.6</b> |

**Liquidity Analysis:**

Total current assets were NT\$13.9 billion lower on a sequential basis. The decrease was mainly attributable to lower cash & short-term investments and accounts receivable.

Total current liabilities were NT\$22.7 billion lower sequentially, due mainly to the payment of accounts payable related to production equipment purchased previously.

As a result, net working capital increased to NT\$121.9 billion and current ratio increased to 4.2x.

**Receivable/Inventory Days Trend:**

Days of receivables improved to 42 days compared to 45 days in 4Q04, reflecting accelerated collection of accounts receivable during 1Q05.

Days of Inventory increased to 42 days as compared to 41 days in the previous quarter. The increase was due mainly to higher portion of 12-inch wafer production that took place during 1Q05, which carries higher values for WIP.

**IV 3. Debt Service**

| (Amount: NT\$ billion) | <b>1Q05</b> | <b>4Q04</b> | <b>1Q04</b> |
|------------------------|-------------|-------------|-------------|
| Cash & S-T Investments | 111.9       | 118.5       | 126.3       |

|                       |      |      |      |
|-----------------------|------|------|------|
| Interest-Bearing Debt | 30.0 | 30.0 | 35.0 |
| Net Cash Reserves     | 81.9 | 88.5 | 91.3 |

***Debt Service:***

Net cash reserves, defined as the excess of cash and short-term investments over interest-bearing debt, decreased by NT\$6.6 billion to NT\$81.9 billion in 1Q05. The decrease reflected lower levels of cash & short-term investments in this quarter.

Interest-bearing debt remained at the same level of NT\$30 billion as in the previous quarter.

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**V. Cash Flow & CapEx****V 1. Cash Flow Analysis**

| (Amount: NT\$ billion)              | <b>1Q05</b>   | <b>4Q04</b>   | <b>1Q04</b>   |
|-------------------------------------|---------------|---------------|---------------|
| Net Income                          | 16.8          | 22.2          | 18.8          |
| Depreciation & Amortization         | 16.7          | 16.6          | 15.1          |
| Other Op Sources/(Uses)             | 2.5           | (2.1)         | (1.2)         |
| <b>Total Op Sources/(Uses)</b>      | <b>36.0</b>   | <b>36.7</b>   | <b>32.7</b>   |
| Capital Expenditure                 | (38.2)        | (20.5)        | (16.4)        |
| Short Term Investment               | 1.3           | (6.9)         | (7.3)         |
| Long Term Investment                | (4.3)         | (17.0)        | (0.2)         |
| Other Investing Sources/(Uses)      | (0.2)         | (0.0)         | 0.0           |
| <b>Net Investing Sources/(Uses)</b> | <b>(41.3)</b> | <b>(44.4)</b> | <b>(23.9)</b> |
| Treasury Stock                      | 0.0           | 0.0           | (0.5)         |
| Payment on long-term bonds payable  | 0.0           | (5.0)         | 0.0           |
| Other Financing Sources/(Uses)      | (0.0)         | (0.1)         | (0.1)         |
| <b>Net Financing Sources/(Uses)</b> | <b>(0.0)</b>  | <b>(5.1)</b>  | <b>(0.6)</b>  |
| <b>Net Cash Position Changes</b>    | <b>(5.3)</b>  | <b>(12.8)</b> | <b>8.2</b>    |
| <b>Cash Balance</b>                 | <b>60.2</b>   | <b>65.5</b>   | <b>106.5</b>  |

**Summary of Cash Flow:**

During this quarter, TSMC generated NT\$36.0 billion operating cash inflow, mainly from net income of NT\$16.8 billion and depreciation & amortization of NT\$16.7 billion.

Net cash used in investing activities totaled NT\$41.3 billion, including (i) capital spending of NT\$38.2 billion, (ii) long-term investment of NT\$4.3 billion, comprising primarily a NT\$3.0 billion (US\$95 million) capital injection to TSMC (Shanghai), and a NT\$1.4 billion net increase in government bonds.

There was no material financing activity during this quarter.

As a result, TSMC ended the quarter with a cash balance of NT\$60.2 billion, NT\$5.3 billion lower than in 4Q04.

***Operating Cash Flow Trend:***

Operating cash flow of NT\$36.0 billion was slightly lower than the previous quarter, due mainly to NT\$5.4 billion lower net income in 1Q05, ameliorated primarily by a decline in accounts receivable.

**V 3. Capital Expenditure**

|                        |                     |
|------------------------|---------------------|
| <b>TSMC</b>            | <b>US\$ 1,210 m</b> |
| <b>TSMC (Shanghai)</b> | <b>US\$ 97 m</b>    |
| <b>WaferTech</b>       | <b>US\$ 1 m</b>     |
| <b>TSMC Group</b>      | <b>US\$ 1,308 m</b> |

***Capital Spending:***

Capital expenditures for TSMC alone during the quarter totaled US\$1.2 billion. Most of the spending was for 12-inch production equipment.

Capital spending was US\$97 million for TSMC (Shanghai), and US\$1 million for WaferTech.

For year 2005, total capital expenditure for TSMC as a group is expected to be in the range of US\$2.5 billion to US\$2.7 billion, unchanged from our previous guidance given in January 2005.

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**VI. Recap of Recent Important Events & Announcements**

**TSMC Board of Directors Proposes NT\$2.0 Cash Dividend and 5% Stock Dividend for 2004 Profit Distribution ( 2005/02/22 )**

**TSMC Appoints Mr. Jason Chen as Vice President of Corporate**