As filed with the Securities and Exchange Commission on May 9 2002

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 20-F

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2001

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

台灣積體電路製造股份有限公司

Commission file number 1-14700

(Exact Name of Registrant as Specified in Its Charter)

Taiwan Semiconductor Manufacturing Company Limited
(Translation of Registrant's Name Into English)

Republic of China
(Jurisdiction of Incorporation or Organization)

No. 121, Park Avenue III
Science-Based Industrial Park
Hsinchu, Taiwan
Republic of China
(Address of Principal Executive Offices)

_____

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Shares, par value NT$10.00 each	The New York Stock Exchange, Inc.*

_____

* Not for trading, but only in connection with the listing on the New York Stock Exchange, Inc. of American Depositary Shares representing such Common Shares

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

As of December 31, 2001, 16,832,553,051 Common Shares, par value NT$10 each were outstanding.

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No __

Indicate by check mark which financial statement item the registrant has elected to follow. Item 17 ___ Item 18 ☑

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Taiwan Semiconductor Manufacturing Company Limited

CAUTIONARY STATEMENT FOR PURPOSES OF THE "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

Except for historical matters, the matters discussed in this Annual Report on Form 20-F are forward-looking statements that are subject to significant risks and uncertainties. Forward-looking statements include, but are not limited to, statements under the following headings: (i) "Item 1. Key Information — Risk Factors", about dedicated foundry revenues and the merchant foundry market; (ii) "Item 4. Information on the Company — Overview of the Company", about the development of 90-nanometer process technology and increases in our monthly capacity; (iii) "Item 4. Information on the Company — Capacity Expansion and Technology Upgrade Plans", about capital expenditures, capacity expansion, technological upgrades and commitments by customers for future capacity; (iv) "Item 4. Information on the Company — Markets and Customers" about customer concentration; (v) "Item 4. Information on the Company — Research and Development", about our plans to continue to invest significant amounts on research and development and the development of 90-nanometer process technology; (vi) "Item 4. Information on the Company — Competition", about competition from semiconductor manufacturers in mainland China; (vii) "Item 4. Information on the Company — Electricity and Water", about the Hsinchu Science Park water supply; (viii) "Item 5. Operating and Financial Reviews and Prospects — Results of Operation — Operating Expenses", about annual research and development expenditures; (ix) "Item 5. Operating and Financial Reviews and Prospects — Liquidity and Capital Resources" about our depreciation and amortization expenses, capital expenditures and financing project expansion; (x) "Item 5. Operating and Financial Reviews and Prospects — Taxation", about the tax exemption period for Fab 12 (Phase I); (xi) "Item 5. Operating and Financial Reviews and Prospects — US GAAP Reconciliation", about payment of employee bonuses with common shares; and (xii) "Item 8. Financial Information — Dividends and Dividend Policy", about the plan to pay future dividends, if any, in the form of stock. Please see "Item 3. Key Information – Risk Factors" for a discussion of certain factors that may cause actual results to differ materially from those indicated by our forward-looking statements.

GLOSSARY OF TECHNICAL TERMS

ASIC.....	Application Specific Integrated Circuit. A custom-designed integrated circuit that performs specific functions that would otherwise require a number of off-the-shelf integrated circuits to perform. The use of an ASIC in place of a conventional integrated circuit reduces product size and cost and also improves reliability.
BiCMOS.....	Integrated circuit fabrication technology that produces both bipolar transistors and CMOS transistors and combine them on one chip.
Cell.....	A primary unit that normally repeats many times in an integrated circuit. For example, a cell represents a bit in a memory integrated circuit.
CMOS	Complementary Metal Oxide Silicon. Currently the most common integrated circuit fabrication process technology, CMOS is one of the latest fabrication techniques to use metal oxide semiconductor transistors.
CVD	Chemical Vapor Deposition. A process in which gaseous chemicals react on a heated surface to form solid crystalline materials.
Die.....	A piece of a semiconductor wafer containing the circuitry of a single chip.
DRAM.....	Dynamic Random Access Memory. A type of volatile memory product that is used in electronic systems to store data and program instructions. It is the most common type of RAM and must be refreshed with electricity thousands of times per second or else it will fade away.
DSP	Digital Signal Processor. A type of integrated circuit that processes and manipulates digital information after it has been converted from an analog source
EPROM.....	Erasable Programmable Read-Only Memory. A form of PROM that can be erasable using ultraviolet light, so that it can be reprogrammed.
Flash memory.....	A type of non-volatile memory, similar to an EEPROM in that it is erasable and reprogrammable. The difference is that it can be erased and reprogrammed in the electronic system into which the flash memory chip has been incorporated.
Integrated circuit	A combination of two or more transistors on a base material, usually silicon. All semiconductor chips, including memory chips and logic chips, are just very complicated integrated circuits with thousands of transitors.

Logic device	A device that contains digital integrated circuits that process, rather than store, information.
Mask	A piece of glass on which an integrated circuit's circuitry design is laid out. Integrated circuits may require up to 20 different layers of design, each with its own mask. In the integrated circuit production process, a light shines through the mask leaving an image of the design on the wafer. Also known as a reticle.
Memory	A group of integrated circuits that a computer uses to store data and programs, such as ROM, RAM, DRAM and SRAM.
Micron	1/25,000 of an inch. Circuitry on an integrated circuit typically follows lines that are less than one micron wide.
MOS	A device which consists of three layers (metal, oxide and semiconductors) and operates as a transistor.
Nonvolatile memory	Memory products which retain their data content without the need for constant power supply.
Reticle	See "Mask" herein.
RISC	Reduced Instruction Set Computing. A type of processor architecture that processes programs more quickly than conventional micro processors because it uses a smaller, faster, less complex set of instructions.
Scanner	A machine used in the photolithography process in making wafers. A scanner, like a conventional stepper, aligns a small portion of the wafer with the mask upon which the circuitry design is laid out and exposes that portion of the wafer to a laser beam, transferring the circuit design on to the wafer. The machine then steps to the next area, repeating the process until the entire wafer has been completed. Exposing only a small area of a wafer at a time allows the laser to focus more intensely, which improves the resolution of the circuitry design. A scanner also combines this stepper technology with a photoscanning method that permits the exposure of a larger segment of the wafer than a stepper.

Semiconductor.....	A material with electrical conducting properties in between those of metals and insulators. (Metals always conduct and insulators never conduct, but semiconductors sometimes conduct.) Essentially, semiconductors transmit electricity only under certain circumstances, such as when given a positive or negative electric charge. Therefore, a semiconductor's ability to conduct can be turned on or off by manipulating those charges and this allows the semiconductor material to act as an electric switch. The most common semiconductor material is silicon, used as the base of most semiconductor chips today because it is relatively inexpensive and easy to create.
SRAM	Static Random Access Memory. A type of volatile memory product that is used in electronic systems to store data and program instructions. Unlike the more common DRAM, it does not need to be refreshed.
Stepper.....	A machine used in the photolithography process in making wafers. A stepper aligns a small portion of the wafer with the mask upon which the circuitry design is laid out and then exposes that portion of the wafer to a laser beam, transferring the circuit design on to the wafer. The machine then "steps" to the next area, repeating the process until the entire wafer has been completed. Exposing only a small area of a wafer at a time allows the laser to focus more intensely, which improves the resolution of the circuitry design.
Transistor.....	An individual circuit that can amplify or switch electric current. This is the building block of all integrated circuits.
Volatile memory.....	Memory products which lose their data content when the power supply is switched off.
Wafer.....	A thin, round, flat piece of silicon that is the base of most integrated circuits.

PART I

Item 1. Identity of Directors, Senior Management and Advisors

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

Selected Financial Data

The selected income statement data and cash flow data for the years ended December 31, 1999, 2000 and 2001, and the selected balance sheet data as of December 31, 2000 and 2001, set forth below are derived from our audited consolidated financial statements included herein and should be read in conjunction with, and are qualified in their entirety by reference to, these consolidated financial statements, including the notes to these consolidated financial statements. These financial statements have been audited by T N Soong & Co., an associated member firm of Deloitte Touche Tohmatsu, independent public accountants. T N Soong & Co. was previously a member firm of Andersen Worldwide, SC. From April 22, 2002, T N Soong & Co. is an associated member firm of Deloitte Touch Tohmatsu. The selected income statement data and cash flow data for the years ended December 31, 1997 and 1998 and the selected balance sheet data as of December 31, 1997, 1998 and 1999 set forth below are derived from our audited consolidated financial statements not included herein. The consolidated financial statements have been prepared and presented in accordance with ROC GAAP, which differ in some material respects from US GAAP. Please see note 23 to our consolidated financial statements for a description of the principal differences between ROC GAAP and US GAAP for the periods covered by these financial statements.

	Year ended and as of December 31,					
	1997	1998	1999	2000	2001	2001
	NT$	NT$	NT$	NT$	NT$	US$
	(in millions, except percentages, earnings per share and per ADS, and operating data)					
Income Statement Data:						
ROC GAAP						
Net sales	43,927	50,524	76,305	166,198	125,885	3,597
Cost of sales(1)	(23,801)	(33,009)	(45,212)	(87,610)	(92,228)	(2,635)
Gross profit(1)	20,126	17,515	31,093	78,588	33,657	962
Operating expenses(1)	(5,504)	(5,210)	(8,823)	(17,293)	(20,879)	(597)
Income from operations	14,622	12,305	22,270	61,295	12,778	365
Non-operating income	1,554	1,977	1,619	6,120	6,476	185
Non-operating expenses	(831)	(3,227)	(3,260)	(3,513)	(8,467)	(242)
Income before income taxes	15,345	11,055	20,628	63,902	10,787	308
Income tax (expense) benefit	2,556	2,318	2,383	1,168	3,741	107
Net income before minority interest	17,901	13,373	23,011	65,070	14,527	415
Minority interest in loss (income) of subsidiary	73	1,016	516	37	(44)	(1.26)
Net income	17,974	14,389	23,527	65,106	14,483	414
Earnings per share(2)	1.25	0.98	1.57	3.97	0.83	0.02
Earnings per ADS equivalent	6.27	4.89	7.85	19.85	4.17	0.12
Average shares outstanding(2)	14,343	14,712	14,980	16,417	16,833	16,833
US GAAP						
Net sales	43,927	50,524	76,305	166,860	127,242	3,636
Cost of sales	30,091	41,200	52,163	105,359	107,194	3,063
Operating expense	7,205	9,525	12,310	44,472	41,712	1,192
Income (loss) from operations	6,631	(201)	11,833	17,029	(21,664)	(619)
Income (loss) before income tax	7,408	(2,082)	10,986	20,537	(25,672)	(733)
Income tax (expense) benefit	2,557	2,316	2,383	1,166	3,741	107

	Year ended and as of December 31,					
	1997	1998	1999	2000	2001	2001
	NT$	NT$	NT$	NT$	NT$	US$
	(in millions, except percentages, earnings per share and per ADS, and operating data)					
Net income (loss)	10,039	1,249	13,884	21,740	(21,975)	(628)
Cumulative preferred dividends	—	—	—	—	(455)	(13)
Income (loss) attributable to common shareholders	10,039	1,249	13,884	21,740	(22,430)	(641)
Average shares outstanding(3)	13,070	13,741	14,249	15,859	16,326	16,326
Earnings per share(3)	0.77	0.09	0.97	1.37	(1.37)	(0.04)
Earnings per ADS equivalent	3.84	0.45	4.87	6.85	(6.87)	(0.19)
Balance Sheet Data:						
ROC GAAP						
Working capital	29,193	15,926	33,267	44,920	37,472	1,071
Long-term equity investments	7,162	6,659	16,165	10,664	11,599	331
Properties	80,864	118,353	150,060	244,748	251,288	7,180
Goodwill	—	—	—	11,531	11,438	327
Total assets	137,318	165,461	235,436	370,886	366,518	10,472
Long-term bank borrowing(4)	8,026	14,630	22,744	23,339	22,399	640
Long-term debt payable	11,983	22,632	20,000	29,000	24,000	686
Guaranty deposit-in and other liabilities	9,006	6,957	6,207	9,046	9,479	271
Minority interest equity	10,841	9,701	7,524	322	120	3.43
Total liabilities	44,693	59,474	75,341	108,811	89,207	2,549
Capital Stock	43,613	66,472	85,209	129,894	181,326	5,181
Cash Dividend on common shares	0	0	0	0	0	0
Shareholders' equity	81,784	96,285	152,571	261,754	277,190	7,920
US GAAP						
Goodwill	—	—	—	58,348	47,464	1,356
Total assets	138,309	164,784	236,859	407,830	393,990	11,257
Total liabilities	57,109	70,491	84,882	114,884	91,540	2,616
Mandatorily redeemable preferred stock	—	—	—	13,000	13,000	371
Shareholders' equity	81,200	94,293	151,977	279,946	289,450	8,270
Other Financial Data:						
ROC GAAP						
Gross margin	46%	35%	41%	47%	27%	27%
Operating margin	33%	24%	29%	37%	10%	10%
Net margin	41%	28%	31%	39%	12%	12%
Capital expenditures	40,289	55,781	51,459	103,762	70,201	2,006
Depreciation and amortization	9,785	15,522	25,198	41,446	55,323	1,581
Cash provided by operating activities	19,288	30,255	40,253	94,786	75,818	2,166
Cash used in investing activities	(42,182)	(57,436)	(60,952)	(120,949)	(77,232)	(2,207)
Cash provided by financing activities	23,635	16,855	39,518	35,366	897	26
Net cash flow	1,334	(10,984)	18,646	9,323	(1,284)	(37)
Operating Data:						
Wafers sold(5)	1,145	1,184	1,826	3,408	2,159	2,159
Average utilization rate	102%	74%	97%	106%	51%	51%

(1) Amounts in 1999 and 2000 reflect the reclassification of NT$1,025 million in 1999 and NT$2,072 million in 2000 from cost of sales to research and development. Please see "Item 5. Operating and Financial Reviews and Prospects—Year Ended December 31, 2000 Compared to Year Ended December 31, 1999—Cost of Sales and Gross Profits".
(2) Retroactively adjusted for all subsequent stock dividends and employee stock bonuses.
(3) Retroactively adjusted for all subsequent stock dividends.
(4) Excludes debt securities.
(5) In thousands.

Exchange Rates

We publish our financial statements in New Taiwan dollars, the lawful currency of the ROC. In this annual report, "$", "US$" and "U.S. dollars" mean United States dollars, and "NT$" and "NT dollars" mean New Taiwan dollars. This annual report contains translations of certain NT dollar amounts into U.S. dollars at specified rates solely

for the convenience of the reader. Unless otherwise noted, all translations from NT dollars to U.S. dollars and from U.S. dollars to NT dollars were made at the noon buying rate in The City of New York for cable transfers in NT dollars per U.S. dollar as certified for customs purposes by the Federal Reserve Bank of New York as of December 31, 2001, which was NT$35.00 to US$1.00 on that date. On May 3, 2002, the noon buying rate was NT$34.59 to US$1.00.

Fluctuations in the exchange rate between NT dollars and U.S. dollars will affect the U.S. dollar equivalent of the NT dollar price of our common shares on the Taiwan Stock Exchange and, as a result, will likely affect the market price of our ADSs. These fluctuations will also affect the U.S. dollar conversion by the depositary of any cash dividends paid in NT dollars on, and the NT dollar proceeds received by the depositary from any sale of common shares represented by ADSs, in each case according to the terms of the deposit agreement.

The following table sets forth, for the fiscal years indicated, information concerning the number of NT dollars for which one U.S. dollar could be exchanged based on the noon buying rate for cable transfers in NT dollars as certified for customs purposes by the Federal Reserve Bank of New York.

	NT dollars per U.S. dollar Noon buying rate			
	Average[(1)]	**High**	**Low**	**Period-End**
1997	NT$29.06	NT$33.25	NT$27.34	NT$32.80
1998	33.54	35.00	32.05	32.27
1999	32.28	33.40	31.39	31.39
2000	31.40	33.20	30.48	33.17
2001	33.82	35.13	32.23	35.00
October 2001	34.58	34.62	34.53	34.55
November 2001	34.50	34.55	34.44	34.47
December 2001	34.68	34.13	34.46	35.00
January 2002	35.03	35.08	34.94	34.99
February 2002	35.07	35.10	34.99	35.11
March 2002	35.02	35.10	34.95	35.00

(1) Annual averages calculated from month-end rates.

Sources: Federal Reserve Statistical Release H.10(512), 1997-2002, Board of Governors of the Federal Reserve System.

No representation is made that the NT dollar or U.S. dollar amounts referred to herein could have been or could be converted into U.S. dollars or NT dollars, as the case may be, at any particular rate or at all.

Risk Factors

We wish to caution readers that the following important factors, and those important factors described in other reports submitted to, or filed with, the Securities and Exchange Commission, among other factors, could affect our actual results and could cause our actual results to differ materially from those expressed in any forward-looking statements made by us or on our behalf:

Risks Relating to Our Business

Since we are dependent on the highly cyclical semiconductor industry, which has experienced significant and sometimes prolonged downturns, our revenues, earnings and margins may fluctuate significantly.

Our semiconductor foundry business is affected by market conditions in the highly cyclical semiconductor industry. All of our customers operate in this industry. Variations in order levels from our customers result in volatility in our revenues and earnings. From time to time, the semiconductor industry has experienced significant, and sometimes prolonged, downturns. Because our business is, and will continue to be, dependent on the requirements of semiconductor companies for our services, downturns in the semiconductor industry lead to reduced demand for our services. For example, a worldwide slowdown in demand for semiconductor devices in 1998 led to surpluses in capacity and price declines which accelerated rapidly and negatively affected our operating results in 1998. Starting in the first quarter of 2001, the semiconductor industry experienced a significant downturn due to a slowdown in the

global economy, overcapacity in the semiconductor industry and a worldwide inventory adjustment. Due to the significant downturn most, if not all, of the integrated device manufacturers that had previously begun purchasing wafer fabrication services from foundry companies reduced purchases from foundry companies in order to increase the utilization rates at their own fabs. If we cannot reduce our costs to sufficiently offset declines in demand, our revenues and earnings will suffer during downturns. As a result of the downturn in the semiconductor industry, our net sales and net income for 2001 were 24.3% and 77.8%, respectively, less than the corresponding amounts in 2000. Although there are current indications that the semiconductor industry is recovering from the 2001 downturn, we cannot give any assurances that the recovery will continue.

Overcapacity in the semiconductor industry may reduce our revenues, earnings and margins.

The price that we can charge our customers for our services is directly related to the overall worldwide supply of integrated circuits and semiconductor products. The overall supply of semiconductor products is based on the expansion plans of other companies, which are outside of our control. Historically, companies in the semiconductor industry have expanded aggressively during periods of increased demand such as was the case in 2000. As a result, periods of overcapacity in the semiconductor industry have frequently followed periods of increased demand. In a period of overcapacity we may have to lower the price we charge our customers for our services or we may have to operate at significantly less than full capacity. This could reduce our margin and weaken our financial condition and results of operations. Due to the decreased demand for semiconductors in 2001, our average capacity utilization rate decreased to 51% during 2001 compared with 106% during 2000.

Decreased demand and average selling price for end-use applications of semiconductor products may adversely affect demand for our products and may result in a decrease in our revenues and earnings.

A significant percentage of our sales revenue is derived from customers who use our products in personal computers, communications devices and consumer electronics. Any significant decrease in the demand for end-use applications of our products may decrease the demand for our products and may result in a decrease in our revenues and earnings. We have been experiencing such decreases recently as a result of the recent significant worldwide decline in demand for these end-use applications. In addition, the historical and continuing trend of declining average selling prices of end-use applications places significant pressure on the prices of the components that go into these end-use applications. If the average selling prices of end-use applications continue to decrease, the pricing pressure on components produced by us may lead to a significant reduction of our revenue. A significant portion of our sales is attributable to the manufacture of semiconductors used in personal computer and communications devices. In 2001 and the first quarter of 2002 approximately 68% and 75%, respectively, of our net sales was attributable to the manufacturing of semiconductors used in personal computer and communication devices. Both industries are subject to intense competition and significant shifts in demand, which could put pricing pressure on our foundry services and have a material adverse effect on our revenues and earnings.

If we are unable to compete favorably in the highly competitive semiconductor foundry market, we may lose customers and our profit margin and earnings may decrease.

The markets for our foundry services are highly competitive both in Taiwan and internationally. We compete with other dedicated foundry service providers, as well as integrated device manufacturers. Some of these companies have access to more advanced technologies and greater financial and other resources than we do. As a result, these companies may be able to compete more aggressively over a longer period of time than we could. Moreover, many integrated device manufacturers from time to time allocate a portion of their capacity to contract production of integrated circuits for others, which brings them in direct competition with us. In addition, a number of dedicated foundry service providers have been expanding significantly and we are facing increased competition from them. Significant increases in competition may erode our profit margin and weaken our earnings.

Most of our customers obtain foundry services from more than one source. In particular, we face increasing competition from other foundry companies in Asia. Many of our competitors have shown a willingness to quickly and sharply reduce prices, as they did in 1998 and 2001, in order to maintain capacity utilization in their facilities during periods of reduced demand. Significant erosion in the prices for our foundry services or under-utilization of our capacity could cause our profits to decrease and have a material adverse effect on our financial condition and results of operations.

If we are unable to remain a technological leader in the semiconductor industry, we may become less competitive and less profitable.

The semiconductor industry is characterized by rapid increases in the diversity and complexity of semiconductor products. The semiconductor industry and the technology used are constantly changing. If we do not anticipate these changes in technology and rapidly develop new and innovative technologies, we may not be able to provide sufficiently advanced foundry services at competitive prices. If we are unable to maintain the ability to provide sufficiently advanced foundry services at competitive prices, our customers may buy products from our competitors instead of us. As a result, we expect that we will need to offer, on an ongoing basis, increasingly advanced and cost-effective foundry technologies and processes prior to these technologies and processes being offered by our competitors in order to continue to satisfy the increasing requirements of our customers. For example, if we are unable on a timely basis to ramp up commercial production of 0.13 micron semiconductors with all copper interconnects on twelve-inch wafers or to develop appropriate process technology to produce 0.09 micron or 90-nanometer semiconductors with all copper interconnects on a competitive basis, we may lose orders to our competitors. In addition, advances in technology typically lead to declining average selling prices for older technologies or processes. As a result, if we cannot reduce the costs associated with using older technologies, the profitability of a given product may decrease over time. If we fail to achieve advances in technology or processes or to obtain access to advanced technologies or processes developed by others, we may become less competitive and less profitable.

If we are unable to manage our expansion and modification of our production facilities effectively, our growth prospects may be limited and our future profitability may be affected.

We are currently ramping up Fab 6 in the Tainan Science-Based Industrial Park or Tainan Science Park, our joint venture fab, Systems on Silicon in Singapore and our first twelve-inch wafer fab, Fab 12 (Phase I), in the Hsinchu Science-Based Industrial Park or Hsinchu Science Park. We are continuing construction of Fab 14 (Phase I), another twelve-inch fab, in the Tainan Science Park, which we plan to commence production in 2003. We also currently plan to begin construction in the second half of 2002 of Fab 12 (Phase II) in Hsinchu Science Park and Fab 14 (Phase II) in Tainan Science Park to further expand our twelve-inch fabrication capacity.

To successfully manage any increase in capacity in our fabs, either generally or with respect to any given process technology, we will need to purchase additional equipment, train personnel to operate the new equipment and hire additional personnel. In addition, the construction and operation of our new fabs in the Tainan Science Park has required the creation of a new administrative organization in Tainan because of the distance between Tainan and Hsinchu, the site of our other fabs in Taiwan.

Since few companies have commenced production operations in the Tainan Science Park, we are not certain whether the general infrastructure in the Tainan Science Park is sufficient or adequate. Any failure in the electrical or water systems in the park, for example, would severely hamper the operations of our new fab. Although we have studied the potential effects of vibration from the high speed railway currently planned to pass through the Tainan Science Park and believe that the vibrations will not affect our yield rate for production in the Tainan Science Park, we can give no assurances that our yield will not be negatively affected after the high-speed railway has commenced operation.

Expansion and modification of our production facilities will increase our fixed costs. We will need to maintain a high utilization rate in our fabs in order to offset these higher fixed costs. If our customers do not correspondingly increase their purchase of our products and services, our financial performance will be adversely affected.

We may not be able to implement our planned growth or development if we are unable to accurately forecast and sufficiently meet our future capital requirements.

Our capital requirements are difficult to plan in the highly cyclical and rapidly changing semiconductor industry. We will need capital to fund the expansion and modification of our facilities. Future acquisitions or mergers or other developments may also cause us to require additional funds. Our ability to obtain external financing in the future is subject to a variety of uncertainties, including:

- our future financial condition, results of operations and cash flows;
- general market conditions for financing activities by semiconductor companies; and
- economic, political and other conditions in Taiwan and elsewhere.

Therefore, sufficient external financing may not be available to us on a timely basis, on acceptable terms or at all. As a result, we may be forced to curtail our expansion and modification plans or delay the deployment of our services and become less competitive, which could result in a loss of customers and limit the growth of our business.

Our business could suffer if we are unable to retain and recruit qualified personnel.

We depend on the continued services of our executive officers and skilled technical and other personnel. Our business could suffer if we lose the services of any of these personnel and cannot adequately replace them. We will be required to increase substantially the number of these employees in connection with our expansion plans. We seek to recruit highly qualified personnel and there is intense competition for the services of these personnel in the semiconductor industry. We may not be able to either retain our present personnel or attract additional qualified personnel as and when needed. We expect competition for personnel to increase significantly in the future as new semiconductor facilities are established. We may need to increase employee compensation levels in order to retain our existing officers and employees and attract and retain the additional personnel that we expect to require.

We may be unable to obtain in a timely manner and at a reasonable cost the equipment necessary for us to remain competitive and we may become less profitable.

The semiconductor foundry business is capital intensive and requires investment in expensive equipment manufactured by a limited number of suppliers. The market for equipment used in semiconductor foundries is characterized, from time to time, by intense demand, limited supply and long delivery cycles. Our operations and expansion plans depend on our ability to obtain a significant amount of equipment from a limited number of suppliers. During times of significant demand for this type of equipment, lead times for delivery can be as long as four to six months or more. In those situations we may try to negotiate binding supply agreements with some of our suppliers, although we typically do not include in these agreements all of the equipment contemplated to be purchased to provide ourselves with flexibility to revise our expansion and modification plans in the future. As a result, we may be exposed to risks relating to the shortage of required or desired equipment. Shortages of equipment could result in an increase in their prices and longer delivery times. In addition, the expansion and modification of fabs planned or announced by us and other semiconductor companies may put additional pressure on the supply of equipment. If we are unable to obtain equipment in a timely manner and at a reasonable cost, we may be unable to fulfill our customers' orders, which could negatively impact our financial condition and results of operations and cause our profit to decrease.

Our revenue and profitability may decline if we are unable to obtain adequate supplies of raw materials in a timely manner and at reasonable prices.

Our production operations require that we obtain adequate supplies of raw materials, such as silicon wafers, chemicals and photoresistors, on a timely basis. Shortages in the supply of some materials experienced by the semiconductor industry have in the past resulted in occasional price adjustments and delivery delays. We may not, at certain times, be able to obtain adequate supplies of raw materials in a timely manner and at reasonable prices. Our revenue and earnings could decline if we are unable to obtain adequate supplies of high quality raw materials in a timely manner or if there are significant increases in the costs of raw materials that we could not pass on to our customers.

Our production may be interrupted if we do not have access to sufficient amounts of fresh water.

The semiconductor manufacturing process uses extensive amounts of fresh water. Due to the growth in semiconductor manufacturing capacity in Hsinchu Science Park, the requirements for fresh water in the Hsinchu Science Park has grown substantially. In 1997, the ROC government constructed a new pipeline in the Hsinchu Science Park to provide companies in the Hsinchu Science Park with an additional source of fresh water. Since the beginning of 2002, Taiwan has experienced a significant drought. Although the new pipeline has provided sufficient

fresh water, some companies in the Hsinchu Science Park, including us, have trucked in additional water. The ROC government has also compensated some farmers in the region to halt crop irrigation so as to provide additional water supplies to companies in the Hsinchu Science Park. The ROC government has announced a plan to build a fresh water reservoir near the Hsinchu Science Park that is expected to satisfy the Hsinchu Science Park's long term water requirements but the reservoir is not expected to be completed until 2005. Until additional water resources are made available on a committed basis, the Hsinchu Science Park may encounter insufficient water supplies. If there is insufficient water to satisfy our requirements, either as a result of the continuation or increased severity of the current drought or otherwise, we may need to reduce our production of semiconductors.

The loss of our right to use Philips intellectual property may require us to incur significant expenses to acquire alternate rights to necessary intellectual property.

We are the beneficiary of many patent cross-licensing arrangements between Koninklijke Philips Electronics N.V. and other semiconductor companies. We will continue to have rights to use the intellectual property governed by these licensing arrangements only if Philips, including its subsidiaries, maintains a minimum percentage ownership in us. This minimum percentage ownership varies from agreement to agreement and generally ranges from 12.5% to 25%. If we lose the right to use the intellectual property under these licensing arrangements, we may not be able to obtain similar licenses without significant expense. In November 2000, Philips purchased from us 1,299,925,653 Preferred A shares, par value NT$10 per share, to be redeemed at par value on May 28, 2003. As of March 31, 2002, Philips, together with its subsidiaries, owned 3,676,871,330 common shares and 1,299,925,653 Preferred A shares, representing in aggregate a 27.45% equity interest in us.

Any inability to obtain, preserve and defend our intellectual property rights could harm our competitive position.

Our ability to compete successfully and achieve future growth will depend, in part, on our ability to protect our proprietary technology and to secure critical processing technology that we do not own on commercially reasonable terms. We cannot assure you that in the future we will be able to independently develop, or secure from any third party, the technology required for upgrading our production facilities. Our failure to successfully obtain such technology may seriously harm our competitive position.

Our ability to compete successfully also depends on our ability to operate without infringing the proprietary rights of others. We have no means of knowing what patent applications have been filed in the United States until they are granted. Because of the complexity of the technology used and the multitude of patents, copyrights and other overlapping intellectual property rights, the semiconductor industry is characterized by frequent litigation regarding patent, trade secret and other intellectual property rights. It is common for patent owners to assert their patents against semiconductor manufacturers. We have received from time to time communications from third parties asserting that our technologies, manufacturing processes, the design of the integrated circuits made by us or the use by our customers of semiconductors made by us infringe upon patents or intellectual property rights of others, and we expect to continue to receive such communications in the future. In some instances, these disputes have resulted in litigation and settlement or damage payments by us. In the event any third party were to make a valid claim against us or our customers, we could be required to:

- seek to acquire licenses to the infringed technology, which may not be available on commercially reasonable terms, if at all;
- discontinue using certain process technologies, which could cause us to stop manufacturing certain semiconductors;
- pay substantial monetary damages; or
- seek to develop non-infringing technologies, which may not be feasible.

Any one of these developments could place substantial financial and administrative burdens on us and hinder our business. Litigation, which could result in substantial costs to us and diversion of our resources, may also be necessary to enforce our patents or other intellectual property rights or to defend us or our customers against claimed

infringement of the rights of others. If we fail to obtain necessary licenses or if litigation relating to patent infringement or other intellectual property matters occurs, it could prevent us from manufacturing particular products or applying particular technologies, which could reduce our opportunities to generate revenues.

If our major shareholders use the majority of our production capacity, we will not be able to service our other customers.

So long as Philips and its affiliates own at least 24.8% of our equity interest, Philips has an option to require us to sell to Philips 30% of our production capacity. According to our agreement with the Industrial Technology Research Institute of Taiwan, or ITRI, the Ministry of Economic Affairs of the ROC, or an entity designated by the Ministry of Economic Affairs, also has an option to purchase up to 35% of our capacity. If Philips or the Ministry of Economic Affairs, or the entity designated by the Ministry of Economic Affairs, exercises either of these options to any significant degree, we will not be able to provide services to all of our other customers. Although the Ministry of Economic Affairs has never exercised its option and Philips has generally placed orders with us without recourse to its capacity option, any significant exercise of these options could damage our relationship with our other customers and may encourage them to purchase more products from our competitors in the future.

Our major shareholders may take actions that are not in, or may conflict with, our public shareholders' best interest.

As of March 31, 2002, Philips and the ROC government, acting through the Development Fund of the Executive Yuan of the ROC, owned, respectively, approximately 27.45% and 8.99% (excluding any shares that may be held by other funds controlled by the ROC government) of our equity interests. Currently Philips has three representatives, and the Development Fund has one representative, on our board of directors. Accordingly, these shareholders will continue to have the ability to exercise significant influence over our business, including over matters relating to:

- our management and policies;
- the timing and distribution of dividends; and
- the election of our directors and supervisors.

These shareholders may take actions that are not in, or may conflict with, our or our public shareholders' best interest.

We are subject to the risk of loss due to fire because the materials we use in our manufacturing processes are highly flammable.

We use highly flammable materials such as silane and hydrogen in our manufacturing processes and are therefore subject to the risk of loss arising from fires. The risk of fire associated with these materials cannot be completely eliminated. Many of the semiconductor companies have experienced extensive fire damage. Although we maintain comprehensive fire insurance, including insurance for loss of property and loss of profit resulting from business interruption, we cannot assure you that our insurance coverage is sufficient to cover all of our potential losses. If any of our fabs were to be damaged or cease operations as a result of a fire, it would reduce our manufacturing capacity and reduce our revenues and profits.

Any impairment charges required under US GAAP may have a material adverse effect on our net income on a US GAAP reconciled basis.

Under currently effective US GAAP, we are required to evaluate our equipment, goodwill and other long-lived assets for impairment whenever there is an indication of impairment. If certain criteria are met, we are required to record an impairment charge. We can give no assurance that impairment charges will not be required in periods subsequent to December 31, 2001. Please see note 23.e. to our consolidated financial statements for a discussion of the criteria which, if met, may require impairment charges.

As a result of new standards under US GAAP that became effective on January 1, 2002, we are no longer permitted to amortize remaining goodwill. Goodwill amortization expenses amounted to NT$12,051 million under US GAAP for the year ended December 31, 2001. Starting from January 2002, all goodwill must be periodically tested for impairment. As of December 31, 2001, we had NT$47,464 million recorded as goodwill under US GAAP. We currently are not able to estimate the extent and timing of any goodwill impairment charge for future years. Any goodwill impairment charge required under US GAAP may have a material adverse effect on our net income for periods subsequent to December 31, 2001 on a US GAAP reconciled basis. Please see note 24.a. to our consolidated financial statements for a discussion of the new standards under US GAAP.

The determination of an impairment charge at any given time is based significantly on our expected results of operation over a number of years subsequent to that time. As a result, an impairment charge is more likely to occur during a period when our operating results are otherwise already depressed.

Any significant decrease in sales to one or more of our major customers may materially decrease our net sales and net income.

The degree to which our sales are concentrated among a limited number of customers varies over time, often increasing during industry downturns. In 2000 and 2001, our ten largest customers accounted for approximately 44% and 49% of our net sales, respectively. Our largest customer in 2001, NVIDIA Corporation, accounted for approximately 17% of our net sales. The increase in concentration in 2001 resulted from an increase in orders from a small number of our customers for advanced semiconductors in the second half of 2001. Our customer concentration increased further in the first quarter of 2002 and our ten largest customers accounted for approximately 63% of our net sales in the first quarter of 2002. Although we believe our customer base is strong and diversified, we may continue to be dependent upon a relatively limited number of customers for a significant portion of our revenue, especially during industry downturns. Loss or cancellation of business from our most significant customers therefore could significantly reduce our net sales and net income.

Risks Relating to the ROC

Strained relations between the Republic of China and the People's Republic of China could negatively affect our business and the market value of your investment.

Our principal executive offices and our principal production facilities are located in Taiwan and a substantial majority of our net revenues are derived from our operations in Taiwan. The Republic of China has a unique international political status. The People's Republic of China does not recognize the legitimacy of the Republic of China. Although significant economic and cultural relations have been established during recent years between the Republic of China and the People's Republic of China, relations have often been strained. The government of the People's Republic of China has indicated that it may use military force to gain control over Taiwan in some circumstances, such as a declaration of independence by Taiwan, the prolonged delay by the Republic of China to commence reunification negotiations, foreign power interference in Taiwanese affairs or the refusal by the Republic of China to accept the People's Republic of China's stated "one China" policy. In elections held on December 1, 2001, the Democratic Progressive Party became the political party controlling the largest number of seats in Taiwan's Legislature. It is unclear what effects the election results may have on relations with the People's Republic of China. Past developments in relations between the Republic of China and the People's Republic of China have on occasion depressed the market prices of the securities of Taiwanese companies, including our own. Relations between the Republic of China and the People's Republic of China and other factors affecting military, political or economic conditions in Taiwan could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our ADSs and common shares.

We are vulnerable to natural disasters and other disruptive events which could severely disrupt the normal operation of our business and adversely affect our earnings.

Taiwan is susceptible to earthquakes. On September 21, October 22, and November 2, 1999, Taiwan experienced severe earthquakes that caused significant property damage and loss of life, particularly in the central part of Taiwan. These earthquakes caused damage to production facilities and adversely affected the operations of many companies in the semiconductor and other industries. We experienced damages to our machinery and equipment as a

result of these earthquakes. There were also interruptions to our production schedule, primarily as a result of power outages caused by the earthquakes, and we were forced to scrap approximately 35,000 wafers. Our production facilities, as well as many of our suppliers and customers and upstream providers of complementary semiconductor manufacturing services, are located in Taiwan. If our customers are affected by an earthquake or other natural disasters, it could result in a decline in the demand for our services. If our suppliers' services are affected, our production schedule could be interrupted or delayed. As a result, a major earthquake, natural disaster or other disruptive event in Taiwan could severely disrupt the normal operation of our business and have a material adverse effect on our financial condition and results of operations.

Fluctuations in exchange rates could result in foreign exchange losses.

Over half of our capital expenditures and manufacturing costs are denominated in currencies other than NT dollars, primarily U.S. dollars, Japanese yen and Euros. A larger portion of our sales are denominated in U.S. dollars and other currencies, than in NT dollars. A substantial portion of our long-term borrowings are denominated in U.S. dollars. We are particularly affected by fluctuations in the exchange rate between the U.S. dollar and the NT dollar. Any significant fluctuation in that exchange rate may have an adverse effect on our financial condition. In addition, fluctuations in the exchange rate between the U.S. dollar and the NT dollar will affect the U.S. dollar value of our common shares and the market price of the ADSs and of any cash dividends paid in NT dollars on our common shares represented by ADSs.

Risks Relating to ownership of ADSs

Your voting rights as a holder of ADSs will be limited.

Holders of ADRs evidencing ADSs may exercise voting rights with respect to the common shares represented by these ADSs only in accordance with the provisions of our ADS deposit agreement. The deposit agreement provides that, upon receipt of notice of any meeting of holders of our common shares, the depositary bank will, as soon as practicable thereafter, mail to the holders (i) the notice of the meeting sent by us, (ii) voting instruction forms and (iii) a statement as to the manner in which instructions may be given by the holders.

ADS holders will not generally be able to exercise the voting rights attaching to the deposited securities on an individual basis. According to the ROC Company Law, the voting rights attaching to the deposited securities must be exercised as to all matters subject to a vote of shareholders collectively in the same manner, except in the case of an election of directors and supervisors. The election of directors and supervisors is by means of cumulative voting. See "Item 10. Additional Information—Voting of Deposited Securities" for a more detailed discussion of the manner in which a holder of ADSs can exercise its voting rights.

You may not be able to participate in rights offerings and may experience dilution of your holdings.

We may, from time to time, distribute rights to our shareholders, including rights to acquire securities. Under our ADS deposit agreement, the depository bank will not distribute rights to holders of ADSs unless the distribution and sale of rights and the securities to which these rights relate are either exempt from registration under the Securities Act of 1933 with respect to all holders of ADSs, or are registered under the provisions of the Securities Act. Although we may be eligible to take advantage of certain exemptions for rights offerings by certain foreign companies, we can give no assurances that we can establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement with respect to any such rights or underlying securities or to endeavor to have such a registration statement declared effective. In addition, if the depositary bank is unable to obtain the requisite approval from the Central Bank of China for the conversion of the subscription payments into NT dollars or if the depositary determines that it is unlikely to obtain this approval, we may decide with the depositary bank not to make the rights available to holders of ADSs. See "Item 10. Additional Information—Foreign Investment in the ROC" and "Item 10. Additional Information—Exchange Controls in the ROC". Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of their holdings as a result.

If the depositary bank is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or reasonably practicable, it will allow the rights to lapse, in which case you will receive no value for these rights.

The value of your investment may be reduced by possible future sales of common shares by us or our shareholders.

One or more of our existing shareholders may dispose of significant numbers of common shares or ADSs. One of our two largest shareholders, the Development Fund, has sold significant amounts of shares and ADSs in the past including 4,000,000 ADSs in April 2000, 8,680,400 ADSs in June 2000, 14,000,000 ADSs in June 2001, 20,000,000 ADSs in November 2001 and 30,207,200 ADSs in February 2002. The Stabilization Fund also sold 26,800,000 ADSs in February 2002.

In addition, we have in place a conversion sale program that allows some of our shareholders to sell their common shares in ADS form to a specified financial intermediary during a 30-day period not more than once every three months. In the third quarter of 1999, our shareholders sold an aggregate of 5,486,000 ADSs in the program. In the first quarter of 2000, our shareholders sold an aggregate of 6,560,000 ADSs in the program. In the second quarter of 2001, our shareholders sold an aggregate of 11,682,000 ADSs in the program. We cannot predict the effect, if any, that future sales of ADSs or common shares, or the availability of ADSs or common shares for future sale, will have on the market price of ADSs or common shares prevailing from time to time. Sales of substantial amounts of ADSs or common shares in the public market, or the perception that such sales may occur, could depress the prevailing market price of our ADSs or common shares and could reduce the premium, if any, that the price per ADS on the New York Stock Exchange represents over the corresponding aggregate price of the underlying five common shares on the Taiwan Stock Exchange.

The market value of your investment may fluctuate due to the volatility of, and government intervention in, the ROC securities market.

The ROC securities market is smaller and more volatile than the securities markets in the United States and in some European countries. The Taiwan Stock Exchange has experienced substantial fluctuations in the prices and volumes of sales of listed securities and there are currently limits on the range of daily price movements on the Taiwan Stock Exchange. Over the past 12 years, the Taiwan Stock Exchange Index peaked at 12,495.3 in February 1990, and subsequently fell to a low of 2,550.5 in October 1990. On March 13, 2000, the Taiwan Stock Exchange Index experienced a 617 point drop, which represented the single largest decrease in the history of the Taiwan Stock Exchange Index. From January 1, 2000 to December 31, 2000, the Taiwan Stock Exchange Index dropped 45.9%. On May 6, 2002, the Taiwan Stock Exchange Index closed at 5,642.5. The Taiwan Stock Exchange has experienced problems such as market manipulation, insider trading and payment defaults. The recurrence of these or similar problems may have a material adverse effect on the market price and liquidity of the securities of ROC companies, including our ADSs and common shares, in both the domestic and the international markets.

In response to past declines and volatility in the securities markets in Taiwan, the government of the Republic of China formed the Stabilization Fund, which has purchased and may from time to time purchase shares of Taiwan companies to support these markets. The details of the transactions of the Stabilization Fund have not been made public. In addition, other funds associated with the ROC government have in the past purchased, and may from time to time purchase, shares of Taiwan companies on the Taiwan Stock Exchange or other markets. In the future, market activity by government entities, or the perception that such activity is taking place, may take place or has ceased, may cause sudden movements in the market prices of our ADSs and common shares.

Item 4. Information on the Company

Industry Background

The Semiconductor Industry. Since the invention of the transistor in 1948, continuous improvements in semiconductor processes and design technologies have led to smaller, more complex and more reliable devices at a lower cost per function. As performance has increased and size and cost have decreased, semiconductors, and particularly integrated circuits, have expanded beyond their original primary applications such as mainframe computer systems to applications such as personal computers, telecommunications systems, consumer electronics, office equipment, automotive products and industrial automation and control systems. Today, semiconductors have become pervasive in everyday life. In addition, system users and designers have demanded semiconductors with more

functionality, higher levels of performance, greater reliability and shorter design cycle times, all in smaller packages at lower costs. These demands have resulted in increased semiconductor content as a percentage of system cost.

The semiconductor industry's growth has generally been driven by its ability to create advanced and innovative technology that can be used in many areas of the world economy. The most significant technology trends today in the semiconductor industry are the development of 300-mm, or twelve-inch, wafer technology, the development of more advanced process technology for 0.13 micron and 90–nanometer semiconductors, the creation of new design analysis tools and the growth of fiber-optic systems and optical interconnect technologies. The advancement of twelve-inch technology is expected to provide significant economies of scale as each twelve-inch wafer produces more die per wafer. The introduction of more advanced circuit technology is creating greater technological barriers as the resolution increases. Important research areas include copper dual-damascene-interconnect technology, low-k intermetal dielectric implementation and silicon and silicon alternative process technologies, such as silicon germanium. We and other leading semiconductor companies have already announced twelve-inch, 0.13 micron production capabilities with 90-nanometer semiconductors process technology in research and development. Significant commercial production using 0.13 micron process technology is expected in 2002. New design tools and circuit interconnect technologies will need to be developed to support the development of more advanced semiconductors at a resolution of 0.13 micron and below. For example, more sophisticated analytical instruments are required to debug new advanced semiconductor designs. Advanced semiconductors provide opportunities for semiconductor companies as the advanced semiconductors generally provide more application possibilities and are expected to command higher prices than less-advanced technologies at any given time. However, the new technologies entail significant costs to develop and produce. It is expected that integrated device manufacturers and foundries that develop the leading-edge technology early on will have a competitive edge. The high costs associated with the development of new technology are likely to result in the future in a higher proportion of advanced semiconductors being produced by dedicated foundries.

Semiconductor sales have increased significantly over the long term but have experienced significant cyclical variations in growth rates. It is estimated that worldwide sales of all semiconductors increased from approximately US$43 billion in 1990 to approximately US$204 billion in 2000, with almost all of the growth occurring during the years between 1992 and 1995 and between 1998 and 2000. During 1996 and the first half of 1997, the worldwide per bit price in the memory market declined sharply, and prices of certain other semiconductor products also declined, as increases in supply outstripped demand as a result of technology advancements and excess inventories accumulated in 1995. In 1998, worldwide sales of semiconductors declined by approximately 8% from 1997. Demand for semiconductors improved significantly in 1999 due to the continued recovery of the worldwide semiconductor industry and worldwide sales of semiconductors increased by approximately 19% from 1998. Starting in the first quarter of 2001, the semiconductor industry experienced a significant downturn due to a slowdown in the global economy, overcapacity in the semiconductor industry and a worldwide semiconductor inventory adjustment. Historically, cyclical changes in production capacity and demand in the semiconductor industry have resulted in pronounced cyclical changes in the level of semiconductor sales and fluctuations in prices and margins for semiconductor products from time to time.

The Emergence of the Fabless Design Houses and Dedicated Foundries. The manufacture of semiconductors is an extremely complex process that requires increasingly sophisticated engineering and manufacturing expertise. Advances in manufacturing process technology enable the design of higher performance semiconductors and the miniaturization of electronic circuitry. As the process of manufacturing semiconductors has become more complex, the capital required for the construction and maintenance of an advanced semiconductor fabrication facility has increased significantly. This has contributed to an important change in the semiconductor industry. Companies that design and develop proprietary semiconductor products but do not maintain any internal manufacturing capacity, called "fabless" companies, have emerged in significant numbers in recent years. Fabless design houses have typically been started by engineers from leading semiconductor companies who wish to test out their innovations and ideas in the market place. These companies are completely dependent on foundry services to manufacture their products. Based upon publicly available information, fabless design houses represent a majority of net sales for dedicated foundry companies.

In addition, many large semiconductor companies and end-product manufacturers that maintain internal manufacturing capacities are increasingly using foundry services for a portion of their manufacturing requirements. Utilizing foundry services allows these companies to reduce manufacturing costs, efficiently allocate capital, research

and development and management resources and gain ready access to manufacturing process technology they do not possess.

These changes, as well as the rapid growth of the semiconductor industry, have led to the increasing utilization of foundries. Foundry manufacturing services were traditionally provided by vertically integrated semiconductor companies with excess capacity. After our establishment, other semiconductor manufacturers have also focused on foundry services. These specialized foundries have derived significant manufacturing advantages due to their greater operational focus, economies of scale in production and capital equipment purchases, and broad access to various process technologies they have developed with their customers. Due to these advantages, dedicated foundries have experienced rapid growth and have made substantial investments in advanced facilities and process technologies. IC Insights estimates that the revenues earned by dedicated foundries will increase from approximately US$7.1 billion in 2001 to US$25.2 billion in 2006, representing a compound annual growth rate of 28.8%. IC Insights estimates that the merchant foundry market (including dedicated and integrated foundries) will more than triple to US$30.5 billion by 2006 from US$9.1 billion in 2001, representing a compound annual growth rate of 27.9%. The projections by IC Insights are forward-looking statements published by IC Insights independently from us. We were not involved in the preparation of these projections and take no responsibility for their accuracy.

The Semiconductor Industry in Taiwan. The semiconductor industry in Taiwan, benefitting from a number of factors, experienced rapid growth through the first half of 1996, with demand for semiconductors generated from downstream manufacturers far exceeding supply during that period. It has been estimated that the market for semiconductors in Taiwan has been growing at a faster rate than that of the world market in recent years, from US$2.4 billion in 1990 to US$10.1 billion in 2001. The semiconductor industry in Taiwan experienced a downturn in 1998 due to an over-supply of manufacturing capacity in both the dynamic random access memory (DRAM) and foundry markets. The semiconductor industry in Taiwan rebounded in 1999 in the wake of expanding Asian economies and increased technology spending among US companies and consumers. The semiconductor industry in Taiwan experienced another downturn starting in the first quarter of 2001 due to the worldwide downturn in the semiconductor industry. Domestic production of semiconductors in Taiwan satisfied approximately 35% of the total domestic demand in 2001.

Taiwan possesses a well-educated and capable labor pool, in particular, a large engineering work force well-suited for sophisticated manufacturing industries. The ROC government has also provided tax incentives, long-term loans at favorable interest rates and research and development support, both directly and indirectly through leading research institutes and universities. As part of such efforts, the ROC government established the Hsinchu Science Park, where we and a number of our customers and competitors are located. Companies located in the Hsinchu Science Park enjoy preferential treatments, including tax holidays, start-up financing and research grants, a streamlined approval process for facility construction and expansion, and dedicated warehousing and shipping facilities. Due to the success of the Hsinchu Science Park, the ROC government has created the Tainan Science Park, a similar park in the southern part of Taiwan, to provide additional beneficial locations for semiconductor companies and further stimulate the semiconductor industry in Taiwan.

The simultaneous growth of Taiwan's indigenous electronics industry, particularly in the personal computer markets, has created a sizable local semiconductor market and a substantial infrastructure of technology companies, particularly in the semiconductor industry, with companies that specialize in one or more of the five segments of semiconductor manufacturing: design, photomask manufacturing, wafer fabrication, assembly and testing. This full spectrum of semiconductor manufacturing services makes Taiwan companies attractive to semiconductor or systems companies from around the world pursuing an outsourcing strategy for all or a portion of their semiconductor production needs.

Overview of the Company

We are the world's largest dedicated semiconductor foundry. As a foundry, we manufacture semiconductors using our advanced production processes for our customers based on their own or third parties' proprietary integrated circuit designs. We offer a comprehensive range of leading edge wafer fabrication processes, including processes to manufacture CMOS logic, mixed-signal, radio frequency and embedded memory and BiCMOS mixed-signal and other semiconductors. IC Insights estimates that our revenue market share among dedicated foundries worldwide was 48% in 2000 and 52% in 2001. We also offer design, mask making, probing, testing and assembly services.

We believe that we are the technology leader among the dedicated foundries in terms of net sales of advanced semiconductors with a resolution of 0.18 micron and below, and that we are among the technology leaders in the semiconductor industry generally. For example, we announced commercial availability of 0.13 micron CMOS process technology in December 2000 and have developed with our customers more than 30 fully functional semiconductors utilizing this technology, some of which are currently in production. In addition, we are currently in the process of developing 90-nanometer technology and expect to commence risk production utilizing this technology by the end of 2002. We also believe that we are a leader in manufacturing process management capabilities among dedicated foundries. We believe our leading position in advanced technology and manufacturing process management capabilities has contributed to our increasing revenue market share among dedicated foundries.

After the recent decommissioning of one of our six-inch fabs and the combining of operations at two of our eight-inch fabs, we operate one twelve-inch fab, six eight-inch wafer fabs and one six-inch wafer fab. Six of our fabs are located in Hsinchu, one is in Tainan Science Park and one is in the United States. We also commenced construction of another new twelve-inch wafer fab, Fab 14 (Phase I), in 2000 in the Tainan Science Park. In 1998, we entered into a joint venture called Systems on Silicon with Philips and EDB Investment Pte. Ltd. to build a fab in Singapore, which commenced production in September 2000. We also hold a 25.28% interest in Vanguard, which operates one fab in Hsinchu. We decommissioned Fab 1, which is a six-inch wafer fab, on March 31, 2002 due to the expiration of our land lease agreement with ITRI. We also currently plan to begin construction in the second half of 2002 of Fab 12 (Phase II) in Hsinchu Science Park and Fab 14 (Phase II) in Tainan Science Park to further expand our twelve-inch fabrication capacity.

We believe that our large capacity is a major competitive advantage. Our monthly capacity was approximately 381,044 wafers at the end of 2001. Based upon preliminary estimates, we expect our monthly capacity to be approximately 381,468 wafers at the end of 2002. The change in our expected capacity in 2002 is primarily due to increased capacity as a result of ramping up Fab 6 and Fab 12 (Phase I), partially offset by decreased capacity as a result of decommissioning Fab 1 and reconfiguring Fab 3 and Fab 7. Our expected capacity as of year-end 2002 includes a monthly capacity of approximately 30,900 wafers at the fabs of our joint ventures Systems on Silicon and Vanguard.

We count among our customers many of the world's leading semiconductor companies, ranging from fabless integrated circuit design houses such as Altera Corporation, Broadcom Corporation, NVIDIA Corporation and VIA Technology, Inc., to integrated device manufacturing companies such as Analog Devices, Inc., Motorola Inc. and Philips, and systems companies such as Alcatel Microelectronics and Qualcomm Inc. Fabless integrated circuit design houses and integrated device manufacturers accounted for approximately 63% and 36% of our net sales in 2000 and 66% and 33% of our net sales in 2001.

Our History and Structure

We were founded in 1987 as a joint venture among the ROC government, Philips and other private investors and were incorporated in the ROC on February 21, 1987. Our common shares have been listed on the Taiwan Stock Exchange since September 5, 1994 and our ADSs have been listed on the New York Stock Exchange since October 8, 1997.

WaferTech in the United States. In 1996, we entered into a joint venture called WaferTech with US-based Altera Corporation, Analog Devices Inc. and Integrated Silicon Solution, Inc. to construct and operate a US$1.2 billion foundry in the United States. Initial trial production at WaferTech commenced in July 1998 and commercial production commenced in October 1998. As of December 31, 2001, the monthly capacity at WaferTech was 28,000 wafers. In December 1998, we increased our percentage ownership of WaferTech from 57% to 68% by purchasing part of the interest of Analog Devices Inc. and Integrated Silicon Solution, Inc. As of April 30, 2000, our percentage interest had decreased to approximately 67% as a result of the exercise of options by certain employees of WaferTech to purchase interests in WaferTech. By the end of the first quarter of 2001, we had increased our percentage ownership of WafterTech from 67% to approximately 99% by purchasing all of the remaining interest of Altera Corporation, Analog Devices Inc. and Integrated Silicon Solutions, Inc.

Systems on Silicon in Singapore. In March 1999, we entered into an agreement with Philips and EDB Investment Pte. Ltd. to found a joint venture, Systems on Silicon, to build a fab in Singapore. As of March 31, 2002, we owned 32% of Systems on Silicon, Philips owned 48% and EDB Investment Pte. Ltd. owned 20%. The fab commenced production in December 2000. After the ramping up of the production capability at Systems on Silicon to its full capacity, we, together with Philips, have the right to purchase up to 100% of its annual capacity. We and Philips jointly are required to purchase up to 70% of the Systems on Silicon's full capacity and we will be required to purchase no more than 28% of the annual installed capacity. Please see "Item 7. Major Shareholders and Related Party Transaction—Related Party Transactions—Systems on Silicon Manufacturing Company Pte. Ltd." for a detailed discussion about the contract terms we entered into with Systems on Silicon.

TSMC-Acer. In July 1999, we acquired 32% of the outstanding equity securities of Acer Semiconductor Manufacturing Inc., a specialized DRAM manufacturer in Taiwan. Upon our acquisition of this 32% interest, the name of this company was changed to TSMC-Acer Semiconductor Manufacturing Corporation. The other principal shareholders of TSMC-Acer as of December 31, 1999 were Acer Inc. and certain of its affiliates, which held an aggregate equity interest of approximately 30%, and China Development Industrial Bank, which held 8%. TSMC-Acer is located in the Hsinchu Science Park and has one eight-inch fab. On June 30, 2000, we acquired by merger the remainder of TSMC-Acer that we did not already own. As a result of the merger with TSMC-Acer, each holder of TSMC-Acer shares was issued one of our common shares for every 3.90625 TSMC-Acer shares held. We issued 433,515,164 common shares upon the completion of the merger with TSMC-Acer. The merger was accounted for as a purchase. Accordingly, the results of operations for TSMC-Acer have been included in our consolidated financial statements from the date of merger.

Worldwide Semiconductor. To rapidly increase our capacity in response to strong demand for our services, in June 2000, we acquired Worldwide Semiconductor, the third-largest dedicated foundry in Taiwan established in May 1996. As result of the merger with Worldwide Semiconductor, each holder of Worldwide Semiconductor shares was issued one of our common shares for every two Worldwide Semiconductor shares held. We issued an aggregate of 1,150,000,000 common shares to Worldwide Semiconductor shareholders upon the completion of the merger on June 30, 2000. The aggregate 1,583,515,164 common shares issued to the shareholders of TSMC-Acer and Worldwide Semiconductor represented more than 10% of our then outstanding common shares. The merger was accounted for as a pooling-of-interest. Accordingly, our consolidated financial statements have been restated to include the results of operation of Worldwide Semiconductor for all periods presented.

We have successfully integrated the operations of TSMC-Acer and Worldwide Semiconductor into our corporate operations. The TSMC-Acer fab is now referred to as our Fab 7 and the Worldwide Semiconductor fab is now referred to as Fab 8. As part of integrating Fab 7, we have reconfigured Fab 7 from exclusively DRAM production to foundry production for DRAM, logic and other semiconductors. We have also conformed all management and logistical processes and appropriate technology to those of our other fabs. We now believe that these fabs function at performance levels, in terms of yield and cycle time, comparable to those of our other fabs that use similar process technologies. As part of the integration process, personnel from the acquired entities have generally been assigned to positions throughout our organization.

Operations in Mainland China. In the fourth quarter of 2001, we established an office in Shanghai and began conducting preliminary studies with respect to business opportunities in China in compliance with applicable ROC rules and regulations. In April 2002, the ROC Government formally announced a partial lifting of the ban on investment by Taiwan semiconductor manufacturing companies in eight-inch wafer fabs in mainland China. The ROC Government indicated that ROC-based semiconductor manufacturers, in the aggregate, may relocate to the mainland a total of three eight-inch wafer fabs that use 0.25 micron and larger technology during the period from 2002 to 2005. In addition, an ROC-based semiconductor manufacturer may only apply to establish such an eight-inch wafer fab in China after such manufacturer has commenced volume production for at least six consecutive months in at least one twelve-inch wafer fab in Taiwan. Although we have commenced production at our first twelve-inch fab, Fab 12 (Phase I), in Hsinchu, ROC, we can give no assurances that the ROC Government will allow us to establish any eight-inch wafer fabs in mainland China.

The following table sets forth, as of March 31, 2002, our ownership interest in, and country of incorporation of, each of our significant subsidiaries in which we own more than 10% of its equity interest.

Name of the Subsidiary	State or Jurisdiction of Incorporation	Our Ownership Interest
TSMC North America	California, USA	100%
TSMC Europe B.V.	The Netherlands	100%
TSMC Japan K.K.	Japan	100%
TSMC International Investment Ltd.	British Virgin Islands	100%
TSMC Partners, Ltd.	British Virgin Islands	100%
Po Cherng Investment Co., Ltd.	Taiwan, ROC	25%
Chi Hsin Investment Co., Ltd.	Taiwan, ROC	25%
Cherng Huei Investment Co., Ltd.	Taiwan, ROC	25%
Hsin Ruey Investment Co., Ltd.	Taiwan, ROC	25%
Kung Cherng Investment Co., Ltd.	Taiwan, ROC	25%
Chi Cherng Investment Co., Ltd.	Taiwan, ROC	25%
TSMC Development, Inc.	Delaware, USA	100%
Vanguard International Semiconductor Corporation	Taiwan, ROC	25%
TSMC Technology, Inc.	Delaware, USA	100%
InveStar Semiconductor Development Fund, Inc.	Cayman Islands	97%
WaferTech, L.L.C.	Delaware, USA	99%
Investar Semiconductor Development Fund, Inc. (II)	Cayman Islands	97%
Systems on Silicon Manufacturing Company Pte. Ltd.	Singapore	32%
Emerging Alliance Fund LLP	Cayman Islands	99%

Our principal executive office is located at No. 121, Park Avenue III, Science-Based Industrial Park, Hsinchu, Taiwan, Republic of China, and our telephone number at that office is (886-3) 578-0221. Our web site is www.tsmc.com.tw. Information contained on our web site does not constitute part of this annual report.

Our Facilities

Our corporate headquarters and six of our fabs are located in the Hsinchu Science Park. Our corporate headquarters and our six fabs in Hsinchu occupy approximately 275,078 square meters of land. We lease all of this land from the Science-Based Industrial Park Administration in Hsinchu under agreements that will expire on various dates between March 2008 and April 2019. Other than certain equipment under leases at Fab 6 and Fab 7, we own all of the buildings and equipment for our fabs. We also have one fab located in Tainan Science Park and are currently constructing a twelve-inch fab in Tainan Science Park. We also currently plan to begin construction in the second half of 2002 of Fab 12 (Phase II) in Hsinchu Science Park and Fab 14 (Phase II) in Tainan Science Park. We have arrangements to lease from the Tainan Science Park Development Office 395,000 square meters of land for our fabs in the Tainan Science Park. WaferTech owns 1,052,181 square meters of land in the State of Washington in the United States, where the WaferTech fab and related offices are located. Systems on Silicon owns 78,000 square meters of land in Singapore, where the Systems on Silicon fab and related offices are located.

Manufacturing Capacity and Technology

We manufacture semiconductors on silicon wafers based on proprietary designs provided by our customers or third party designers. Two key factors that characterize a foundry's manufacturing capabilities are output capacity and fabrication process technology. Since our establishment, we have possessed the largest capacity among the world's dedicated foundries. We also believe that we are the technology leader among the dedicated foundries in terms of our net sales of advanced semiconductors with a resolution of 0.18 micron and below and are one of the leaders in the semiconductor industry. For example, we announced the commercial production availability of 0.13 micron CMOS process technology in December 2000 and developed with our customers more that 30 fully functional semiconductors utilizing their technology, some of which are currently in production. This technology was the industry's first commercially available 0.13 micron process. We are also the sole foundry member of International SEMATECH, a consortium of 13 of the world's leading semiconductor companies that is dedicated to the research and development of advanced semiconductor manufacturing technologies. In addition, we believe that we are a leader in manufacturing process management capabilities among dedicated foundries, which contributes to our yield and our ability at times to produce at utilization rates in excess of 100%.

The following table lists our fabs, together with the year of commencement of commercial production, technology and capacity during the last five years:

Fab[1]	Year of commencement	Initial technology[2]	Current technology range[2]	Monthly capacity[3] 1997	1998	1999	2000	2001
1[4]	1987	1.5	1.5/1.0/0.8	11,236	12,022	11,910	11,011	11,378
2A	1990	0.8	1.0/0.8/0.6	22,753	21,348	22,472	21,348	21,910
2B	1992	0.6	0.6/0.5/0.45	23,034	23,034	21,910	22,191	23,315
3	1995	0.5	0.35/0.25/0.15	39,000	41,000	39,000	45,000	46,500
4	1996	0.5	0.35/0.25/0.18	23,000	31,000	31,000	36,000	36,200
5	1997	0.5	0.35/0.25/0.18	3,000	13,000	28,000	39,500	40,000
6	2000	0.25	0.25/0.18	—	—	—	32,000	41,000
7[5]	1995	0.45	0.35/0.25/0.20	—	—	—	10,000	44,000	46,500
8[6]	1998	0.35	0.35/0.25/0.18	—	4,000	17,000	48,000	54,700
12 (Phase I)	2001	0.15	0.15/0.13					3,375
WaferTech	1998	0.35	0.35/0.25	—	8,000	20,300	28,000	28,000
Vanguard[7]	1994	0.5/0.35	0.5/0.35	—	—	9,000	22,000	23,000
Systems on Silicon[8]	2000	0.25/0.18	0.25	—	—	—	400	5,166
Total				122,809	153,292	209,693	348,046	381,044

(1) Fab 1 and Fab 2 produces six-inch wafers. Fabs 3, 4, 5, 6, 7, 8, WaferTech, Vanguard and Systems on Silicon produce eight-inch wafers. Fab 12 (Phase I) produces twelve-inch wafers. Fab 1 is located in Hsinchu at ITRI Fabs 2A, 2B, 3, 4, 5, 7, 8, 12 (Phase I) and Vanguard are located in Hsinchu Science Park. Fab 6 is located in the Tainan Science Park. WaferTech is located in the United States and Systems on Silicon is located in Singapore.

(2) In microns, as of year-end.

(3) Estimated capacity in wafers as of year-end. Actual capacity during each year will be lower as new production capacity is phased in during the course of the year.

(4) We decommissioned Fab 1 on March 31, 2002 due to the expiration without renewal of our land lease agreement with ITRI.

(5) Represents that portion of the total capacity from TSMC-Acer that we utilized for foundry production prior to the completion of our merger with TSMC-Acer on June 30, 2000 and the total capacity from TSMC-Acer subsequent to the completion of the merger.

(6) Represents the total capacity from Worldwide Semiconductor since 1998, reflecting the restated operating data as a result of pooling-of-interest accounting for the merger with Worldwide Semiconductor on June 30, 2000.

(7) Represents that portion of the total capacity from Vanguard that we had the option to utilize as of December 31, 2000 and December 31, 2001.

(8) Represents that portion of the total capacity that we had the option to utilize as of December 31, 2000 and December 31, 2001. This fab commenced production in September 2000.

As of December 31, 2001, our monthly capacity was 381,044 wafers.

Capacity Utilization Rates. A key factor influencing our profit margins is our capacity utilization. Because a high percentage of our cost of sales is of a fixed nature, operations at or near capacity have a significant positive effect on output and profitability. During the first half of 1996, our fabs operated at an average utilization rate in excess of 100%, but due to adverse market conditions in the global semiconductor market in the latter half of 1996 and the first half of 1997, our fabs operated at average utilization rates of 87% and 98% respectively. In the second half of 1997 and the first half of 1998, the average utilization rates were 106% and 88%, respectively. In the second half of 1998, the first half of 1999 and the second half of 1999, the average capacity utilization rates were 63%, 95% and 98%, respectively. The average utilization rates in the first and second half of 2000 were 105% and 106%, respectively. The utilization rates for 2000 do not take into account the utilization rates for TSMC-Acer prior to the completion of our merger with TSMC-Acer on June 30, 2000, and the utilization rates prior to 2000 do not take into account the utilization rate for Worldwide Semiconductor and TSMC-Acer. The average utilization rate for each quarter of 2001 was 70%, 44%, 41% and 50%, respectively and 51% for the entire year. Operation at utilization rates exceeding 100% has been possible in the past due to, among other factors, our ability to manage the production facilities and product flows efficiently. Other factors affecting utilization rates are the percentage yield of commercially useful wafers during the fabrication process, the complexity of the wafer produced and the actual product mix.

We determine the capacity of a fab based on the capacity ratings given by manufacturers of the equipment used in the fab, adjusted for, among other factors, actual output during uninterrupted trial runs, expected down time due to setup for production runs and maintenance, and expected product mix. All of our fabs currently operate 24 hours per day, seven days per week. Employees work shifts of 12 hours each day on a two days on, two days off basis, except during periods of annual maintenance.

Mini-Environments. Our fabs are organized into bays grouped by function. The general production environment consists of class 1000 or class 100 “clean rooms”. A class 100 clean room means a room containing less

than 100 particles of contaminants per cubic foot. Within the clean rooms, we use the "mini-environment" approach pioneered by us in which the manufacturing steps are performed in a class 1 (in the case of Fab 3, class 0.1) clean mini-environment. We believe that the mini-environment approach has several advantages. The use of mini-environment results in reductions of building structure costs, mechanical and electrical system requirements and operating costs, allows flexibility in equipment layout and set-up and reconfiguration and facilitates the ramping-up process during capacity expansion.

Capacity Expansion and Technology Upgrade Plan

We intend to maintain our strategy of expanding manufacturing capacity and improving manufacturing process technology to meet both the fabrication and the technological needs of our customers.

The following table sets forth the range of our circuitry resolution capability and manufacturing capacity, broken down by fabs, as of year-end 2001 and planned resolution capability and capacity during 2002:

	2001		2002(E)	
Fab[1]	**Technology range[2]**	**Monthly capacity[3]**	**Technology range[2]**	**Monthly capacity[3]**
1[4]	1.5/1.0/0.8	11,378	—	—
2A	1.0/0.8/0.6	21,910	1.0/0.8/0.6	21,910
2B	0.6/0.5/0.45	23,315	0.6/0.5	23,258
3[5]	0.35/0.25/0.15	46,500	0.35/0.25/0.18/0.15	67,030
4[5]	0.35/0.25/0.18/0.13	36,200	0.35/0.25/0.18/0.13	—
5	0.35/0.25/0.18/0.15	40,000	0.35/0.25/0.18/0.15	34,920
6	0.25/0.18/0.15/0.13	41,000	0.25/0.18/0.15/0.13	55,500
7	0.35/0.25/0.20	46,500	0.5/0.35/0.25	22,500
8	0.35/0.25/0.18/0.15	54,700	0.35/0.25/0.18/0.15	60,200
12 (Phase I)	0.15	3,375	0.18/0.15/0.13	29,250
WaferTech	0.35/0.25/0.18	28,000	0.35/0.25/0.18/0.15	36,000
Vanguard[6]	0.5/0.35/0.25	23,000	1.0/0.5/0.35	23,000
Systems on Silicon[6]	0.25/0.18	5,166	0.25/0.18	7,900
Total		381,044		381,468

(1) Fab 1, Fab 2A and 2B produce six-inch wafers. Fabs 3, 4, 5, 6, 7, 8, WaferTech, Vanguard and Systems on Silicon produce eight-inch wafers. Fab 12 (Phase I) produces twelve-inch wafers.
(2) In microns, as of year-end.
(3) Estimated capacity range in wafers as of year-end. Actual capacity during each year will be lower as new production capacity is phased in during the course of the year.
(4) We decommissioned Fab 1 on March 31, 2002 due to the expiration without renewal of our land lease agreement with ITRI.
(5) Fab 4 was consolidated into Fab 3 during the fourth quarter of 2001.
(6) Represents the portion of the total expected capacity that we have the option to utilize from these fabs.

We believe that in 2001, our aggregate capacity represented approximately 5.6% of the worldwide capacity for the production of semiconductors.

Our capital expenditures in 2001 were NT$70,201 million (US$2,006 million). We currently expect our capital expenditures to be between approximately NT$85,000 million (US$2,429 million) and approximately NT$95,000 million (US$2,714 million) in 2002. During 2002 we anticipate capital expenditures will focus primarily on the following:

- constructing Fab 14 (Phase I), Fab 14 (Phase II) and Fab 12 (Phase II);
- ramping up Fab 6 and Fab 12 (Phase I); and
- upgrading the technology at Fabs 3, 5, 6, 8 and Wafertech.

Our unconsolidated, affiliated companies spent NT$10,115 million (US$289 million) for capital expenditures in 2001 and are expected to spend between approximately NT$11,000 million (US$314 million) and approximately NT$13,000 million (US$371 million) for capital expenditures during 2002 primarily on the following:

- increasing the capacity at Systems on Silicon; and
- upgrading the technology at Vanguard.

These investment plans are still preliminary and are subject to change based upon market conditions.

Commitments by Customers. A number of our customers have entered into arrangements with us to ensure that they have access to specified capacity at our fabs. These arrangements are primarily in the form of a deposit agreement. In a deposit agreement, the customer makes in advance a cash deposit for an option on a specified capacity at our fabs. Option deposits are generally credited to wafer purchase prices as shipments are made. As of March 31, 2002, our customers had on deposit an aggregate of approximately US$48.8 million to reserve future capacity, which was reserved for capacity during the years 2002 through 2004.

Markets and Customers

The primary customers of our foundry services are fabless design houses, integrated device manufacturers and systems companies. The following table presents the breakdown of net sales (including revenues associated with application-specific integrated circuits, ASIC, and mask making services) by types of customers during the last three years:

	Year ended December 31,					
	1999		2000		2001	
Customer Type	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**
			(in millions, except percentages)			
Fabless integrated circuit design houses	NT$52,671	69.0%	NT$105,202	63.3%	NT$83,260	66.2%
Integrated device manufacturers	21,442	28.1	60,259	36.3	42,071	33.4
Systems Companies	2,192	2.9	736	0.4	554	0.4
Total	NT$76,305	100.0%	NT$166,198	100.0%	NT$125,885	100.0%

We categorize our net sales based on the country in which the customer is headquartered. The following table presents a geographic breakdown of our net sales during the last three years:

	Year ended December 31,					
	1999		2000		2001	
Region	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**
USA	NT$47,803	62.6%	NT$112,183	67.5%	NT$84,846	67.4%
Asia	21,926	28.7	41,716	25.1	33,548	26.6
Europe	6,576	8.5	12,299	7.4	7,491	6.0
Total	NT$76,305	100.0%	NT$166,198	100.0%	NT$125,885	100.0%

Although we are not dependent on any single customer, a significant portion of our net sales are attributable to a relatively small number of our customers. Some of our customers operate in cyclical businesses and order levels have varied in the past, and may vary in the future. In 2000 and 2001, our ten largest customers accounted for approximately 44% and 49% of our net sales, respectively. Our largest customer in 2001, NVIDIA Corporation, accounted for approximately 17% of our net sales. The increase in concentration in 2001 resulted from an increase in orders from a small number of our customers for advanced semiconductors in the second half of 2001. Our customer concentration increased further in the first quarter of 2002 and our ten largest customers accounted for approximately 63% of our net sales in the first quarter of 2002. See “Item 3. Key Information—Risk Factors—Any significant decrease in sales to one or more of our major customers may materially decrease our net sales and net income”.

Over the years, we have attempted to strategically manage our exposure to the memory semiconductor market by limiting the proportion of memory semiconductor manufacturing services to a designated percentage of total sales revenue. This policy has successfully shielded us from significant adverse effects resulting from the previous precipitous price drops in the memory semiconductor market.

We have four marketing and customer support offices. The office in Hsinchu serves Asian (excluding Japanese) customers. Wholly-owned subsidiaries in the United States, Japan and The Netherlands serve North American, Japanese and European customers, respectively. Foundry service sales are technologically intensive and involve frequent and intensive contacts with customers. We believe that the most effective means of marketing our foundry services is by developing direct relationships with our customers. We do not use agents or distributors. Our customer engineers work closely with the sales force by providing detailed technical advice and specifications to customers.

The Semiconductor Fabrication Process

The semiconductor fabrication process can be categorized into a series of general stages. The following are the main stages involved in semiconductor production:

Circuit Design: The layout of the circuit components and interconnections is generally produced at computer-aided design terminals. A complex circuit may be designed in as many as thirty layers of patterns or more.

Mask Making: Each layer of the pattern of the circuit is duplicated on a photographic negative, known as the mask, by an electron beam generator. A mask is also referred to as a reticle.

Wafer Fabrication: This is the process by which raw silicon wafers are modified to form junctions, transistors or interconnects. In this process, the raw wafers are oxidized to form silicon dioxide, which is used as an insulator between the conductors and as an insulating layer for a controlling gate. Through the introduction of various impurities, the characteristics of conduction in the silicon are eventually changed to form a junction or transistor. During the wafer fabrication process, conductor, semiconductor or resistor materials are applied to the wafer in multiple layers in different patterns specified in the masks.

Wafer Probing: After a visual inspection, individual semiconductors, called “dies”, on a wafer are tested, or “probed”, electrically. Dies that fail this test are marked to be discarded.

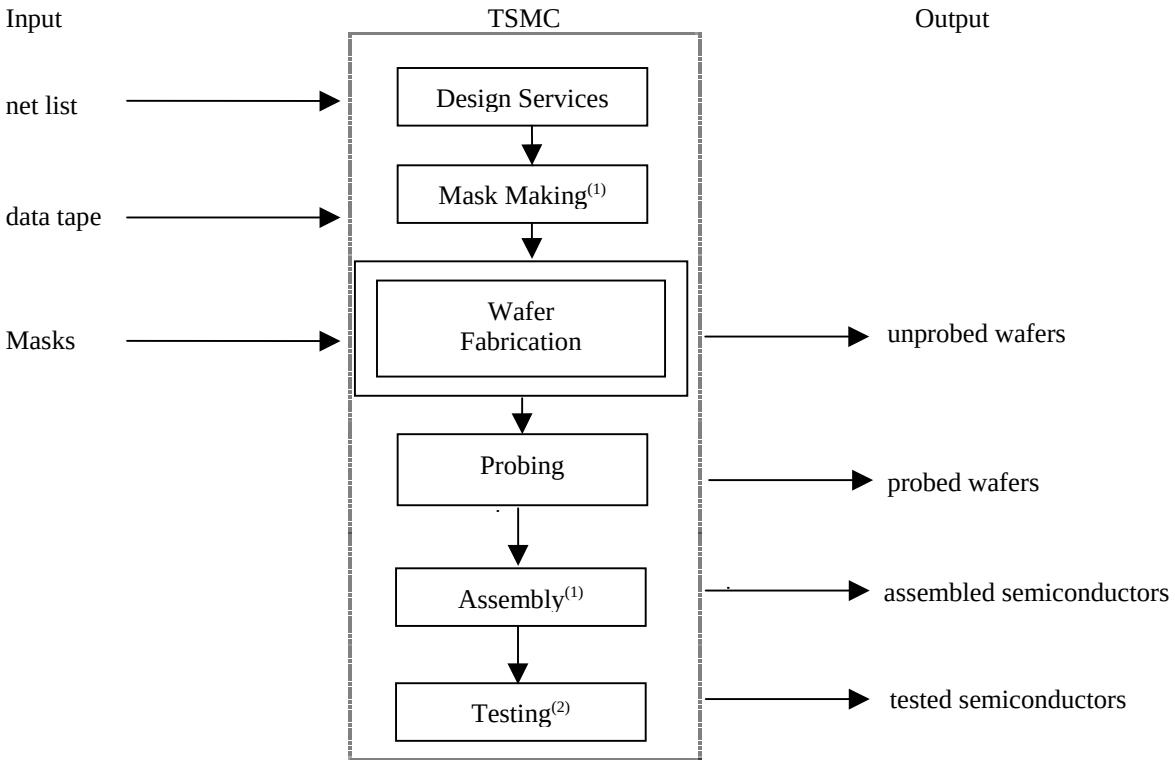
Assembly: Each wafer is cut into individual dies and marked semiconductors are discarded. Good dies are connected to a conductive lead frame or organic substrate-based package and the bonded semiconductors, if lead frame based, are then encapsulated using a plastic molding compound or a ceramic casing.

Testing: Packaged semiconductors are fully tested by the use of specialized testing equipment.

Our Foundry Services

Range of Services. We are primarily engaged in wafer fabrication for foundry customers. We also offer design, mask making, wafer probing and testing services and, on a subcontracted basis, assembly services. Because of our ability to provide a full array of services in addition to wafer fabrication, we are able to accommodate customers with a variety of input and output needs. Almost all of our customers choose to have us make the masks to be used during the fabrication process, as this decreases the risk of damage to the masks that can result from having to transport them. A growing number of customers in the recent years have also begun to use our design services. The flexibility in input stages allows us to cater to a variety of customers with different in-house capabilities and thus to service a wider class of customers as compared to a foundry that cannot offer design or mask making services. We are planning on increasing our capacity to offer directly, or through closer arrangements with third parties, design services and assembly and testing services. By increasing our capacity to offer these services, we intend to offer our customers a complete integrated service for the design, manufacturing, assembly and testing of semiconductors.

The following diagram illustrates the services we provide to our customers:



(1) Subcontracted out to third parties.
(2) Portions are subcontracted out to third parties.

Fabrication Processes. We manufacture semiconductors using the complementary metal oxide silicon, CMOS and BiCMOS processes. The CMOS process is currently the dominant semiconductor manufacturing process. In the past, a competing manufacturing process called the "bipolar" process was also prevalent. Bipolar devices typically operate at higher speeds than CMOS devices, but CMOS devices consume less power and permit higher density circuit design. While the bipolar process was once widely used, it is now used primarily for high speed semiconductors and analog semiconductors. The BiCMOS process combines the high speed of the bipolar circuitry and the low power consumption and high density of the CMOS circuitry. We use the CMOS process to manufacture logic semiconductors, memory semiconductors including static random access memory, or SRAM, DRAM, flash memory, mixed-signal semiconductors, which combine analog and digital circuitry in a single semiconductor, and embedded memory semiconductors, which combine logic and memory in a single semiconductor. The BiCMOS process is used to make high-end mixed-signal and other types of semiconductors.

Types of Semiconductors Manufactured by Us. Different types of semiconductors with different specific functions are manufactured using the CMOS and BiCMOS processes by changing the number of and the combinations of conducting, insulating and semiconducting layers and by defining different patterns in which such layers are applied on the wafer. At any given point in time, there are over a hundred different products in various stages of fabrication at a full service foundry like ours. We believe that the keys to maintaining high production quality and utilization rates are our effective management and control of the manufacturing process technology that come from our extensive experience as the longest existing dedicated foundry and our dedication to quality control and process improvements.

The following is a general description of the types of semiconductors that we manufacture:

Logic Semiconductors: Logic semiconductors process digital data to control the operation of electronic systems. The largest segment of the logic market, standard logic devices, includes microprocessors, microcontrollers, DSPs, graphic chips and chip sets.

Memory Semiconductors: Memory semiconductors, which are used in electronic systems to store data and program instructions, are generally classified as either volatile memory (which lose their data content when power supplies are switched off) or nonvolatile memory (which retain their data content without the need for a constant power supply). Examples of volatile memory include SRAM and DRAM and examples of nonvolatile memory include electrically erasable programmable read-only memory, or EPROM, and flash memory. We currently offer CMOS process for the manufacture of SRAM and embedded 1T RAM in resolutions down to 0.13 micron in both high speed and low power designs, and for the manufacture of flash memory and embedded flash in resolutions down to 0.18 micron.

Mixed-Signal Semiconductors: Analog/digital semiconductors combine analog and digital devices on a single semiconductor to process both analog signals and digital data. We make mixed-signal semiconductors using both the CMOS and BiCMOS processes. We offer 0.13 micron CMOS process and 0.35 micron BiCMOS and silicon germanium process for manufacturing mixed-signal semiconductors. The primary uses of mixed-signal semiconductors are in hard disk drives, wireless communications equipment and network communications equipment, with those made with the BiCMOS process occupying the higher end of the mixed-signal market.

The table below presents a breakdown of our net sales during the last three years by each semiconductor type:

	Year ended December 31,					
	1999		2000		2001	
Semiconductor Type	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**
			(in millions, except percentages)			
CMOS						
Logic	NT$55,825	73.2%	NT$120,285	72.4%	NT$96,334	76.5%
Memory	10,474	13.7	24,288	14.6	14,821	11.8
Mixed-Signal(1)	6,829	8.9	17,559	10.6	12,953	10.3
BiCMOS(2)	200	0.3	395	0.2	658	0.5
Others	2,977	3.9	3,671	2.2	1,119	0.9
Total	NT$76,305	100.0%	NT$166,198	100.0%	NT$125,885	100.0%

(1) Mixed-signal semiconductors made with the CMOS process.
(2) Mixed-signal and other semiconductors made with the BiCMOS process.

Design Services. We offer design services that range from providing our customers with access to the fundamental technology files that facilitate a customer's own design to direct design services in which we design a semiconductor based on a customer's requirements. Technology files are necessary for checking the customer's semiconductor design against the design rules to be used to manufacture a semiconductor using a given process technology.

As part of the necessary building blocks for our customers' semiconductor designs, we offer libraries of compatible designs for portions of semiconductors, such as standard cells, inputs/outputs and selected memory blocks, in addition to technology files. We have a dedicated team of engineers who work with our research and development department to develop, or acquire from third parties, selected key libraries early on in the development of new process technologies so that our customers can quickly design sophisticated semiconductors that utilize the new process technologies. We also have entered into, and will continue to enter into, arrangements with other providers of libraries so as to allow our customers access to a broad library portfolio for their designs.

Certain design services that we offer are also more important for semiconductors of a resolution of 0.13 micron or below because at these resolutions the interconnects significantly impact a semiconductor's performance. We are also able to provide reference design flows generated from our research and development for use in our customers' semiconductor designs. For these design services we frequently work together with the major vendors of electronic design automation software products.

We also provide direct design services, or chip implementation services, to our customers. Since our launch of design services in April 1991, we have successfully completed more than 1,200 netlist sign-off, or design service projects, in various market applications. Our direct design services focus on more advanced semiconductors, such as those with a resolution of 0.18 micron and below.

Our chip implementation services can combine placement and routing services, library and intellectual property merge services, physical verification and porting services in order to specifically address any customer's need. We believe that our strengths in chip implementation services allow our customers to use our resources to quickly finish a design. In addition, we have been collaborating with industry leaders in electronic design automation, library and intellectual property services to create a worldwide network of expertise, resources and services that are available to implement and produce a customer's innovative designs.

Multiproject Wafers Program. To help our customers reduce costs, we offer a dedicated multiproject wafer processing service that allows us to provide multiple customers with wafers produced with the same mask. This program eliminates costly and time-consuming repetitive mask and wafer runs, resulting in accelerated time-to-market for our customers. In the fourth quarter of 2000, we extended this program to all customers and library and intellectual property partners using our 0.13 micron process technology. This extension offers a routinely scheduled multiproject wafer run to customers on a shared-cost basis for prototyping and verification. Multiproject wafers accelerate time-to-market for device designers and library and intellectual property developers by reducing mask development and wafer cutting costs by up to a factor of ten.

We developed our multiproject wafer program in response to the current system-on-chip development methodologies, which often require the independent development, prototyping and validation of several cores before they can be integrated onto a single device. A complex system-on-chip may require RISC, DSP, Ethernet and physical interface cores, each of which has to be verified individually before integration. By sharing resources with our customers, the system-on-chip supplier can enjoy reduced prototyping costs and greater confidence that the design will be successful.

Customer Service

We believe that our focus on customer service has been an important factor in attracting leading semiconductor companies as customers. The key elements of our customer service are:

- our firmly established customer-oriented culture, which emphasizes close interaction with our customers on many levels, from senior management, marketing staff and customer engineers in the marketing and customer service offices to product and line engineers in the fabs and the research and development staff. Some of this interaction is achieved through direct data links to customers to enhance communication and facilitate real time engineering data and order information flow;

- responsiveness to customer's requirements in terms of lead time and product cycle;

- flexibility in technical capability, order size requirements and design changes;

- delivery accuracy in terms of time and quantity;

- tight design rules that promote the design of more compact, faster dies; and

- our "virtual fab", which is a customer service program intended to integrate and formalize the customer service approach that we have pursued since our inception. The goal of the virtual fab program is to make our manufacturing services as transparent and easy to deal with for our customers as their own in-house fabs, without the additional expense and drain on management resources. The virtual fab also provides our customers with the benefits of an in-house fab, including:

    - confidentiality of proprietary customer information and data;

- quality of service and products;
- assurance of on-time delivery of products;
- flexibility in scheduling and in capacity;
- cost effectiveness;
- real-time on-line information exchange with the customer during manufacturing, including on-line mask data review, so that the entire process is transparent to the customer; and
- logistical support for the processes of handling, assembly and final testing, which are subcontracted out to third parties before the products are shipped to the customer.

In a move to further enhance our virtual fab program, we launched on July 20, 1999, TSMC On-Line, our on-line ordering and information delivery system. In addition to work in progress and shipping reports, TSMC On-Line provides a 24 hours a day, seven days a week, one-stop shop for our customers who wish to place orders, review technical documentation, brochures or manuals or place general queries. As of March 31, 2002, approximately 33% of our orders were processed electronically.

We believe that, owing to our extensive experience in planning and managing foundry production runs, we offer the advantage of a short lead time and product cycle to customers who need finished products within a short time frame.

We offer to our customers manufacturing processes for a wide array of semiconductors, including CMOS logic, mixed-signal, radio frequency, embedded memory and BiCMOS mixed-signal and other semiconductors. This has allowed us to pursue business from a wide range of customers, both in terms of manufacturing needs and end use. We also handle small orders as well as large ones and can accommodate design changes late into the pre-production stage. Such flexibility is possible because of our technical capability and dedication to customer service as well as our ability to plan and manage effectively many production runs.

We also provide our customers with the ability to share the ever increasing silicon verification costs through our multi-project wafer processing service. This service allows customers to share costs by combining multiple designs on a single mask set.

We believe that our customers also value our ability to deliver ordered wafers on time in consistent quality and in the desired quantities. We have received various awards and testimonials from our customers attesting to the quality of our customer service and the important role we play in the businesses of our customers.

Manufacturing Quality and Reliability

We believe that our management experience, capabilities and high-quality manufacturing processes have allowed us to maintain a high standard of manufacturing quality and reliability. We believe that wafers manufactured by us provide consistent, high die yield (or electric yield), which allows our customers to determine with greater certainty the appropriate number of wafers to order and allows us to charge a higher price on a per wafer basis while keeping the cost to customers on a per die basis competitive. We have been informed by many of our customers that our semiconductors consistently meet or exceed their quality reliability specifications.

Our policy is to implement quality assurance measures during all stages in manufacturing, including the research and development process. Quality is maintained through in-line testing and inspection of processed materials at various production stages in the manufacturing process. Final visual and mechanical inspection is performed before shipment to ensure quality and prevent maverick lots. Quality assurance measures also include on-going process and product reliability monitors, failure tracking for early identification of production problems and continuous customer services. Certain testing is subcontracted to semiconductor testing service providers in Taiwan for their more cost-effective services.

All our fabs, other than Fab 12 (Phase I), were certified as meeting the ISO-9001, QS-9000 and ISO-14000 quality standards. The ISO-9001 quality standards were provided by the International Standards Organization in 1993. The International Standards Organization is an organization formed by delegates from member countries to establish international quality assurance standards for products and manufacturing processes. International Standards Organization certification is required in connection with sales of industrial products in certain European countries. The QS-9000 quality standard is a more stringent standard provided by the Auto Industry Action Group since 1998. The QS-9000 standard consolidated the ISO-9000 standards with the quality systems of Ford, Chrysler and General Motors. The ISO-14000 quality standard is part of a comprehensive series of quality standards for environmental management published by the International Standards Organization after the success of the ISO-9000 series of quality standards. The ISO-14000 quality standards cover environmental management principles, systems and supporting techniques.

Backlog

Because of the fast-changing technology and functionality in semiconductor design, foundry customers generally do not place purchase orders far in advance to manufacture a particular type of product. However, we engage in discussions with customers commencing in advance of the placement of purchase orders regarding customers' expected manufacturing requirements. Certain of our customers have options on capacity at our fabs for the next few years. See "—Capacity Expansion and Technology Upgrade Plans—Commitments by Customers" for a discussion of the options on capacity held by some of our customers.

Research and Development

The semiconductor industry is characterized by rapid changes in technology, frequently resulting in the obsolescence of recently introduced products. We believe that, in order to stay technologically ahead of our foundry competitors and maintain our market position in the foundry industry, we need to maintain our position as a technology leader not only in the foundry sector but in the semiconductor industry in general. We spent NT$4,116 million, NT$7,204 million and NT$10,649 million (US$304 million) in 1999, 2000 and 2001, respectively, on research and development, which represented 5.4%, 4.3% and 8.5%, respectively, of our net sales for these periods. We plan to continue to invest significant amounts on research and development in 2002 with the goal of maintaining a leading position in the development of advanced process technologies. Our research and development efforts have recently allowed us to provide our customers access to certain advanced process technology, such as 0.13 micron process technology, prior to the implementation of those advanced process technologies by most integrated device manufacturers and our competitors.

Our research and development are divided into centralized research and development activities and research and development activities undertaken by each of our fabs. Our centralized research and development activities are principally directed toward developing most advanced and new generation manufacturing technologies. The research and development activities undertaken in each fab focus on upgrading the manufacturing process technology. The research and development team also seeks to develop versatile process technology that can be applied to the manufacture of different types of products. The primary target of our research and development efforts in the next few years is expected to be the development of 90-nanometer process technology for use with twelve-inch wafers, including the development of super low conducting interconnects for use on 90-nanometer semiconductors and process technology for embedded memory and other functions for semiconductors that combine various logic, input/output and embedded memory functions on a single 90-nanometer semiconductor.

Intellectual Property

We use internally developed process technologies and process technologies licensed from our customers and third parties. In continuing to advance our process technologies, we intend to rely primarily on our internal engineering capability and know-how and our research and development efforts, including collaboration with our customers and equipment vendors.

In order to minimize risks to us from any intellectual property infringement claims, we have implemented a screening procedure whereby customers are evaluated for infringement risk based on size, reputation and product specification, and those that are identified as high risk are examined closely for potential infringement. Furthermore, our equipment vendors generally indemnify us from any losses resulting from any suit or proceedings brought against us involving allegation of infringement of intellectual property rights on account of our use of the equipment supplied

by them. We also obtain indemnification rights from our customers with respect to any losses to us arising out of any infringement of intellectual property rights on account of design of integrated circuits.

We entered into a technology cooperation agreement with Philips on December 31, 1986, pursuant to which Philips provides us with process and technical information for the production of unencapsulated MOS integrated circuits in wafer form. Please see "Item 7. Major Shareholders and Related Party Transactions — Related Party Transactions — Koninklijke Philips Electronics N.V. and its Affiliates" for a detailed discussion about those agreements entered into with Philips. Under a separate agreement, Philips has an option on up to 30% of our capacity, on most favored terms and conditions for similar orders, as long as Philips' shareholding in us remains at 24.8% or higher.

We are a beneficiary of Philips' patent cross-licensing arrangements with a number of companies. All of these licenses are royalty-free. Most of these licenses are granted subject to a requirement that Philips' equity ownership in us remain at not less than a certain level (generally in the range of 12.5% to 25%). As of March 31, 2002, Philips had, including 1,299,925,653 Preferred A shares purchased from us in November 2000, an equity ownership in us of approximately 27.45%. We may lose the benefit of some of Philips' cross-licensing arrangements if it does not maintain its minimum equity ownership level and thus may be required to expend additional funds to obtain or develop alternative intellectual property. We also have significant in-house technology and know-how and already have and use significant intellectual property rights other than those made available to us under these Philips cross-licensing arrangements. We were issued 293, 523 and 598 United States patents in 1999, 2000 and 2001, respectively, and among these patents, 210, 400 and 490 are semiconductor-related patents issued in 1999, 2000, and 2001, respectively.

We also entered into a technical cooperation agreement with the ITRI. According to this agreement, the ITRI granted to us the license to use its technology with respect to the manufacture of silicon MOS wafers and agreed to provide certain associated assets and relevant technical assistance and information to us, in exchange for a license from us for improvements and refinements thereof. Please see "Item 7. Major Shareholders and Related Party Transactions-Related Party Transactions—Industrial Technology Research Institute" for a detailed discussion about this technical cooperation agreement.

Equipment

The quality and technology of the equipment used in the semiconductor manufacturing process are important in that they effectively define the limits of our process technology. Advances in process technology cannot be brought about without commensurate advances in equipment technology. The principal pieces of equipment used by us to manufacture semiconductors are scanners, steppers, cleaners and track equipment, inspection equipment, etchers, furnaces, wet stations, strippers, implanters, sputterers, CVD equipment, testers and probers. Other than a portion of the equipment used in Fab 6 and Fab 7, which is leased, we own all of the equipment used at our fabs.

In implementing our capacity expansion and technology advancement plans, we expect to make significant purchases of equipment required for semiconductor manufacturing. Some of the equipment is available from a limited number of vendors and/or is manufactured in relatively limited quantities, and certain equipment has only recently been developed. We believe that our relationships with our equipment suppliers are good and that we have enjoyed the advantages of being a major purchaser of semiconductor fabrication equipment. We work closely with manufacturers to provide equipment customized to our needs for certain advanced technologies. We have entered into supply agreements with equipment manufacturers covering some of our required equipment.

Raw Materials

Our manufacturing processes use many raw materials, primarily silicon wafers, chemicals, gases and various types of precious and other metals. Raw materials costs constituted 13.5% of our net sales in 2000 and 11.1% of our net sales in 2001. The three largest components of raw material costs—wafers, gas and chemicals—accounted for 41.4%, 18.8% and 16.2%, respectively, of our raw material costs in 2000 and 40.1%, 12.7% and 16.0%, respectively, of our raw material costs in 2001. Most of our raw materials generally are available from several suppliers. Our raw material procurement policy is to select only those vendors who have demonstrated quality control and reliability on

delivery time and to maintain multiple sources for each raw material so that a quality or delivery problem with any one vendor will not adversely affect our operations. The quality and delivery performance of each vendor is evaluated monthly or quarterly and quantity allocations are adjusted for subsequent periods based on the evaluation. Although we believe that supplies of raw materials used by us currently are adequate, shortages could occur in various critical materials due to interruption of supply or increased industry demand.

The most important raw material used in our production is silicon wafers, which is the basic raw material from which integrated circuits are made. The principal suppliers for our wafers are Shin-Etsu Handotai and Sumitomo Sitix of Japan, Wacker Siltronic of Germany, Taisil Electronic Material of Taiwan and MEMC Electronic Materials of the United States. Together they supplied approximately 85% of our total wafer needs in 2000 and in 2001. We have in the past obtained, and believe we will continue to be able to obtain, a sufficient supply of six-inch, eight-inch and twelve-inch wafers. The price of wafers decreased slightly during 1997 and 1998, but a moderate increase in price occurred during the second half of 1999 and 2000. In 2001, the price of eight-inch wafers decreased.

In order to secure a reliable and flexible supply of high quality wafers, we entered into long-term master agreements with our wafer suppliers to acquire wafers on a purchase order basis in June 2000.

For a discussion of our fabrication plants, see "—Manufacturing Capacity and Technology".

Competition

We compete internationally and domestically with dedicated foundry service providers, as well as with integrated semiconductor companies that allocate a portion of their manufacturing capacity to foundry operations. We seek to compete primarily on the basis of process technology, quality and service, rather than price. The level of competition differs according to the process technology involved. In more mature technologies, the competition tends to be more severe. Some companies compete with us in limited geographic regions or application end-markets. In recent years, substantial investments have been made to establish new dedicated foundry companies in China and elsewhere. We currently do not anticipate significant competition from these new foundries during the next few years.

Our competitors and potential competitors include companies that have substantially greater financial and other resources than us. However, we believe that we currently enjoy competitive advantages in such areas as technology, manufacturing quality, customer service and capacity. We aim to maintain or enhance these competitive advantages in order to stay ahead of the competition. However, we cannot assure you that we will be able to maintain or enhance these competitive advantages in the future.

Environmental Regulation

The semiconductor production process generates gaseous chemical wastes, liquid waste, waste water and other industrial wastes in various stages of the manufacturing process. We have installed various types of pollution control equipment for the treatment of gaseous chemical waste and liquid waste and equipment for the recycling of treated water in our fabs. Our operations at our fabs are subject to regulation and periodic monitoring by the ROC Environmental Protection Administration, or EPA, and local environmental protection authorities, including the Science-Based Industrial Park Administration.

We believe that we have adopted pollution control measures for the effective maintenance of environmental protection standards consistent with the practice of the semiconductor industry in Taiwan. We conduct an annual environmental audit to ensure that we are in compliance in all material respects with, and we believe that we are in compliance in all material respects with, applicable environmental laws and regulations. Furthermore, we, in many cases, have implemented waste reduction steps ahead of regulatory requirements. In 2001, we received the "Energy Conservation Excellence Award" from the Ministry of Economic Affairs and "Pollution Control Equipment Maintenance Outstanding Performance Plant Award" from the Industry Development Bureau. We also received the "Industrial Excellence Award" from the Ministry of Economic Affairs in 2000. We received ISO 14001 certification

in August 1996 and continue to implement improvement programs in connection with this certification. In January 2000, we received OHSAS 18001 certification for our occupational health safety management system.

Electricity and Water

We use substantial amounts of electricity supplied by Taiwan Power Company in our manufacturing process. Businesses in the Hsinchu Science Park and Tainan Science Park, such as us, enjoy preferential electricity supply.

The semiconductor manufacturing process uses extensive amounts of fresh water. Due to the growth of the semiconductor manufacturers in the Hsinchu Science Park, there has been concern as to the future availability of sufficient fresh water. In 1997, the ROC government finished construction of a pipeline to provide the Hsinchu Science Park with an additional source of fresh water, which is currently sufficient for our fabs in the Hsinchu Science Park. The ROC government has announced a plan to build a fresh water reservoir near the Hsinchu Science Park that is expected to satisfy the Hsinchu Science Park's long-term water requirements. The reservoir is expected to be completed in 2005. We have also taken steps to reduce fresh water consumption for our fabs in Hsinchu and Tainan. This primarily involves the installation of water recycling systems at our fabs, which allow us to recycle between 45% to 85% of the water used during the fabrication process, depending on the fabs. Taiwan has experienced a significant drought since the beginning of 2002 and some companies in the Hsinchu Science Park, including us, have trucked in additional water. The ROC government has also compensated some farmers in the region to halt crop irrigation so as to provide additional water supplies to companies in the Hsinchu Science Park.

Risk Management

We have a separate risk management department that develops comprehensive plans for the prevention of, and the response to, emergencies and disasters. The focuses of the department are loss prevention, emergency response, crisis management and business recovery. Our risk management department played an important role in minimizing the effect of the 1999 earthquakes on our business. We maintain insurance with respect to our facilities, equipment and inventories. The insurance for the fabs and their equipment covers, subject to some limitations, various risks including fire, typhoon, earthquake and some other risks generally up to their respective replacement values and lost profits due to business interruption. We received a total of approximately NT$3,711 million (US$106 million) in insurance compensation in respect of the earthquake that occurred on September 21, 1999. We have an insurance policy covering losses in respect of the construction of Fab 14 (Phase I). Equipment and inventories in transit are also insured. We believe that our overall insurance coverage is adequate.

Item 5. Operating and Financial Reviews and Prospects

Overview

We manufacture a variety of semiconductors based on designs provided by our customers. We also provide various design services. Our business model is now commonly called a "dedicated semiconductor foundry". The foundry industry as a whole experienced rapid growth over the last 15 years since our inception. As the leader of the foundry industry, we also have seen our net sales and net income increase from NT$39,400 million and NT$19,436 million in 1996 to NT$166,198 million and NT$65,106 million in 2000, respectively, despite two major industry downturns over that same period. From the middle of 1996 until the middle of 1998, the growth rate of worldwide demand for semiconductor products decreased as the growth rate of worldwide semiconductor production capacity increased. As a result of the increasing disparity between the growth rate of demand and the growth rate of supply, margins were squeezed and our net income declined from NT$19,436 million in 1996 to NT$17,974 million in 1997 and to NT$14,389 million in 1998. This occurred despite increases in our net sales from NT$39,400 million in 1996 to NT$43,927 million in 1997 and to NT$50,524 million in 1998. Starting in late 1998, there was an increase in demand that led to increases in both our net sales and net income for 1999 and 2000. In 2001, the semiconductor industry experienced a significant downturn due to a slowdown in the global economy, overcapacity in the semiconductor industry and a worldwide semiconductor inventory adjustment that led to decreases in our net sales and net income from NT$166,198 million and NT$65,106 million in 2000 to NT$125,885 million (US$3,597 million) and NT$14,483 million (US$414 million) in 2001.

The principal source of our sales revenue is wafer fabrication, which accounted for approximately 86% of our net sales in 2001. The rest of our net sales is derived from design, mask making, probing, testing and assembly services.

Demand for Semiconductors. Global semiconductor demand grew at an accelerated pace during the period from 1992 through 1995, as a result of the growth in the electronics industry, the increase in semiconductor applications and greater demand for semiconductors that offer higher performance, speed and reliability. In the second half of 1996 and 1997, however, a number of sectors of the semiconductor industry were in a state of overcapacity, with sharp declines in the average selling prices of memory chips and declines in prices of other semiconductor products evident during the period. In 1998, as a result of both the slowdown in many Asian economies and the expansion of memory semiconductor capacity, the total value of semiconductor products sold decreased and many semiconductor companies posted losses as a result. We were affected by the macro business environment and experienced a decline in sales and net income over the second half of 1998. The foundry industry, however, did not suffer as much as the semiconductor industry as a whole due to its diversified business nature. Demand for our foundry services improved significantly in 1999. Moreover, an increasing number of integrated device manufacturers were beginning to outsource manufacturing jobs to foundry service providers such as us. As a result of a slowdown in the global economy, overcapacity in the semiconductor industry and a worldwide semiconductor inventory adjustment in 2001, worldwide sales of semiconductors decreased significantly in 2001 as compared to 2000. The decreased worldwide semiconductor sales has caused most, if not all, integrated device manufacturers that had previously begun purchasing wafer fabrication services from foundry companies to reduce purchases from foundry companies in order to increase their own utilization rates.

Capacity and Production. We have expanded our aggregate capacity from approximately 83,000 wafers per month as of year-end 1996 to approximately 381,044 wafers per month as of year-end 2001. Over the same period, our annual sales volume grew from 816,000 wafers to approximately 2,158,639 wafers. The annual sales volume in 2000 takes into account the wafers sold by Worldwide Semiconductor in 2000 and the wafers sold by TSMC-Acer after our merger with TSMC-Acer on June 30, 2000.

Technology Migration. Since our establishment, we have regularly developed and made available to our customers manufacturing capabilities for wafers with increasingly higher circuit resolutions. Wafers designed with higher circuit resolutions yield a greater number of dies per wafer and these dies are able to integrate more functionality and run faster in application. As a consequence, higher circuit resolution wafers generally sell for a higher price than those with lower resolutions. In addition, we began in November 2001 offering our customers production of twelve-inch wafers which can produce a greater number of dies per area than eight-inch wafers. Advanced technology wafers have accounted for an increasingly larger portion of our sales since their introduction as the demand for advanced technology wafers has increased. Because of their higher selling price, advanced technology wafers account for a larger pro rata portion of our sales revenue as compared to their pro rata share of unit sales volume. The higher selling prices of semiconductors with higher circuit resolutions usually offset the higher production costs associated with these semiconductors once an appropriate economy of scale is reached. Although mainly dictated by supply and demand, prices for wafers of a given level of technology typically decline over the technology's life cycle. Therefore, we must continue to offer additional services and to develop and successfully implement increasingly sophisticated technological capabilities to maintain our average sales prices and margins.

The table below presents a percentage breakdown of wafers sold by us by circuit resolution during the last three years:

	Year ended December 31,					
	1999		2000		2001	
Resolution	Quantity (in thousands)	Percentage	Quantity (in thousands)	Percentage	Quantity (in thousands)	Percentage
0.15 micron	0.0	0.0%	0.0	0.0%	139.6	6.5%
0.18 micron	18.0	1.0	153.0	4.5	291.1	13.5
0.25 micron	385.6	21.1	950.9	27.9	744.0	34.5
0.35 micron	625.1	34.2	1,313.9	38.6	533.8	24.7
0.5 micron	374.2	20.5	484.6	14.2	261.7	12.1
0.6 micron	213.4	11.7	239.1	7.0	72.1	3.3
0.8 micron	45.7	2.5	67.7	2.0	28.4	1.3
1.0 micron	45.5	2.5	88.9	2.6	41.1	1.9
>1.0 micron	118.1	6.5	110.0	3.2	42.6	2.0
Total	1,825.6	100.0%	3,408.1	100.0%	2,158.6	100.0%

Pricing. We usually establish pricing levels quarterly with our customers, subject to adjustment during the course of each quarter to take into account market developments and other factors. We believe that our large capacity, flexible manufacturing capabilities, focus on customer service and ability to deliver high yields in a predictable and timely manner have contributed to our ability to obtain premium pricing for our wafer production in recent years. Because of our favorable yield, we believe that our pricing is competitive with other semiconductor manufacturers. Our historical pricing policy is to pass through a portion of cost savings realized as our production processes migrate to more advanced technologies and our manufacturing operations achieve higher yields and greater economies of scale.

Results of Operations

The following table sets forth, for the periods indicated, some financial data from our consolidated statements of income, expressed in each case as a percentage of net sales:

	Year ended December 31,		
	1999	2000	2001
Net sales	100.0%	100.0%	100.0%
Cost of sales[(1)]	(59.3)	(52.7)	(73.3)
Gross profit[(1)]	40.7	47.3	26.7
Operating expenses			
General and administrative	(3.7)	(4.5)	(6.3)
Marketing	(2.4)	(1.6)	(1.8)
Research and development[(1)]	(5.4)	(4.3)	(8.5)
Total operating expenses[(1)]	(11.5)	(10.4)	(16.6)
Income from operations	29.2	36.9	10.2
Non-operating income	2.2	3.8	5.1
Non-operating expenses	(4.4)	(2.2)	(6.7)
Income before income tax	27.0	38.5	8.6
Income tax (expense) benefit	3.1	0.7	3.0
Net income before minority interest income	30.1	39.2	11.5
Minority interest income	0.7	0.0	(0.0)
Net income	30.8%	39.2%	11.5%

(1) Amounts in 1999 and 2000 reflect the reclassification of NT$1,025 million in 1999 and NT$2,072 million in 2000 from cost of sales to research and development. Please see "— Year Ended December 31, 2000 Compared to Year Ended December 31, 1999 — Cost of Sales and Gross Profit".

We completed mergers with Worldwide Semiconductor and TSMC-Acer on June 30, 2000. The merger with Worldwide Semiconductor was accounted for as a pooling-of-interests transaction and thus the historical financial statements of Worldwide Semiconductor have been combined with our historical financial statements, and are restated, for all relevant periods. The merger with TSMC-Acer was accounted for as a purchase transaction and thus we recorded on our books an amount of goodwill that is equal to the excess of the value of our purchase price for TSMC-Acer over the net book value of TSMC-Acer. Under regulations of the ROC Ministry of Economic Affairs, we are

required to eliminate the goodwill amount and reduce our capital surplus by a corresponding amount. Previously under US GAAP, however, this goodwill was required to be amortized on a straight-line basis over five years. As of January 1, 2002, we are no longer permitted to amortize the goodwill under US GAAP, but rather we must continue carrying the goodwill on our books subject to reduction based upon an impairment determined in the future. For a further description of this change in accounting policies, please see "—Recent Accounting Pronouncements".

Critical Accounting Policies

Below we have summarized our accounting policies that we believe are both important to the portrayal of our financial results and involve the need to make estimates about the effect of matters that are inherently uncertain.

Revenue recognition. The four criteria that we use to recognize revenue are the existence of evidence of sales, actual shipment, fixed or determinable selling price and reasonable assurance of collectibility. We sell our products directly to customers and recognize revenue at the time of shipment, which is when title to the products and the risks of ownership are transferred. In the same period that the related revenue is recorded, we also record estimated allowances for pricing discounts and sales returns that customers may subsequently request. These estimates are based on historical experience and our management's judgment. If the estimates are not correct, revenue may be either understated or overstated.

Allowances for doubtful accounts. We periodically record a provision for doubtful accounts based on our evaluation of the collectibility of our accounts receivable. We categorize doubtful accounts by age and make provisions for a percentage of each age category. We determine these percentages by examining our historical collection experience and current trends in the credit quality of our customers as well as our internal credit policies. The allowance was 3.1% and 5.5% of gross accounts receivable as of December 31, 2000 and 2001, respectively. If the financial condition of our customers, or economic conditions generally, were to deteriorate, additional allowances may be required in the future and such additional allowances would reduce our net income.

Inventory valuation. Inventory that has not been used and, in the judgment of management, is no longer useful, is written off completely. Other inventory is stated at the lower of cost or market value. Market value represents the net realizable value for finished goods and work-in-progress goods, and replacement costs for raw materials, supplies and spare parts. Net realizable value for finished goods and work-in-progress goods is primarily based on the latest invoice prices. If the market value of a product drops below its book cost, we must write off the difference between the book cost and the market value.

Valuation allowance for deferred tax assets. When we have net operating loss carryforwards, investment tax credits or temporary differences in the amount of tax recorded for tax purposes and accounting purposes, we may be able to reduce the amount of tax that we would otherwise be required to pay in future periods. We recognize all existing future tax benefits arising from these tax attributes as deferred tax assets and then, based on our internal estimations of our future profits, establish a valuation allowance equal to the extent, if any, that it is more likely than not that deferred tax assets will not be realized. The valuation allowance, which was 28.0% and 14.3% under ROC GAAP and 40.1% and 26.5% under U.S. GAAP of gross deferred tax assets as of December 31, 2000 and 2001, respectively, reduces our deferred tax assets. We record a benefit or expense under the income tax benefit line of our income statement when there is a net change in our total deferred tax assets and liabilities in a period. Because the calculation of income tax benefit is dependent on our internal estimation of our future profitability, it is inherently subjective.

In addition, because the recording of deferred tax assets and income tax benefit is based on our assumptions of levels of profitability, if we subsequently determine that it is unlikely that we will achieve those profit levels, or otherwise believe that we will not incur sufficient tax liabilities to fully utilize the deferred tax assets, we will reduce our deferred tax assets in an amount equal to that determination and incur a charge to income in that amount at that time. Because our expectation for future income is generally less during periods of reduced income, we will be more likely to take significant valuation allowances in respect of income tax assets during those periods of already reduced income.

Valuation of long-lived and intangible assets and goodwill. Under U.S. GAAP, we assess the impairment of identifiable intangibles, long-lived assets and related goodwill, and enterprise level goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important which could trigger an impairment review include the followings:

- significant under performance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period; and
- significant decline in our market capitalization relative to net book value.

When we determine that the carrying value of intangibles, long-lived assets and related goodwill or enterprise level goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on a projected discounted cash flow method using a discount rate determined by our management to be commensurate with the risk inherent in our current business model. Net intangible assets, long-lived assets, and goodwill amounted to NT$262,725.2 million (US$7,506.4 million) under ROC GAAP and NT$289,290.8 million (US$8,265.5 million) under US GAAP as of December 31, 2001. Our projection for future cash flow is generally less during periods of reduced cash flow. As a result, an impairment charge is more likely to occur during a period when our operating results are already otherwise depressed.

In January 2002, Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets" became effective and as a result, we have ceased to amortize approximately NT$47,463.8 million (US$1,356.1 million) of goodwill under U.S. GAAP. We had recorded approximately NT$12,051.2 million (US$344.3 million) of amortization on these amounts during 2001 and would have recorded approximately NT$12,051.2 million (US$344.3 million) of amortization during 2002. In lieu of amortization, we are required to perform an initial impairment review of our goodwill in 2002 and an annual impairment review thereafter.

Year Ended December 31, 2001 Compared to Year Ended December 31, 2000

Net Sales. Our net sales decreased 24.3% from NT$166,198 million in 2000 to NT$125,885 million (US$3,597 million) in 2001. This decrease was primarily due to a 36.7% decrease in wafer sales volume, from 3,408 thousand in 2000 to 2,159 thousand in 2001, partially offset by a 10.3% increase in the average selling price of our wafers. The decrease in wafer sales volume is due primarily to the significant downturn in the semiconductor industry. The increase in the average selling price of our wafers in 2001 was primarily the result of a significant increase in the percentage of our net sales comprised of relatively higher priced semiconductors with a resolution of 0.18 micron and below, partially offset by a decrease in the average selling prices for those semiconductors.

Cost of Sales and Gross Profit. Our cost of sales increased 5.3% from NT$87,610 million in 2000 to NT$92,228 million (US$ 2,635 million) in 2001. This increase resulted from a 33.5% increase in depreciation and amortization expenses from NT$41,446 million in 2000 to NT$55,323 million (US$1,580 million) in 2001 and an increase in some material and labor costs required for the manufacture of advanced semiconductors, partially offset by a decrease in our general requirements for materials, labor and other components as a result of our 36.7% decrease in wafers sold. Our depreciation and amortization expenses increased in 2001 primarily because of the increased depreciation associated with ramping up Fab 6, the capacity increase at Fab 8 and the additional capacity acquired in our merger with TSMC-Acer.

Our gross margin decreased from 47% in 2000 to 27% in 2001. The decrease in our gross margin was principally the result of the decreased sales volumes, as the average utilization rate of our fabs fell from 106% in 2000 to 51% in 2001. Please see "—Year Ended December 31, 2000 Compared to Year Ended December 31, 1999—Cost

of Sales and Gross Profit" for a discussion of the reclassification of some amounts from cost of sales to research and development in our accounts for 1999 and 2000.

Operating Expenses. Our total operating expenses increased 20.7% from NT$17,293 million in 2000 to NT$20,879 million (US$597 million) in 2001. General and administrative expenses increased 7.2% from NT$7,408 million in 2000 to NT$7,940 million (US$227 million) in 2001. This increase resulted primarily from preparations in connection with the expected production of twelve-inch wafers. Marketing expenses decreased 14.6% from NT$2,682 million in 2000 to NT$2,290 million (US$65.4 million) in 2001. This decrease resulted primarily from reductions in bad debt expenses and DRAM selling commissions paid to Vanguard in 2001.

Research and development expenses increased 47.8% from NT$7,204 million in 2000 to NT$10,649 million (US$304 million) in 2001. Research and development expenses increased significantly as a result of our increased expenditures related to the development of our 0.13 micron and 90-nanometer and twelve-inch wafer production technology, along with copper interconnect technology, as part of our increased focus on being a leader in developing advanced process technology. We anticipate that our annual research and development expenditures will remain at a similar absolute level in 2002 as in 2001. Please see "—Year Ended December 31, 2000 Compared to Year Ended December 31, 1999—Cost of Sales and Gross Profit" for a discussion of the reclassification of some amounts from cost of sales to research and development in our accounts for 1999 and 2000.

Income from Operations. Income from operations decreased 79.2% from NT$61,295 million in 2000 to NT$12,778 million (US$365 million) in 2001. This was due principally to the global decline in demand in the semiconductor industry. Our operating margin decreased from 37% in 2000 to 10% in 2001.

Non-Operating Income and Expenses. Non-operating income increased 5.8% from NT$6,120 million in 2000 to NT$6,476 million (US$185 million) in 2001. This increase principally resulted from a NT$777 million increase in royalty income and a NT$558 million increase in the net gain on sales of short-term investments, partially offset by a NT$763 million decrease in insurance compensation and the elimination of a NT$828 million foreign exchange gain recorded in 2000. Non-operating expenses increased 141% from NT$3,513 million in 2000 to NT$8,467 million (US$242 million) in 2001. This increase principally resulted from a NT$3,772 million increase in net equity in net loss of investee companies and a NT$696 million (US$20 million) foreign exchange loss recorded in 2001.

Income Tax Expense (Benefit). Income tax benefit increased 220% from NT$1,168 million in 2000 to NT$3,741 million (US$107 million) in 2001. This increase primarily resulted from a significant decrease in income tax payable at the statutory rate due to a reduction in income before income tax and a significant increase in available investment tax credits due to the substantial capital expenditures made in the second half of 2000 and in 2001 that were eligible for investment tax credits in 2001. We anticipate that our tax benefit will be substantially less in 2002 due to a significant reduction in capital expenditures in 2001 and the expiration of most applicable tax holidays for Fab 2, Fab 3 and Fab 5.

Net Income. Net income decreased 77.8% from NT$65,106 million in 2000 to NT$14,483 million (US$414 million) in 2001. This was due principally to the global decline in demand in the semiconductor industry. Our net margin decreased from 39% for 2000 to 12% for 2001.

Year Ended December 31, 2000 Compared to Year Ended December 31, 1999

Net Sales. Our net sales increased 117.8% from NT$76,305 million in 1999 to NT$166,198 million in 2000. This increase primarily resulted from an 86.6% increase in wafer sales volume, from 1,826 thousand in 1999 to 3,408 thousand in 2000, and a 19.1% increase in average selling price of wafers. This increase in wafer sales volume is attributable to an increase in wafers produced at our fabrication plants as well as to the merger with TSMC-Acer. In addition, the increase in the average selling price of our wafers was the result of an increase in the proportion of wafers with higher resolution sold in 2000, partially offset by the negative impact of appreciation of the NT dollar against the US dollar and Japanese yen. Prior year results have been restated to reflect the merger with Worldwide Semiconductor, which was accounted for as a pooling-of-interests.

The following table sets forth the actual and pro forma net sales for the years ended December 31, 1999 and 2000, assuming the merger with TSMC-Acer was effected as of January 1, 1999. Since our actual net sales for the year ended December 31, 2000 reflects only six months of operations for TSMC-Acer, a comparison of our pro forma net sales reveals more clearly the extent of the growth in net sales of wafers produced at all of our current fabs.

	1999	2000	Percent Change
	(in millions, except percentage)		
Actual net sales	NT$76,305	NT$166,198	117.8%
Pro forma net sales	NT$86,130	NT$170,132	97.5%

Cost of Sales and Gross Profit. Our cost of sales increased 93.8% from NT$45,212 million in 1999 to NT$87,610 million in 2000. This increase resulted primarily from a 64.5% increase in depreciation and amortization expenses, from NT$25,198 million in 1999 to NT$41,446 million in 2000, and an increase in our requirements for materials, labor and other components as a result of our 86.6% increase in wafers sold. Our depreciation and amortization increased primarily because of the increased depreciation in the second half of 2000 associated with the additional capacity acquired in the merger with TSMC-Acer as of June 30, 2000 and the increased depreciation associated with ramping up our Fab 6 and the capacity increase in Fab 5 and Fab 8. Our gross margin increased from 40.7% in 1999 to 47.3% in 2000. The increase in our gross margin was principally the result of the increased average selling price of wafers sold and an increased utilization rate of our fabs from approximately 100% in 1999 to approximately 106% in 2000.

The cost of sales and research and development amounts for 1999 and 2000, which we previously released, have been restated in this annual report to reflect the reclassification of certain expenses related to wafers produced for engineering at our existing fabs. We believe that it is more appropriate to classify these engineering wafer production costs to research and development instead of cost of sales. This classification is consistent with our practice in all other periods. As a result of this reclassification, gross profit increased 3.4% in 1999 and 2.7% in 2000, and operating expenses increased 13.1% in 1999 and 13.6% in 2000. There was no effect on our operating income or our net income. The amount reclassified in our 1999 accounts was NT$1,025 million, the amount reclassified in our 2000 accounts was NT$2,072 million and the amount reclassified in our accounts for the first half of 2000 was NT$619 million.

Operating Expenses. Our total operating expenses increased 96.0% from NT$8,823 million in 1999 to NT$17,293 million in 2000. This increase was below the increase in our net sales due to efficiencies related to higher production and operation at a 106% utilization rate. As a percentage of total net sales, our operating expenses decreased from 11.5% in 1999 to 10.4% in 2000. General and administrative expenses increased 160.4% from NT$2,845 million in 1999 to NT$7,408 million in 2000. This increase resulted primarily from expenses associated with increased capacity and production, in particular, in Fab 8, the start-up of our twelve-inch pilot line in Fab 12, (Phase I) the purchase of stock options from some WaferTech employees and the expenses related to the TSMC-Acer operations acquired on June 30, 2000. Marketing expenses increased 44.0% from NT$1,862 million in 1999 to NT$2,682 million in 2000. This increase resulted primarily from the increase in our marketing operations and number of personnel in North America, partially offset by our policy in limiting the hiring of sales personnel. Research and development expenses increased 75.0% from NT$4,116 million in 1999 to NT$7,204 million in 2000, representing 4.3% of the total net sales in 2000. This increase was principally due to our development of more advanced technology. Please see "—Cost of Sales and Gross Profit" for a discussion of the reclassification of certain amounts from cost of sales to research and development in our accounts for 1999 and 2000.

Income from Operations. Income from operations increased 175.2% from NT$22,270 million in 1999 to NT$61,295 million in 2000. This was due principally to the 86.6% increase in production of wafers and the higher average utilization rate resulting from a significant improvement in the demand for our foundry services. Our operating margin also increased from 29.2% in 1999 to 36.9% in 2000.

Non-Operating Income and Expenses. Non-operating income increased 278.0% from NT$1,619 million in 1999 to NT$6,120 million in 2000. This increase principally resulted from the receipt of NT$1,624 million in insurance compensation related to the earthquake that occurred on September 21, 1999 and a power failure in 2000. Non-operating income also increased due to a gain of NT$1,061 million on the sale of short-term investments primarily

distributed by InveStar Semiconductor Development Fund, Inc., a venture capital fund in which we have invested approximately US$46 million. Non-operating expenses increased 7.7% from NT$3,260 million in 1999 to NT$3,513 million in 2000. This increase principally resulted from an increase of 17.4% in our aggregate amount of outstanding bank loans, notes and bonds payable from NT$47,865 million as of December 31, 1999 to NT$56,173 million as of December 31, 2000, which caused an increase of 12.4% in interest expense from NT$2,417 million in 1999 to NT$2,717 in 2000. Our interest expense did not increase as rapidly as our increase in bank loans, notes and bonds as a result of the refinancing of our bank loans with lower interest rates in connection with our mergers with Worldwide Semiconductor and TSMC-Acer.

Income Tax Expense (Benefit). Income tax benefit decreased 51.0% from NT$2,383 million in 1999 to NT$1,168 million in 2000. This decrease resulted from increased tax expenses as a result of our increased profit.

Net Income. Net income increased 176.7% from NT$23,527 million in 1999 to NT$65,106 million in 2000. The increase in net income was attributable primarily to the increase in net sales associated with our fabs owned, our merger with TSMC-Acer on June 30, 2000 and the higher average utilization rate. Prior year results have been restated to reflect the merger with Worldwide Semiconductor, which was accounted for as a pooling-of-interests. Our net margin increased from 30.8% in 1999 to 39.2% in 2000.

The following table sets forth the actual and pro forma net income for the year ended December 31, 1999 and 2000. Because our actual net income for the year ended December 31, 2000 reflects only six months of operations for TSMC-Acer, a comparison of our pro forma net income reveals more clearly the extent of the growth in net income.

	1999	2000	Percent Change
	(in millions, except percentage)		
Actual net income	NT$23,527	NT$65,106	176.7%
Pro forma net income	NT$20,888	NT$66,340	217.6%

Pro forma net income increased 217.6% from NT$20,888 million in 1999 to NT$66,340 million in 2000. Our pro forma earnings per share was NT$3.97 for the year ended December 31, 2000 compared with NT$1.31 for the year ended December 31, 1999. On a pro forma basis, our net margin increased to 39.0% for the year ended December 31, 2000 from 24.3% for the year ended December 31, 1999.

Liquidity and Capital Resources

We had cash, cash equivalents and short-term investments of NT$38,954 million (US$1,113 million) as of December 31, 2001. Net cash outflow in 2001 was NT$1,284 million (US$37 million) as compared to net cash inflow of NT$9,323 million in 2000. The NT$10,607 million (US$303 million) decrease in net cash inflow in 2001 as compared with 2000 resulted primarily from a NT$34,469 million decrease in cash provided by financing activities and a NT$18,969 million decrease in cash provided by operating activities, partially offset by a NT$43,717 million decrease in cash used in investing activities. Net cash inflow in 2000 was NT$9,323 million as compared to net cash inflow of NT$18,646 million in 1999. The NT$9,323 million decrease in net cash inflow in 2000 as compared with 1999 resulted primarily from a NT$59,997 million increase in cash used in investing activities and a NT$4,152 million (US$120 million) decrease in cash provided by financing activities, partially offset by a NT$54,533 million increase in cash provided by operating activities.

In 2001, our net cash provided by operating activities amounted to NT$75,818 million (US$2,166 million), which included non-cash depreciation and amortization expenses of NT$55,323 million (US$1,581 million). Depreciation and amortization expenses were significantly higher in 2001 than in 2000 primarily due to increased depreciation and amortization at Fab 6 and Fab 8, as a result of capacity increases, and at Fab 7 after we acquired it in our merger with TSMC-Acer. In 2000, our net cash provided by operating activities amounted to NT$94,786 million, which included non-cash depreciation and amortization expenses of NT$41,446 million. Depreciation and amortization expenses will continue to increase in 2002 due to the increased depreciation and amortization at Fab 6 and Fab 8 as a result of capacity increases, the commencement of depreciation and amortization expenses at Fab 12 (Phase I) and depreciation and amortization of additional research and development equipment. We build to order and do not maintain a significant amount of inventory of finished goods.

Net cash used in investing activities in 2001 amounted to NT$77,232 million (US$2,207 million). The most significant component of this was the acquisition of equipment amounting to NT$70,201 million (US$2,006 million) primarily in connection with Fab 6, Fab 8 and Fab 12 (Phase I). Net cash used in investment activities in 2000 amounted to NT$120,949 million. The most significant component of this was the acquisition of equipment amounting to NT$103,762 million, primarily in connection with Fabs 5, 6 and 8, and WaferTech.

Net cash provided by financing activities in 2001 amounted to NT$897 million (US$26 million). This amount primarily reflects net proceeds from short-term bank loans of NT$2,435 million (US$70 million), partially offset by net payments made on long-term bank borrowings of NT$940 million (US$27 million) and NT$584 million (US$17 million) for bonuses to directors and supervisors. Net cash provided by financing activities in 2000 amounted to NT$35,366 million. This amount primarily reflects proceeds of NT$26,205 million from the sale of 23,000,000 ADSs by us in June 2000, partially offset by payments made on our short-term and long-term bank borrowings and commercial paper of NT$15,483 million.

As of December 31, 2001, we had aggregate short-term bank loans of NT$6,269 million (US$179 million), current portion of long term bonds of NT$5,000 million (US$143 million) and aggregate long-term debt of NT$46,399 million (US$1,326 million). NT$6,162 million (US$176 million) of the short-term bank loans and NT$22,399 million (US$640 million) of the long-term debt were denominated in U.S. dollars. All of the short-term bank loans and US$708 million of the long-term debt had floating interest rates based on the London interbank offer rate, or LIBOR, or Singapore interbank offer rate, or SIBOR. NT$29,000 million of the long-term bonds (including current portion) had fixed interest rates ranging from 2.578% to 7.71% (See notes 11, 12 and 13 to our consolidated financial statements). As of December 31, 2001, we had an aggregate of NT$17,941 million (US$513 million) in unused short-term credit lines and NT$4,321 million (US$123 million) in unused long-term credit lines.

Our loan agreements, credit facilities and guaranty agreements for the obligations of our consolidated subsidiaries contain covenants which, if violated, could result in our obligations under these agreements becoming due prior to the originally scheduled maturity dates. These covenants include financial covenants that require us to maintain at least:

- a current assets to current liabilities ratio of 1:1;
- an earnings before interest, taxes, depreciation and amortization to gross interest expense ratio of 2:1; and
- a total net worth to total indebtedness ratio of 1:1.

As of March 31, 2002, we were in compliance with our financial covenants. Other covenants could be triggered by a material adverse change in our business or management personnel that would impair our ability to perform our obligations under the agreements.

As of December 31, 2001, our customers had on deposit an aggregate of approximately US$48.8 million to reserve future capacity, which was reserved for capacity during the years 2002 through 2004.

The following table sets forth the maturity of our long-term bank loans and short-term bank loans outstanding as of December 31, 2001:

	Long-term loans	Short-term loans
	(in millions)	
During 2002	NT$0	NT$6,269
During 2003	7,000	—
During 2004	0	—
During 2005	15,400	—
During 2006 and thereafter	0	—

The following table sets forth information on our material contractual obligated payments for the periods indicated as of March 31, 2002:

		Payments Due by Period			
Contractual Obligations	Total	Less than 1 Year	1-3 Years	4-5 Years	More than 5 Years
			(in millions)		
Long-Term Debt[1]	NT$66,400	NT$9,000	NT$27,400	NT$13,000	NT$17,000
Preferred Shares[2]	13,910	455	13,455	—	—
Capital Lease Obligations	30.7	30.7	—	—	—
Operating Leases	1,242.8	30.9	1,211.9	—	—
Property Leases	3,814.3	347.6	623	625.3	2,218.4
Royalty or other License Payments[3]	3,310	1,060	1,900	350	—
Equipment or other Purchase Obligations	43,659	43,659	—	—	—
Total Contractual Cash Obligations	NT$132,366.8	NT$54,583.2	NT$44,589.9	NT$13,975.3	NT$19,218.4

(1) Excludes interest payments.
(2) Includes 3.5% annual cash dividend.
(3) Excludes payments that vary based upon our net sales of certain products and our sales volume of certain other products.

We do not generally provide letters of credit, or guarantees to, or engage in any repurchase financing transactions with, any entity other than our consolidated subsidiaries.

We require significant amounts of capital to build, expand, upgrade and maintain our production facilities and equipment. We made capital expenditures of NT$51,459 million, NT$103,762 million and NT$70,201 million (US$2,006 million) in 1999, 2000 and 2001, respectively. We currently expect that our plans for constructing Fab 14 (Phase I), Fab 12 (Phase II) and Fab 14 (Phase II), ramping up production at Fab 6 and Fab 12(Phase I) and upgrading some of our equipment in our existing fabs will require capital expenditures of between approximately NT$85,000 million (US$2,429 million) and approximately NT$95,000 million (US$2,714 million) for 2002.

In November 2000, we issued 1.3 billion Preferred A Shares at the par value of NT$10 per share for total proceeds of NT$13 billion. Philips purchased 99.99% of the Preferred A shares. The Preferred A shares pay a cumulative annual cash dividend at a rate of 3.5% per annum and are to be redeemed in May 2003 at par value.

We anticipate that Systems on Silicon will require approximately NT$4,138 million (US$118 million) in additional capital from its shareholders in 2002, of which our proportionate share would be approximately NT$1,324 million (US$38 million). We also anticipate that Vanguard will require approximately NT$5,000 million (US$143 million) in additional capital from its shareholders in 2002, of which our proportionate share would be approximately NT$1,264 million (US$36 million).

We expect to fund our expansion projects and other cash requirements primarily with internally generated funds and additional external financings, including our completed offering in January 2002 of an aggregate of NT$15,000 million in five, seven and ten year unsecured debt securities in Taiwan. In the future, we may consider additional debt and equity financing, depending on market conditions, our financial performance and other relevant factors. In particular, an extended industry downturn could adversely affect our profitability and internal generation of cash, and thereby increase our reliance on external sources of funds. We believe that we will have sufficient resources available to meet our planned capital requirements.

Inflation

Our principal export market is the United States and we do not believe that inflation in the ROC or the United States has had a material impact on our results of operations. Inflation in the ROC was approximately 0.2%, 1.3% and -0.1% in 1999, 2000 and 2001, respectively.

Taxation

We enjoy preferential tax treatment in certain respects under the Hsinchu and Tainan Science Park regulations. We are entitled to a four-year tax holiday for income generated from construction and capacity expansions of production facilities. The exemption period may begin at any time within four years following the completion of the construction or expansion. The aggregate tax benefits of such exemption in 1999, 2000 and 2001 were NT$2,383 million, NT$1,168 million and NT$3,741 million (US$107 million), respectively. We commenced the exemption period for Fab 6 in 2001 and expect to commence the exemption period for Fab 12 (Phase I) in 2003. See note 16 to our consolidated financial statements.

Pursuant to the Statute for Upgrading Industries, we are entitled to credit 5% to 20% of investments, depending on the type and origin of the assets, in most of our production and production-related equipment against tax payable in any year within five years of the acquisition date of the assets. The Statute for Upgrading Industries also grants us the right to credit up to 20% of our investments in emerging, important and strategic industries (as defined in that statute) against tax payable within five years after the expiration of the first three years of investment, during which period we are required to hold such investments.

According to the tax credit rules promulgated under the Statute for Upgrading Industries, we currently enjoy a tax credit of 20% for the purchase of equipment manufactured in Taiwan and 10% for the purchase of equipment manufactured outside of Taiwan. Because the ROC became a member of the World Trade Organization on January 1, 2002, the Ministry of Economic Affairs has proposed to amend the tax credit rules in March 2002 to adopt a 13% rate of tax credit to be applied to the purchase of equipment regardless of where it was manufactured.

US GAAP Reconciliation

Our consolidated financial statements are prepared in accordance with ROC GAAP, which differs in certain material respects from US GAAP. The following table sets forth a comparison of our net income (loss) and shareholders' equity in accordance with ROC GAAP and US GAAP for the periods indicated:

	Year ended and as of December 31,				
	1998	1999	2000	2001	
	NT$	NT$	NT$	NT$	US$
			(in millions)		
Net income (loss) in Accordance with:					
ROC GAAP	14,389	23,527	65,106	14,483	414
US GAAP	1,249	13,884	21,740	(21,975)	(628)
Shareholders' equity in Accordance with:					
ROC GAAP	96,285	152,571	261,754	277,190	7,920
US GAAP	94,293	151,977	279,946	289,450	8,270

Notes 23 and 24 to the consolidated financial statements provide a description of the principal differences between ROC GAAP and US GAAP as they relate to us, and a reconciliation to US GAAP of certain items, including net income and shareholders' equity. Differences between ROC GAAP and US GAAP that have a material effect on our net income as reported under ROC GAAP include compensation expense pertaining to stock bonuses to employees, directors and supervisors, impairment charges for long-lived assets, amortization of goodwill acquired in our merger with TSMC-Acer and the effect of the use of the liability method to account for income taxes.

We paid employee bonuses in respect of 1998, 1999 and 2000 in the form of common shares and expect to pay all or a portion of employee bonuses in future periods in the form of common shares. The number of common shares distributed as part of employee bonuses is obtained by dividing the total nominal NT dollar amount of the bonus

to be paid in the form of common shares by the par value of the common shares, or NT$10 per share, rather than their market value, which has generally been substantially higher than par value. Under ROC GAAP, the distribution of employee bonus shares is treated as an allocation from retained earnings, and we are not required to, and do not, charge the value of the employee bonus shares against income. Under US GAAP, however, we are required to charge the market value of the employee bonus shares to employee compensation expense in the period to which they relate, correspondingly reducing our net income and income per share calculated in accordance with US GAAP. However, since the amount and the form of the payment of the compensation is subject to shareholder approval and only determinable at the annual shareholders' meeting, which is generally held after the issuance of our financial statements, under US GAAP the compensation expense is initially accrued at the nominal NT dollar amount of the aggregate bonus in the period to which it relates as if it were to be paid entirely in cash. For US GAAP purposes, the difference between the amount initially accrued and the market value of the common shares and cash issued as payment of all or any part of the bonus is recorded as employee compensation expense in the period in which shareholder approval is obtained, which normally occurs during the second fiscal quarter of each subsequent year. See note 23 to the consolidated financial statements. Net income and income per share amounts calculated in accordance with ROC GAAP and US GAAP differ accordingly. In addition, because the adjustment for market price for the purpose of US GAAP reconciliation is made in the second quarter of each fiscal year and the entire amount of the adjustment is charged to the results for such quarter, the adjustment has a disproportionate impact on the results for the second quarter under US GAAP.

For purposes of US GAAP, we are required to periodically evaluate the recoverability of the carrying amount of our long-lived assets in accordance with Statement of Financial Accounting Standard No. 121 "Accounting for the impairment of long-lived assets and for the long-lived assets to be disposed of" (to be superseded by SFAS 144). Whenever events or changes in circumstances indicate that the carrying amounts of those assets may not be recoverable over the remaining amortization period, we are required to compare undiscounted net cash flows estimated to be generated by those assets to the carrying amount of those assets. To the extent that cash flows are less than the carrying amounts of the assets, we are required to record impairment losses to write the assets down to fair value generally based on discounted cash flows. Under ROC GAAP, we are not required to record impairment losses of assets.

Under ROC GAAP, goodwill is amortized over ten years but under US GAAP, prior to January 1, 2002, goodwill was amortized over five or ten years. The goodwill from our acquisition in 2000 of a 68% interest in TSMC-Acer was netted against capital surplus under ROC GAAP because the goodwill was from an acquisition paid for with shares. The goodwill from the prior acquisition of the 32% interest in TSMC-Acer in 1999 was not netted against capital surplus but rather was deferred and amortized because the goodwill was from an acquisition paid for with cash. Under US GAAP, prior to January 1, 2002 all goodwill from the TSMC-Acer acquisitions was recognized and amortized over five years.

Recent Accounting Pronouncements

In June 2001, the U.S. Financial Accounting Standards Board issued SFAS No. 141, "Accounting for business combinations", and SFAS No. 142, "Goodwill and other intangible assets". These standards, which we adopted on January 1, 2002, affect accounting for business combinations consummated after June 30, 2001 and may affect existing goodwill and our other intangible assets. The standards require, among other things, companies to review for possible impairment of goodwill existing at the date of adoption and perform subsequent impairment tests on an annual basis. Additionally, existing goodwill and intangible assets must be reassessed and classified consistently in accordance with the criteria. Under the new standards for US GAAP, we no longer amortize goodwill, but intangible assets continue to be amortized over their estimated useful lives, which, if supportable, may be a period that exceeds the current maximum period of 40 years. Intangible assets with indeterminable useful lives are not amortized but are assessed for impairment in accordance with SFAS No. 121.

As a result of this change in US GAAP, we no longer incur goodwill amortization expenses, which amounted to NT$1,260 million (US$36.0 million) under ROC GAAP and NT$10,791 million (US$308 million) of additional goodwill amortization under US GAAP for 2001. As of December 31, 2001, TSMC had a total amount of NT$47,464 million (US$1,356 million) recorded as goodwill under US GAAP. We currently are not able to estimate the extent and timing of any goodwill impairment charge for future years. Any goodwill impairment charge under US GAAP

may have a material adverse effect on our net income for periods subsequent to December 31, 2001 on a US GAAP reconciled basis.

Please see note 24 to the consolidated financial statements for a discussion of other announced changes in US GAAP that we do not expect to have a material effect on our consolidated financial statements.

Auditors

T N Soong & Co. was previously a member firm of Andersen Worldwide, SC. On April 7, 2002, T N Soong & Co. served notice to terminate its relationship with Andersen Worldwide, SC. From April 22, 2002, T N Soong & Co. is an associated member firm of Deloitte Touche Tohmatsu.

Item 6. Directors, Senior Management and Employees

Director, Supervisors and Executive Officers

MANAGEMENT

Members of our board of directors are elected by our shareholders. Our board of directors is composed of nine directors. The chairman of the board of directors is elected by the directors. The chairman of the board of directors presides at all meetings of the board of directors, and also has the authority to act as our representative. The term of office for directors is three years.

We also have three supervisors. In accordance with the ROC Company Law, supervisors are elected by our shareholders and cannot concurrently serve as our directors, executive officers or other staff members. The term of office for supervisors is three years. The supervisors' duties and powers include, but are not limited to, investigation of our financial condition, inspection of corporate records, verification of statements by the board of directors, calling of and giving reports at shareholders' meetings, representation of us in negotiations with our directors and giving notification, when appropriate, to the board of directors to cease acting in contravention of applicable law or regulations or in contravention of our articles of incorporation or beyond our scope of business.

Pursuant to the ROC Company Law, a person may serve as our director or supervisor in his personal capacity or as the representative of another legal entity. A director or supervisor who serves as the representative of a legal entity may be removed or replaced at any time at the discretion of that legal entity, and the replacement director or supervisor may serve the remainder of the term of office of the replaced director or supervisor. Of our nine directors, three are representatives of Philips and one is a representative of the Development Fund. Of our three supervisors, one is a representative of Philips and one is a representative of the Development Fund.

The following table sets forth the name of each director, supervisor and executive officer, their positions, the year in which their term expires and the number of years they have been with us as of May 8, 2002. The business address for each of our directors, supervisors and executive officers is No. 121, Park Avenue III, Science-Based Industrial Park, Hsinchu, Taiwan, Republic of China.

Name	Position with our company	Term Expires	Years with our company
Morris Chang	Chairman and Chief Executive Officer	2003	15
A.P.M. van der Poel	Director (Representative of Philips)	2003	5
J.C. Lobbezoo	Director (Representative of Philips)	2003	8
P.J. Zeven	Director (Representative of Philips)	2003	1
F.C. Tseng	Director and Deputy Chief Executive Officer	2003	15
Stan Shih	Director (Representative of Chi Cherng Investment Co. Ltd.)	2003	2
Chintay Shih	Director (Representative of the Development Fund)	2003	5
Lester C. Thurow	Director	2003	1
Sir Peter L. Bonfield	Director	2003	1
Robbert Brakel	Supervisor (Representative of Philips)	2003	2
George C. Shiu	Supervisor (Representative of the Development Fund)	2003	2
Michael E. Porter (1)	Supervisor (Representative of Hsin Ruey Investment)	2003	1
Rick Tsai	President and Chief Operating Officer	—	12
Harvey H.W. Chang	Senior Vice President, Chief Financial Officer and Spokesperson	—	4
Quincy Lin	Senior Vice President of Corporate Development	—	12
Shang-Yi Chiang	Senior Vice President of Research and Development	—	5
Kenneth L. Kin	Senior Vice President of Worldwide Marketing and Sales	—	1
Richard L. Thurston(2)	Vice President and General Counsel	—	1
C.C. Wei	Vice President of Operations I	—	4
Mark Liu	Vice President of Operations II	—	8
J. B. Chen	Vice-President of Material Management and Risk Management	—	15
M.C. Tzeng	Vice President of Operations, Deputy of Operations I	—	15
Genda Hu	Vice President of Corporate Marketing	—	2
Chung-Shih Hsu	Vice President of Business Operations	—	1
S.H. Lee	Vice President of Corporate Human Resources	—	3
Chenming Hu	Chief Technology Officer	—	1
Ping Yang	Vice President of Design Services	—	4
Chiam Wu	Vice President of Worldwide Customer Service	—	1

(1) Effective May 8, 2002, Michael E. Porter replaced Paul Chien as supervisor.

(2) Richard L. Thurston succeeded K.C. Chen as General Counsel on January 1, 2002.

Morris Chang has been the chairman of our board of directors since our establishment. He has been chief executive officer since March 1998. He is also chairman of the board of directors of Vanguard and a member of the board of directors of The Goldman Sachs Group, Inc. From 1985 to 1994, he was president and then chairman of the board of directors of ITRI. Prior to that, Mr. Chang was president and chief operating officer of General Instrument Corporation and Corporate Group and vice-president for Texas Instruments. He holds a bachelor's degree and a master's degree in mechanical engineering from the Massachusetts Institute of Technology and a Ph.D. in electrical engineering from Stanford University and has been involved in the semiconductor industry for over 46 years.

A. P. M. van der Poel is a director. He is also chairman and chief executive officer of Philips and a member of the Group Management Committee of Philips. Mr. van der Poel holds a degree in electrical engineering from Eindhoven Technical University.

J.C. Lobbezoo is a director. He has also been the chief financial officer of Philips since 1994. Mr. Lobbezoo majored in business economics at Erasmus University.

P.J. Zeven is a director. He has also been the chairman of Assemble on Taiwan and president and chief executive officer of Philips Taiwan since 1999. Prior to that, he was the regional director and general manager of Philips Asia Pacific region since 1997. Mr. Zeven holds a master's degree from Nijerode School of Business.

F.C. Tseng is a director. He has been deputy chief executive officer since August 2001. He formerly served as the president of Vanguard from 1996 to 1998 and our president from May 1998 to August 2001. Prior to his presidency at Vanguard, Mr. Tseng served as our senior vice president of operations. Mr. Tseng holds a Ph.D. in electrical engineering from National Cheng-Kung University and has been involved in the semiconductor industry for over 31 years.

Stan Shih is a director. He also has served as the chairman and chief executive officer of the Acer Group since 1976. Mr. Shih holds a bachelor's degree, a master's degree and a Honorary EE Ph.D degree in electrical engineering from National Chiao Tung University.

Chintay Shih is a director. He is also the president of ITRI and a director of each of Vanguard and the Industrial Technology Investment Corporation. Mr. Shih holds a Ph.D. in electrical engineering from Princeton University.

Lester C. Thurow was elected as an independent director on May 7, 2002. Mr. Thurow is also professor of management and economics at the Massachusetts Institute of Technology's Sloan School of Management. Professor Thurow served as dean of the Sloan School of Management from 1987 to 1993. Professor Thurow holds a Ph.D. in economics from Harvard University and an M.A. in philosophy, politics and economics from Oxford University where he was a Rhodes Scholar.

Sir Peter L. Bonfield was elected as an independent director on May 7, 2002. Sir Peter Bonfield was the chief executive of British Telecommunications from January 2, 1996 to January 13, 2002. He currently is a non-executive director of AstraZeneca Group Plc. He also served as a director of STC Plc from 1985 to 2000 and chairman and chief executive of from 1985 to 1996. Sir Peter Bonfield was director of ICL Plc from 1981. He holds a bachelors degree in engineering from Longhborough University of Technology.

Robbert Brakel is a supervisor. He has also been the financial controller of the Mainstream TV business at Philips Consumer Electronics, Singapore, since 1997. Prior to that, Mr. Brakel served as the financial controller of the Domestic Appliance business at Philips Domestic Appliances & Personal Care from 1994 to 1997. Mr. Brakel holds a Ph.D. in business economics from the Free University of Amsterdam.

George C. Shiu is a supervisor. He has also been deputy executive secretary of the Development Fund since 1999. Prior to that, he was the vice president of Overseas Chinese Commercial Bank. Mr. Shiu holds a master's degree from Johns Hopkins University.

Paul Chien was a supervisor until May 8, 2002. He also became the president of Vanguard in March 2000. Prior to that, he was the vice president of sales and marketing of Vanguard. Mr. Chien holds a master's degree in chemical engineering from Massachusetts Institute of Technology.

Michael E. Porter replaced Paul Chien as a supervisor on May 8, 2002. Mr. Porter is the Bishop William Lawrence University Professor at Harvard Business School. Professor Porter is a leading expert on competitiveness strategy and has served as an advisor to both international companies and sovereign states. Professor Porter holds a Ph.D. in business economics from Harvard University, an MBA from Harvard Business School and a bachelors degree in mechanical engineering from Princeton University.

Rick Tsai has been president and chief operating officer since August 2001. He was executive vice president of worldwide marketing and sales from September 2000 to August 2001. Prior to that, he served as our executive vice president of operations. He joined us in 1989 as deputy director of our Fab 2 operations. He holds a Ph.D. in material science from Cornell University and has been involved in the semiconductor industry for over 20 years.

Harvey H.W. Chang has been senior vice president and chief financial officer since January 1998 and spokesperson since January 2002. Prior to that, he was chairman of China Securities Investment Trust Corporation and president of China Development Corp. He holds a master's degree in business administration from the Wharton School, University of Pennsylvania and has been involved in the finance and/or semiconductor industry for over 23 years.

Quincy Lin has been senior vice president of corporate development since May 1997. He joined us in 1989 as director of strategic planning and development after having worked for Bell Laboratories of AT&T. He was senior director of corporate services at our company from 1992 to 1994 and vice president of corporate marketing and sales from 1994 to 1997. He holds a Ph.D. in business administration from the University of Kentucky and has been involved in the semiconductor industry for over 20 years.

Richard L. Thurston became vice president and general counsel in January 2002. Prior to that, he was a partner with Kelt Capital Partners, LP, in Addison, Texas. Mr. Thurston also was the Asia Pacific regional counsel for Texas Instruments for 12 years. Mr. Thurston holds a Ph.D. in East Asian Studies from the University of Virginia and a J.D. from Rutgers School of Law.

Shang-Yi Chiang has been senior vice president of research and development since May 2001. He joined us as vice president of research and development in July, 1997. Prior to that, he worked at Hewlett Packard. Dr. Chiang holds a Ph.D. in electrical engineering from Stanford University and has been involved in the semiconductor industry for over 25 years.

Kenneth L. Kin joined us as senior vice president of worldwide marketing and Sales in August 2001. Prior to that, he was the vice president of IBM Corporation since 1996. He holds a Ph.D. in nuclear engineering and applied physics from Columbia University.

C.C. Wei has been vice president for operations I since January 1, 2002. Prior to that, he was vice president of south sites operation from April 2000 and vice president of north sites operations from February 1998 to April 2000. Prior to that, he was senior vice president at Chartered Semiconductor Manufacturing Ltd. in Singapore starting in 1993. He holds a Ph.D. in electrical engineering from Yale University.

Mark Liu has been vice president of operations II since January 1, 2002. Prior to that, he was the vice president of our Fab 8 and Fab 12 sites operation from July 2000 and vice president of south sites operations from 1999 to July 2000. He formerly served as president of Worldwide Semiconductor from February to June 2000. He joined us in 1993 and has held the positions as manager director of our Fab 3 operation and senior director of north sites operations. He holds a Ph.D. in electrical engineering and computer science from the University of California, Berkeley, and has been involved in the semiconductor industry for over 15 years.

J.B. Chen has been vice president of material management and risk management since August 2001. Prior to that, he was vice president of Tainan sites operations since April 2001. Prior to that, he was vice president of Fab 7 sites operations since July 2000. He also served as president of TSMC-Acer from 1999 to 2000. He joined us in 1987 and has held the positions of manager of engineering department, director of Fab 2B and Fab 4, and senior director of north sites operations. He holds a master's degree in physics from National Tsing Hua University and has been involved in the semiconductor industry for over 20 years.

M.C. Tzeng has been vice president of north sites operations since August 2001. Prior to that, he was the senior director of our Fab 2 operations since 1997. He joined us in 1987 and has held various positions in manufacturing functions. He holds a master degree in applied chemistry from Chung Yuan University.

Genda Hu has been vice president of corporate marketing since May 2001. Mr. Hu joined us as vice president of research and development in May 2000. Prior to that, he was chief of the Electronic Research and Service Organization for ITRI since July 1996. He holds a Ph.D. in electrical engineering from Princeton University and has been involved in the semiconductor industry for over 15 years.

Chung Shih Hsu has been vice president of business operation since November 2000. Prior to that, he served as vice president for Vanguard Semiconductor since 1997. He holds a Ph.D. in physics from Columbia University and has been involved in the semiconductor industry for over 20 years.

S.H. Lee has been vice president of corporate human resources since August 1998. Prior to that, he was regional vice president of network systems of Lucent Technologies, Asia Pacific. Mr. Lee holds a master's degree in management from Stanford University.

Chenming Hu joined us as chief technology officer since August 2001. He has also been the co-founder and co-chairman of Board of Celestry Design Technologies, Inc. since 1995. He holds a Ph.D. in electrical engineering and computer science from University of California, Berkeley.

Ping Yang has been vice president of design services since August 2001. Prior to that, Dr. Yang was assigned to our U.S. subsidiary, TSMC North America, in 2000. He joined us in 1997 as vice president and has been through various functions of corporate marketing and design services. He holds a Ph.D. in electrical engineering from University of Illinois, Champaign-Urbana.

Chiam Wu joined us as vice president of worldwide customer service in April 2002. Prior to that, she was group vice president of Applied Material and vice chairperson of Applied Materials Taiwan. She was with Applied Material since 1987. Ms. Wu received a B.S. degree in material science and engineering from National Tsing Hua University in 1978, and a M.S. degree in material science and engineering from Oregon State University in 1980.

Except for the sibling relationship between Genda Hu, vice president of corporate marketing, and Chenming Hu, chief technology officer, there is no family relationship between any of our directors, supervisors or executive officers and any other director, supervisor or executive officer.

Share Ownership

The following table sets forth certain information as of February 28, 2002 with respect to our common shares owned by our directors, supervisors and executive officers.

Names of Shareholders	Number of Common Shares Owned	Percentage of Total Outstanding Common and Preferred Shares
Morris Chang, Chairman and CEO	81,160,464	0.45%
A.P.M. van der Poel, Director[1]	2,322,227,527	12.81%
J.C. Lobbezoo, Director[1]	2,322,227,527	12.81%
P.J. Zeven, Director[1]	2,322,227,527	12.81%
Chintay Shih, Director[2]	1,630,474,915	8.99%
Stan Shih, Director[3]	3,023,328	0.02%
F.C. Tseng, Director and Deputy CEO	26,556,877	0.15%
Robbert Brakel, Supervisor[1]	2,322,227,527	12.81%
George C. Shiu, Supervisor[2]	1,630,474,915	8.99%
S.J. Paul Chien, Supervisor[4]	1,407,168	0.01%
Rick Tsai, President & COO	17,309,467	0.10%
Quincy Lin, Senior Vice President & CIO	17,499,626	0.10%
Harvey Chang, Senior Vice President & CFO	5,190,622	0.03%
S.Y. Chiang, Senior Vice President	7,220,170	0.04%
Kenneth Kin, Senior Vice President	1,150,000	0.01%
Y.C. Huang, Vice President	11,950,389	0.07%
J.B. Chen, Vice President	4,635,849	0.03%
Ping Yang, Vice President	4,764,313	0.03%
C.C. Wei, Vice President	3,970,931	0.02%
S.H. Lee, Vice President	3,478,946	0.02%
Mark Liu, Vice President	7,223,793	0.04%
John T. Yue, Vice President[5]	2,813,611	0.02%
Genda Hu, Vice President	502,111	0.00%
Chung-Shih Hsu, Vice President	491,940	0.00%
Chenming Hu, CTO	670,000	0.00%
M.C. Tzeng, Vice President	2,902,271	0.02%
Richard Thurston, Vice President	-	-

(1) Includes shares held by Koninklijke Philips Electronics N.V.
(2) Includes shares held by the Development Fund of the Executive Yuan.
(3) Includes shares held by Chi Cherng Investment Co., Ltd.
(4) Includes shares held by Hsin Ruey Investment Co., Ltd.
(5) Mr. John T. Yue resigned in April 2002.

Compensation

The aggregate compensation paid and benefits in kind granted to our directors, supervisors and executive officers in 2001, which included a bonus to the executive officers of common shares, was NT$1,303 million. The number of common shares distributed as stock bonus was calculated by dividing the total nominal amount of the bonus by the par value of the common shares, i.e., NT$10 per share, rather than their market value, which has generally been substantially higher than par value. See note 23 to our consolidated financial statements. In 2002, we plan to distribute an aggregate bonus to our directors and supervisors of NT$133.8 million in cash.

The following table sets forth remuneration paid to our individual directors and supervisors in 2001.

Name	Position with our company in 2001	Total Compensation[(1)]
Mr. Morris Chang	Director and Chairman	NT$161,931,000
Mr. F.C. Tseng	Director and President	124,143,000
Mr. A.P.M. van der Poel	Director (Representative of Philips)	(2)
Mr. J.C. Lobbezoo	Director (Representative of Philips)	(2)
Mr. P.J. Zeven	Director (Representative of Philips)	(2) (3)
Mr. Chintay Shih	Director (Representative of the Development Fund)	119,000(4)
Mr. Stan Shih	Director (Representative of Chi Cherng Investment Co. Ltd.)	120,000(5)
Mr. Jerome S.N. Hu	Supervisor	16,763,000(6)
Mr. Robbert Brakel	Supervisor (Representative of Philips)	(2) (7)
Mr. George C. Shiu	Supervisor (Representative of the Development Fund)	119,000
Mr. Paul Chien	Supervisor (Representative of Hsin Ruey Investment Co. Ltd.)	120,000(8)

(1) Including share bonuses paid to executive officers, calculated at their par value of NT$10 per share.
(2) Philips was paid NT$234,201,000 in the aggregate for the services of its representative directors and supervisor.
(3) Mr. P.J. Zeven was appointed by Philips in March 2001.
(4) The Development Fund was paid approximately NT$133,861,000 in the aggregate for the services of its representative directors and supervisor.
(5) The Chi Cherng Investment Co. Ltd. was paid approximately NT$41,788,000 in the aggregate for the services of its representative director.
(6) Mr. Jerome S.N. Hu resigned in April 2000.
(7) Mr. Robbert Brakel was appointed by Philips in June 2001.
(8) The Hsin Ruey Investment Co. Ltd. was paid approximately NT$41,788,000 in the aggregate for the services of its representative supervisor.

Employees

The following table sets out, as of the dates indicated, the number of our full-time employees serving in the capacities indicated.

	As of December 31,		
Function	**1999**	**2000**	**2001**
Managers	704	1,024	1,092
Engineers	2,765	5,739	5,322
Technicians	3,675	7,370	6,807
Clerical staff	316	503	455
Total	7,460	14,636	13,676

The following table sets out, as of the dates indicated, a breakdown of the number of our full-time employees by geographic location:

	As of December 31,		
Location of Facility	**1999**	**2000**	**2001**
Hsinchu Science Park, Taiwan	6,743	12,390	11,575
Tainan Science Park, Taiwan	559	2,045	1,908
United States	127	156	149
Europe	14	20	21
Japan	17	25	23
Total	7,460	14,636	13,676

The numbers of employees listed in the two tables above do not take into account the 1,727 employees of Worldwide Semiconductor in 1999.

As of February 28, 2002, the highest academic degree of approximately 14.9% of our workforce was a university degree, with an additional 25.9% holding a junior college degree. Approximately 26.8% of the workforce held a master's or doctorate degree. We believe that, in order to maintain and improve quality control, efficiency in the manufacturing process and workplace safety, it is important that our technical workers receive continuing training in these areas. Our technical workers received an average of 15 hours of continuing training per person in 2001.

Our success depends to a significant extent upon, among other factors, our ability to attract, retain and motivate qualified personnel. Taiwan is currently experiencing a labor shortage for technical personnel and, as a result, we may face extensive competition in recruiting and retaining such personnel. We have recently begun to recruit and hire a significant amount of additional full-time employees, although we are not certain how many new employees we will hire in 2002.

Pursuant to our articles of incorporation, our employees participate in our profits by way of a bonus. Employees are entitled to not less than 1% of our net income after the payment of taxes, deduction for prior years' losses and contributions to legal reserves. Our practice in the past has been to determine the amount of the bonus based on our operating results and industry practice in the ROC. In July 2001 we distributed an aggregate bonus to our employees of NT$4,674,426,290 with respect to 2000 profit, in the form of common shares. In 2002, we plan to distribute an aggregate bonus to our employees of NT$1,070,783,880 in the form of common shares with respect to 2001 profits. The number of common shares issued as profit sharing is calculated by valuing the common shares at their par value, or NT$10, rather than their market value. Profit-related pay is awarded according to the performance of departments and individual performance within departments.

On May 7, 2002, our shareholders approved an amendment to our articles of incorporation which allows for the adoption of an employee stock option plan and the granting of employee stock options. We have reserved 500,000,000 of our authorized but unissued common shares for issuance to our employees upon exercise of stock options and we currently intend to adopt a plan that authorizes the issuance of options exercisable for up to 100 million common shares. As of May 7, 2002, 100 million shares represented approximately 0.6% of our outstanding common shares. Under the plan intended to be adopted, common shares issued upon exercise of options by an employee in any fiscal year shall not exceed 1% of the number of our common shares issued and outstanding on the last day of that fiscal year. The exercise price for an option will be equal to the closing price of our common shares on the day such options is granted. Options will vest between two and five years after the date of issuance and will expire ten years after the date of issuance.

Our employees are not covered by any collective bargaining agreements. We consider our relationship with our employees to be good.

Item 7. Major Shareholders and Related Party Transactions

Major Shareholders

As of March 31, 2002, Philips owned 21.84% of our outstanding common shares and 99.99% of our redeemable preferred shares and appointed three of our seven directors. The Development Fund, a governmental organization of the ROC, owned 9.69% of our outstanding common shares and appointed one of our seven directors. As a result, Philips and the Development Fund could each be deemed under the U.S. securities laws to be a controlling shareholder of us.

The following table sets forth certain information as of March 31, 2002 with respect to our common shares owned by (1) each person who, according to our records, beneficially owned five percent or more of our common shares and by (2) all directors, supervisors and executive officers as a group.

Names of Shareholders	Number of Common Shares Owned	Percentage of Total Outstanding Common Shares

Philips[1]	3,676,871,330	21.84%
Development Fund[2]	1,630,474,915	9.69%
Directors, supervisors and executive officers as a group[3][4]	206,955,617	1.23%

(1) Includes 2,322,227,527 common shares held by Koninklijke Philips Electronics N.V. and 1,354,643,803 common shares held by Philips Electronics Industries (Taiwan) Ltd.
(2) Excludes any common shares that may be owned by other funds controlled by the ROC government.
(3) Each of the directors, supervisors or executive officers owns less than 1% of the outstanding common shares.
(4) Excludes any common shares that may be owned by entities that nominate any directors and supervisors.

In November 2001, the Development Fund sold 20,000,000 ADSs, representing 100,000,000 common shares. As a result, the Development Fund's ownership of our common shares decreased from 11.18% to 10.58%. In February 2002, the Development Fund sold an additional 30,207,200 ADSs, representing 151,036,000 common shares, which further decreased the Development Fund's ownership of our common shares to 9.69%. In November 2000, Philips purchased from us 1,299,925,653 Preferred A shares, par value NT$10 per share, which pay a cumulative annual cash dividend at the rate of 3.5% per annum. As a result, Philips' ownership percentage of our outstanding equity securities, including the Preferred A shares, increased from 21.84% to 27.45%.

As of March 31, 2002, a total of 16,832,553,051 common shares were outstanding. With certain limited exceptions, holders of common shares that are not ROC persons are required to hold their common shares through a brokerage account in the ROC. As of March 31, 2002, 1,594,031,175 common shares were registered in the name of a nominee of Citibank, N.A., the depositary under our ADS deposit agreement. Citibank, N.A., has advised us that, as of March 31, 2002, 318,806,235 ADSs, representing 1,594,031,175 common shares, were held of record by Cede & Co. and 196 other U.S. persons. We have no further information as to common shares held, or beneficially owned, by U.S. persons.

We are not aware of any arrangement that may at a subsequent date result in a change of control of us.

TSMC Partners, Ltd., our indirect wholly-owned subsidiary, owned 692,601 ADSs as of March 31, 2002, representing 0.02% of our outstanding common shares.

Related Party Transactions

Industrial Technology Research Institute

ITRI is a government-sponsored organization in the ROC engaging in applied research to accelerate industrial technology development and promote industrial growth. ITRI has, and will continue to have, contractual relationships with us. Our relationships include the following:

- We entered into a technical cooperation agreement with ITRI pursuant to which ITRI granted us the license to use its technology to manufacture silicon MOS wafers and agreed to provide certain associated assets and relevant technical assistance and information to us, in exchange for a license from us for improvements and refinements thereof. The agreement provides that the ROC Ministry of Economic Affairs, or the entity designated by the ROC Ministry of Economic Affairs, has an option to purchase up to 35% of our capacity as agreed in the agreement on favorable terms and conditions. The term of this agreement is for five years beginning January 1, 1987 and is automatically renewed for successive periods of five years unless otherwise terminated by the parties. The agreement was automatically renewed in 1992 and 1997 and on January 1, 2002.

- We entered into a lease agreement with ITRI in which we leased from ITRI the land of our Fab 1 in Hsinchu. The term of the agreement is for five years beginning April 1, 1997, renewable for successive periods of five years upon notice and agreement between both parties. The agreement can also be terminated upon two-year notice prior to the date of termination. We decommissioned our Fab 1 on March 31, 2002 due to the expiration of the lease agreement with ITRI. Our total rental expenses paid to ITRI for the years 2000 and 2001 were NT$162 million and NT$162 million (US$4.6 million), respectively.

- From time to time, we provide foundry services to ITRI. In 2000 and 2001, we had total sales to ITRI of NT$198 million and NT$115 million (US$3.3 million), respectively, representing less than 1% of our net sales in each year.

Koninklijke Phillips Electronics N.V. and its Affiliates

Philips owns 27.45% of our outstanding equity securities, including the Preferred A Shares. Three of our seven directors are representatives of Philips. Philips is engaged in the business of world-wide manufacturing and processing of integrated circuits and other semiconductor devices. Philips and its affiliates currently have, and will continue to have in the future, contractual and other business relationships with us. Our relationships include the following:

- On December 31, 1986, we entered into a technology cooperation agreement with Philips pursuant to which Philips provides us with process and technical information for the production of unencapsulated MOS integrated circuits in wafer form. Under this technology cooperation agreement, we are obligated to pay to Philips a royalty equal to a fixed percentage of the net sales of the products covered by the agreement during the term of the agreement and for three years thereafter. On May 12, 1997, we and Philips agreed to extend and modify the technology cooperation agreement for ten years from July 9, 1997. Beginning on July 9, 1997, the royalty that we are obligated to pay Philips was reduced and, starting from July 9, 2002, we may deduct from such royalty payment any license fees and defense costs that we have paid to any third parties, provided that the royalty payment to Philips in any year is no less than certain percentage of net sales covered by the agreement.

- On October 28, 1992, we entered into a letter agreement with Philips under which Philips has an option on up to 30% of the capacity as agreed in the agreement on most favored terms and conditions for similar orders, as long as Philips' and its affiliates' shareholding in us remains at 24.8% or higher. From time to time, we provide foundry services to Philips and its affiliates. In 2000 and 2001, we had total sales to Philips and its affiliates of NT$5,290 and NT$2,389 million (US$68 million), representing 3% and 2%, respectively, of our total net sales.

- In March 1999, we entered into an agreement with Philips, and EDB Investment Pte. Ltd. to found a joint venture to build the Systems on Silicon fab in Singapore. We own 32% of the joint venture, Philips owns 48% and the EDB Investment owns 20%. After the ramping up of the production capability at Systems on Silicon, we, together with Philips, have the right to purchase up to 100% of its annual capacity. We and Philips jointly are required to purchase up to 70% of the Systems on Silicon's full capacity and we will be required to purchase no more than 28% of the annual installed capacity. See "Item 4. Information on the Company—Our History and Structure—Systems on Silicon in Singapore" for a discussion of our agreement with Philips and EDB Investment to build our Systems on Silicon fab and "—Systems on Silicon Manufacturing Company Pte. Ltd." for a detailed discussion of the contract terms we entered into with Systems on Silicon.

- In November 2000, Philips purchased from us 1,299,925,653 Preferred A shares, at the par value of NT$10 per share, which pay a cumulative annual cash dividend at the rate of 3.5% per annum. The Preferred A shares are to be redeemed in May, 2003.

- In January 2002, we entered into an agreement with Phillips Semiconductors and ST Microelectronics to collaborate on developing 90-nanometer process and beyond generic CMOS Logic and e-DRAM technologies and to align 0.13 micron CMOS technologies to enhance TSMC's foundry business opportunities. We will pay a portion of the costs of the joint development program.

Vanguard International Semiconductor Corporation

In 1994, we and other investors entered into a joint venture agreement with the ROC Ministry of Economic Affairs to establish Vanguard, an integrated DRAM manufacturer. Vanguard commenced volume commercial

production in 1995 and listed its shares on the ROC Over-the-Counter Securities Exchange in March 1999. As of March 31, 2002, we owned 25.28% of Vanguard.

On February 14, 2000, we entered into a five-year manufacturing agreement with Vanguard in which Vanguard has agreed to manufacture integrated circuit devices and wafers required by our customers. During the term of this agreement, Vanguard is obligated to manufacture wafers for us at a fixed amount of reserved capacity. In consideration of the reserved capacity, we paid Vanguard certain amounts in security bonds which Vanguard is obligated to return to us based on the amounts of wafers we order. We pay Vanguard at a discount of the actual selling price. We also agreed to grant Vanguard a royalty-free, non-exclusive and non-transferable right to use any of our logic process technologies necessary for the sole purpose of manufacturing the wafers we order, and transfer technical know-how and information in connection with the manufacturing process. In 2001, we had total purchases of NT$3,802 million (US$109 million) from Vanguard, representing 4.12% of our total cost of sales.

Systems on Silicon Manufacturing Company Pte. Ltd.

Systems on Silicon is a joint venture in Singapore that we established with Phillips and EDB Investment Pte. Ltd. for the purpose of producing integrated circuits by means of advanced submicron manufacturing processes pursuant to the product design specifications provided primarily by us and by Phillips and its affiliates. Systems on Silicon's business is limited to manufacturing wafers for us, our subsidiaries, Philips and Philips' subsidiaries. As of March 31, 2002 we owned 32% of Systems on Silicon.

We entered into a technology cooperation agreement with Systems on Silicon on May 12, 1999 in which Systems on Silicon agreed to base a major part of its production activities on processes compatible to those in use in our MOS integrated circuits wafer volume production fabs, for the purpose of maximizing efficiency and cost savings in its foundry services to us. In return, we have agreed to provide Systems on Silicon with access to and benefit of the technical knowledge and experience relating to the processes in use in our MOS integrated circuits wafer volume production fabs and to assist Systems on Silicon by rendering technical services in connection with its production activities. In addition, we have agreed to grant licenses of any pertinent intellectual property rights owned or controlled by us to Systems on Silicon for the purpose of MOS integrated circuit production. Systems on Silicon pays to us during, and up to three years after, the term of this agreement a remuneration of a fixed percentage of the net selling price of all products manufactured by Systems on Silicon. In 2001, we had total purchases of NT$43 million (US$1.2 million) from Systems on Silicon, representing 0.05% of our total cost of sales.

Item 8. Financial Information

Consolidated Financial Statements and Other Financial Information

Please see "Item 18: Financial Statements".

Legal Proceedings

As is the case with many companies in the semiconductor industry, we have received from time to time communications from third parties asserting that our technologies, manufacturing processes, the design of the integrated circuits made by us or the use by our customers of semiconductors made by us infringe upon patents or intellectual property rights of others. In some instances, these disputes have resulted in litigation and settlement or damage payments by us. Because we neither design the integrated circuits nor control the end use thereof, we believe that we should not be ultimately liable to third parties for monetary damages, in most cases, on claims based on infringement of designs of integrated circuits or end-use products. Irrespective of the validity of these claims, we could incur significant costs in the defense thereof or could suffer adverse effects on our operations. In addition, from time to time we initiate legal proceedings to protect our intellectual property rights against infringement by third parties. We are not currently involved in any material litigation.

Dividends and Dividend Policy

The following table sets forth the stock dividends per share paid during each of the years indicated in respect of common shares outstanding on the record date applicable to the payment of those dividends. In recent years, we have not paid any cash dividends.

	Stock dividends per 100 shares	Total shares issued as stock dividends	Outstanding common shares at year end
1996	80.0	1,151,200,000	2,756,700,000
1997	50.0	1,327,100,000	4,361,300,000
1998	45.0	1,836,585,000	6,647,175,967
1999	23.0	1,390,850,473	8,520,881,717
2000	28.0	2,147,846,881	11,689,364,587
2001	40.0	4,675,745,835	16,832,553,051

In recent years, we have paid all of our dividends in the form of stock in order to reinvest our cash in operations, and we expect that we will continue in the future to pay a substantial portion of dividends in the form of stock. The form, frequency and amount of future dividends on the common shares will depend upon our earnings, cash flow, financial condition, reinvestment opportunities and other factors. Our shareholders have approved the declaration of a stock dividend of one (1) common share per 10 common shares, or NT$16,832,553,060 in the aggregate based upon the par value of NT$10 per common share, in respect of net income earned in the year ended December 31, 2001 and our retained earnings. Payment of the stock dividend is subject to the receipt of the approval from the ROC Securities and Futures Commission. We currently contemplate that the record date for the stock dividend will be in June 2002 and the dividend will be distributed in August 2002.

Holders of outstanding common shares on a dividend record date will be entitled to the full dividend declared without regard to any subsequent transfer of the common shares. Payment of dividends in respect of the prior year is made following approval by our shareholders at the annual general meeting of shareholders.

Except in limited circumstances, under the ROC Company Law, we are not permitted to distribute dividends or make other distributions to shareholders in respect of any year in which we have no current or retained earnings (excluding reserves). The ROC Company Law also requires that 10% of annual net income (less prior years' losses and outstanding tax) be set aside as legal reserves until the accumulated legal reserves equal our paid-in capital. Our articles of incorporation require that at least one percent of annual net earnings (after deducting the legal reserve provision, outstanding taxes and providing for losses incurred in prior years) be distributed as a bonus to employees and that one percent of our annual net earnings (after deducting the legal reserve provision and outstanding taxes and providing for any losses incurred in prior years) be distributed as a bonus to directors and supervisors.

Holders of ADRs evidencing ADSs are entitled to receive dividends, subject to the terms of the deposit agreement, to the same extent as the holders of common shares. Cash dividends will be paid to the depositary in NT dollars and, after deduction of any applicable ROC taxes and except as otherwise provided in the deposit agreement, will be converted by the depositary into U.S. dollars and paid to holders. Stock dividends will be distributed to the depositary and, except as otherwise provided in the deposit agreement, will be distributed to holders by the depositary in the form of additional ADSs.

For information relating to ROC withholding taxes payable on cash and stock dividends, see "Item 10. Additional Information — Taxation — ROC Taxation — Dividends".

Item 9. The Offer and Listing

The principal trading market for our common shares is the Taiwan Stock Exchange. The common shares have been listed on the Taiwan Stock Exchange under the symbol "2330" since September 5, 1994, and the ADSs have been listed on the New York Stock Exchange under the symbol "TSM" since October 8, 1997. The outstanding ADSs are identified by the CUSIP number 874039100. The table below sets forth, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the Taiwan Stock Exchange for the common shares and the high and low closing prices and the average daily volume of trading activity on the New York Stock Exchange for the common shares represented by ADSs.

	Taiwan Stock Exchange			New York Stock Exchange[1]		
	Closing price per common share [2]			Closing price per ADS[2]		
	high (NT$)	Low (NT$)	Average daily Trading volume (in thousands of shares)	High (US$)	Low	Average daily Trading volume (in thousands of ADSs)
1997	53.19	11.58	177,797	9.74	5.36	2,532
1998	52.88	26.09	86,283	9.31	4.54	1,184
1999	95.42	30.85	72,544	25.11	6.44	1,817
2000	122.21	53.57	43,506	38.29	11.88	2,502
First Quarter	122.21	96.54	54,254	38.29	25.67	2,197
Second Quarter	117.19	98.21	37,175	31.32	22.22	2,417
Third Quarter	106.43	71.43	31,347	27.68	15.80	2,335
Fourth Quarter	83.57	53.57	52,384	17.90	11.88	3,037
2001	89.00	44.10	42,040	19.08	8.85	4,250
First Quarter	75.36	57.50	46,294	18.04	12.32	2,528
Second Quarter	70.71	56.43	33,014	17.71	11.85	4,301
Third Quarter	70.50	46.50	33,947	17.05	8.88	5,113
Fourth Quarter	89.00	44.10	54,709	19.08	8.85	5,074
October	67.00	44.10	48,327	13.90	8.85	4,580
November	79.50	61.00	56,798	16.60	13.27	5,688
December	89.00	77.50	58,902	19.49	16.00	4,997
2002						
First Quarter	97.50	80.00	44,800	20.99	15.85	5,333
January	93.00	82.50	48,641	20.14	16.86	5,543
February	89.00	80.00	34,220	18.50	15.85	6,074
March	97.50	81.00	46,822	20.99	16.25	4,409

(1) Trading in ADSs commenced on October 8, 1997 on the New York Stock Exchange. Each ADS represents the right to receive five common shares.

(2) As adjusted for a 80% stock dividend in June 1996, a 50% stock dividend in June 1997, a 45% stock dividend in June 1998, a 23% stock dividend in June 1999, a 28% stock dividend in July 2000 and a 40% stock dividend in July 2001.

Purchase of shares of companies on the Taiwan Stock Exchange or other markets by the Stabilization Fund, or other funds associated with the government of the Republic of China may have caused, and may in the future cause, the price of shares of companies listed on the Taiwan Stock Exchange, including our shares, to be higher than the prices that would otherwise prevail in the open market. See Item 3. “Key Information — Risk Factors — Risks Relating to Ownership of ADSs — The market value of your investment may fluctuate due to the volatility of, and government intervention in, the ROC securities market”.

Item 10. Additional Information

Description of Common Shares

Set forth below is a description of our common shares, including summaries of the material provisions of our articles of incorporation, the ROC Company Law, the ROC Securities and Exchange Law and the regulations promulgated thereunder.

General

Our authorized share capital is NT$246,000,000,000, divided into 24,600,000,000 common shares among which 16,832,553,051 common shares and 1,300,000,000 Preferred A shares were issued and outstanding and in registered form as of December 31, 2001.

The ROC Company Law, the ROC Statute for Establishment and Administration of Science-Based Industrial Parks and the ROC Securities and Exchange Law provide that any change in the issued share capital of a public company, such as us, requires the approval of its board of directors, an amendment to its articles of incorporation

(which requires shareholder approval if such change also involves a change in the authorized share capital) and the approval of, or the registration with, the ROC Securities and Futures Commission and the Ministry of Economic Affairs or the Science-Based Industrial Park Administration (as applicable).

There are no provisions under either ROC law or the deposit agreement under which holders of ADSs would be required to forfeit the common shares represented by ADSs.

We are organized under the laws of the ROC.

Dividends and Distributions

An ROC company is generally not permitted to distribute dividends or to make any other distributions to shareholders in respect of any year for which it did not have accumulated earnings. In addition, before distributing a dividend to shareholders following the end of a fiscal year, the company must recover any past losses, pay all outstanding taxes and set aside in a legal reserve 10% of its net income for that fiscal year (less prior year's losses) until such time as its legal reserve equals its paid-in capital. Our articles of incorporation require that at least one percent of the net income for that fiscal year be distributed as a bonus to employees and that 0.3 percent of the net income for that fiscal year be distributed as a bonus to directors and supervisors. It has been our practice in each of the last three years to pay a portion of employee bonuses in the form of stock dividends. The amount of common shares issued as a bonus is obtained by dividing the cash value of the bonus by the par value of the common shares, *i.e.*, NT$10 per share. Because the market value of our common shares has generally been well in excess of par value, the actual cash value of a stock bonus has also been in excess of the amount the employee would have received if the bonus had been paid exclusively in cash. Subject to compliance with these requirements, a company may pay dividends or make other distributions from its accumulated earnings or reserves as permitted by the ROC Company Law as set forth below.

At the annual general meeting of our shareholders, the board of directors submits to the shareholders for their approval of our financial statements for the preceding fiscal year and any proposal for the distribution of a dividend or the making of any other distribution to shareholders from our accumulated earnings (subject to compliance with the requirements described above) at the end of the preceding fiscal year. All common shares outstanding and fully paid as of the relevant record date are entitled to share equally in any dividend or other distribution so approved. Dividends may be distributed in cash, in the form of common shares or a combination thereof, as determined by the shareholders at the meeting.

In addition to permitting dividends to be paid out of accumulated earnings, the ROC Company Law permits us to make distributions to our shareholders of additional common shares by capitalizing reserves (including the legal reserve and some other reserves). However, the capitalized portion payable out of our legal reserve is limited to 50% of the total accumulated legal reserve and this capitalization can only be effected when the accumulated legal reserve exceeds 50% of our paid-in capital.

For information as to ROC taxes on dividends and distributions, see ''—Taxation—ROC Taxation''.

Preemptive Rights and Issues of Additional Common Shares

Under the ROC Company Law, when a public company such as us issues new shares of common stock for cash, 10% to 15% of the issue must be offered to its employees. The remaining new shares must be offered to existing shareholders in a preemptive rights offering, subject to a requirement under the ROC Securities and Exchange Law that at least 10% of these issuances must be offered to the public. This percentage can be increased by a resolution passed at a shareholders' meeting, thereby limiting or waiving the preemptive rights of existing shareholders. The preemptive rights provisions do not apply to (i) offerings by shareholders of outstanding shares; and (ii) offerings of new shares through a private placement approved at a shareholders' meeting.

Authorized but unissued shares of any class may be issued at such times and, subject to the above-mentioned provisions of the ROC Company Law and the ROC Securities and Exchange Law, upon such terms as the board of directors may determine. The shares with respect to which preemptive rights have been waived may be freely offered, subject to compliance with applicable ROC law.

Meetings of Shareholders

General meetings of our shareholders may be ordinary or extraordinary. Ordinary meetings of shareholders are generally held in Hsinchu, Taiwan, within six months after the end of each fiscal year. Extraordinary meetings of shareholders may be convened by resolution of the board of directors whenever it deems necessary, or under certain circumstances, by shareholders or the supervisors. For a publicly held company such as us, notice in writing of general meetings, stating the place, time and purpose thereof, must be sent to each shareholder at least thirty days (in the case of ordinary meetings) and fifteen days (in the case of extraordinary meetings) prior to the date set for each meeting.

Voting Rights

A holder of common shares has one vote for each common share. Except as otherwise provided by law, a resolution may be adopted by the holders of a simple majority of the total issued and outstanding common shares represented at a shareholders' meeting at which a majority of the holders of the total issued and outstanding common shares are present. The election of directors and supervisors at a shareholders' meeting is by cumulative voting. Ballots for the election of directors are cast separately from those for the election of supervisors. Both are nominated by our shareholders at the shareholders' meeting at which ballots for these elections are cast.

The ROC Company Law also provides that in order to approve certain major corporate actions, including any amendment to the articles of incorporation (which is required for, among other actions, any increase in authorized share capital), the dissolution or amalgamation of a company or the transfer of the whole or an important part of its business or its properties or the taking over of the whole of the business or properties of any other company which would have a significant impact on the acquiring company's operations, and the distribution of any stock dividend, a meeting of the shareholders must be convened with a quorum of holders of at least two-thirds of all issued and outstanding shares of common stock at which the holders of at least a majority of the common stock represented at the meeting vote in favor thereof. However, in the case of a publicly held company such as us, such a resolution may be adopted by the holders of at least two-thirds of the shares of common stock represented at a meeting of shareholders at which holders of at least a majority of the issued and outstanding shares of common stock are present.

A shareholder may be represented at a general meeting by proxy. A valid proxy must be delivered to us at least five days prior to the commencement of the general meeting.

Holders of ADSs will not have the right to exercise voting rights with respect to the common shares represented thereby, except as described in ''Description of American Depositary Receipts—Voting Rights''.

Other Rights of Shareholders

Under the ROC Company Law, dissenting shareholders are entitled to appraisal rights in the event of amalgamation, spin-off or certain other major corporate actions. A dissenting shareholder may request us to redeem all of the shares owned by that shareholder at a fair price to be determined by mutual agreement or a court order if agreement cannot be reached. A shareholder may exercise these appraisal rights by serving written notice on us prior to the related shareholders' meeting and/or by raising an objection at the shareholders' meeting. In addition to appraisal rights, any shareholder has the right to sue for the annulment of any resolution adopted at a shareholders' meeting where the procedures were legally defective within thirty days after the date of such shareholders' meeting. One or more shareholders who have held more than three percent of the issued and outstanding shares for over a year may require a supervisor to bring a derivative action against a director for that director's liability to us as a result of that director's unlawful actions or failure to act. In addition, one or more shareholders who have held more than three percent of our issued and outstanding shares for over a year may require the board of directors to convene an extraordinary shareholders' meeting by sending a written request to the board of directors.

Register of Shareholders and Record Dates

Our share registrar, Chinatrust Commercial Bank, maintains the register of our shareholders at its office in Taipei, Taiwan, and enters transfers of the common shares in the register upon presentation of, among other documents, the certificates in respect of the common shares transferred. Under the ROC Company Law, the transfer of common shares in registered form is effected by endorsement and delivery of the related share certificates. In order to assert shareholders' rights against us, however, the transferee must have his name and address registered on the register of shareholders. Shareholders are required to file their respective specimen signatures or seals with us. The settlement of trading in the common shares is normally carried out on the book-entry system maintained by the Taiwan Securities Central Depository Co., Ltd.

The ROC Company Law permits us to set a record date and close the register of shareholders for a specified period in order for us to determine the shareholders or pledgees that are entitled to certain rights pertaining to common shares by giving advance public notice. Under the ROC Company Law, our register of shareholders should be closed for a period of sixty days, thirty days and five days immediately before each ordinary meeting of shareholders, extraordinary meeting of shareholders and record date, respectively.

Annual Financial Statements

Under the ROC Company Law, ten days before the ordinary meeting of shareholders, our annual financial statements must be available at our principal office in Hsinchu for inspection by the shareholders.

Acquisition of Common Shares by Us

With minor exceptions, we may not acquire our common shares under the ROC Company Law. However, under the Securities and Exchange Law, we may, by a board resolution adopted by majority consent at a meeting with two-thirds of our directors present, purchase our common shares on the Taiwan Stock Exchange or by a tender offer, in accordance with the procedures prescribed by the ROC SFC, for the following purposes: (i) to transfer shares to our employees; (ii) to satisfy our obligations to provide our common shares upon exercise or conversion of any warrants, convertible bonds or convertible preferred shares; and (iii) if necessary, to maintain our credit and our shareholders' equity (such as for the purpose of supporting the trading price of our common shares during market dislocations), provided that the common shares so purchased shall be cancelled thereafter.

We are not allowed to purchase more than ten percent of our total issued and outstanding common shares. In addition, we may not spend more than the aggregate amount of our retained earnings, premium from issuing stock and the realized portion of the capital reserve to purchase our common shares.

We may not pledge or hypothecate any purchased common shares. In addition, we may not exercise any shareholders' rights attached to such common shares. In the event that we purchase our common shares on the Taiwan Stock Exchange, our affiliates, directors, supervisors, managers and their respective spouses, minor children and nominees are prohibited from selling any of our common shares during the period in which we purchase our common shares.

In addition, effective from November 2001 under the revised ROC Company Law, our subsidiaries may not acquire our shares. This restriction does not, however, affect any of our shares acquired by our subsidiaries prior to November 14, 2001.

Liquidation Rights

In the event of our liquidation, the assets remaining after payment of all debts, liquidation expenses, taxes and distributions to holders of preferred shares, if any, will be distributed pro rata to our shareholders in accordance with the ROC Company Law.

Transaction Restrictions

The ROC Securities and Exchange Law (i) requires each director, supervisor, manager or shareholder holding more than ten percent of the shares of a public company to report the amount of that person's shareholding to that

company and (ii) limits the number of shares that can be sold or transferred on the Taiwan Stock Exchange or on the ROC Over-the-Counter Securities Exchange by that person per day.

Material Contracts

We are not currently, and have not been in the last two years, party to any material contract, other than contracts entered into in the ordinary course of our business. Please see "Item 7. Major Shareholders and Related Party Transactions — Related Party Transactions" for a summary of contracts with certain of our related parties.

Foreign Investment in the ROC

Historically, foreign investment in the ROC securities markets has been restricted. Since 1983, the ROC government has periodically enacted legislation and adopted regulations to permit foreign investment in the ROC securities market. Currently, non-ROC persons may invest in ROC securities through the following vehicles.

Qualified Foreign Institutional Investment. On December 28, 1990, the Executive Yuan approved guidelines drafted by the ROC Securities and Futures Commission which, since January 1, 1991, allow direct investment in ROC securities listed on the Taiwan Stock Exchange or other ROC securities approved by the ROC Securities and Futures Commission by certain eligible foreign institutional investors. Under the guidelines as currently in effect, eligible foreign institutional investors include:

(1) banks which hold securities assets of at least US$200 million and have experience in custody and management of securities and assets, and international finance or trust business;

(2) insurance companies which hold securities assets of at least US$200 million;

(3) fund management companies which manage assets of at least US$200 million;

(4) offshore fund management companies which are more than 50% owned by an ROC securities investment trust enterprise provided that the funds to be invested do not come from (1) the ROC, (2) self-own fund of such offshore fund management companies or (3) the People's Republic of China;

(5) general securities firms which have a net worth of at least US$100 million and experience in international securities investments;

(6) offshore securities firms which are more than 50% owned by an ROC securities firm, or other offshore securities firms which are wholly-owned by such offshore securities firms;

(7) offshore securities firms which are wholly-owned by an ROC securities firm, or other offshore securities firms which are more than 51% owned by such offshore securities firms;

(8) foreign government-owned investment institutions provided that the funds completely come from the government;

(9) pension funds;

(10) mutual funds, unit trusts or investment trusts which have assets of at least US$200 million;

(11) trust companies which hold securities assets in trust of at least US$200 million and have experience in custody and management of securities and assets, and international finance or trust business; and

(12) other institutional investors which hold securities assets of at least US$200 million.

Eligible foreign institutional investors who wish to qualify as qualified foreign institutional investors need to apply for and receive an investment permit from the ROC Securities and Futures Commission. Any application for investment exceeding US$50 million must also be approved by the Central Bank of China. Application with the ROC Securities and Futures Commission requires the submission of, among other documents, proof of eligibility, proof of appointment of a local agent and custodian, credentials of the local agent and custodian and a copy of the custodial contract. Foreign institutional investors who receive a permit may currently invest up to US$3 billion (with certain limited exceptions, the maximum amount of US$3 billion may be exceeded) and are required to remit the full amount into the ROC within one year after receiving the investment permit.

Except for certain specified industries, such as telecommunications, investments in ROC-listed companies by qualified foreign institutional investors are not subject to individual or aggregate foreign ownership limits. Custodians for qualified foreign institutional investors are also required to submit to the Central Bank of China and the ROC Securities and Futures Commission a monthly report of trading activities and status of assets under custody and other matters. Capital remitted to the ROC under these guidelines may be remitted out of the ROC at any time after the date this capital is remitted to the ROC. Capital remitted out of the ROC may be returned to the ROC within one year of the outward remittance without the ROC Securities and Futures Commission's approval. Capital gains and income on investments may be remitted out of the ROC at any time.

On March 7, 2001, the government of the ROC further amended the guidelines regarding investments by qualified foreign institutional investors. Pursuant to the amended guidelines, a qualified foreign institutional investor may, effective from May 1, 2001, remit the full amount into the ROC within two years, instead of one year, after receiving the investing permit. In addition, the previous rules allowing the capital remitted out of the ROC to be returned to the ROC within one year of the outward remittance will no longer be applicable. For a qualified foreign institutional investor whose investment is approved prior to May 1, 2001, the one-year period for remitting full investment amount into the ROC and the one-year period for return of capital remitted out of the ROC shall be extended for one additional year after the date of the last outward remittance of investment amount by the qualified foreign institutional investor made prior to May 1, 2001. If the qualified foreign institutional investor has not made any outward remittance of investment amount on or before May 1, 2001, the extended one additional year period shall commence on the anniversary date of receiving the investment permit.

Other Foreign Investment. In addition to qualified foreign institutional investors, under existing ROC laws and regulations relating to foreign investment, individual and institutional foreign investors which meet certain qualifications set by the ROC Securities and Futures Commission may invest in the shares of Taiwan Stock Exchange-listed companies or companies whose shares are traded on the ROC Over-the-Counter Securities Exchange up to a limit of US$50 million (in the case of institutional investors) and US$5 million (in the case of individual investors) after obtaining permission from the Taiwan Stock Exchange. These investors, known as general foreign investors, are also subject to the foreign ownership limitations on certain specified industries as described above.

Foreign investors (other than qualified foreign institutional investors, general foreign investors or investors investing in overseas convertible bonds and depositary receipts) who wish to make direct investments in the shares of ROC companies are required to submit a foreign investment approval application to the Investment Commission of the ROC Ministry of Economic Affairs or other government authority. The Investment Commission or such other government authority reviews each foreign investment approval application and approves or disapproves each application after consultation with other governmental agencies (such as the Central Bank of China and the ROC Securities and Futures Commission).

Under current law, any non-ROC person possessing a foreign investment approval may repatriate annual net profits, interest and cash dividends attributable to the approved investment. Stock dividends attributable to this investment, investment capital and capital gains attributable to this investment may be repatriated by the non-ROC person possessing a foreign investment approval after approvals of the Investment Commission or other government authorities have been obtained.

In addition to the general restriction against direct investment by non-ROC persons in securities of ROC companies, non-ROC persons (except in certain limited cases) are currently prohibited from investing in certain industries in the ROC pursuant to a "negative list", as amended by the Executive Yuan. The prohibition on foreign investment in the prohibited industries specified in the negative list is absolute in the absence of specific exemption from the application of the negative list. Pursuant to the negative list, certain other industries are restricted so that non-ROC persons (except in limited cases) may invest in these industries only up to a specified level and with the specific approval of the relevant competent authority that is responsible for enforcing the relevant legislation that the negative list is intended to implement.

Depositary Receipts. In April 1992, the ROC Securities and Futures Commission enacted regulations permitting ROC companies with securities listed on the Taiwan Stock Exchange, with the prior approval of the ROC Securities and Futures Commission, to sponsor the issuance and sale to foreign investors of depositary receipts. Depositary receipts represent deposited shares of ROC companies. In December 1994, the Ministry of Finance allowed companies whose shares are traded on the ROC Over-the-Counter Securities Exchange or listed on the Taiwan Stock Exchange, upon approval of the ROC Securities and Futures Commission, to sponsor the issuance and sale of depositary receipts. The approval will be granted (1) if the underlying shares are newly issued shares, for a fixed number of depositary receipts or (2) if the underlying shares are not newly issued shares, for a maximum number of depositary receipts and, with limited exceptions (as described below), may not be increased without additional approvals by the ROC Securities and Futures Commission.

A holder of depositary receipts may, from three months (in the case that the underlying shares are new shares) or immediately (in the case that the underlying shares are not newly issued shares) after the initial issue date for the deposit receipts, request the foreign depositary bank issuing the depositary receipts to cause the underlying securities to be sold in the ROC and to distribute the proceeds of the sale to the depositary receipt holder or to withdraw from the depositary receipt facility shares represented by depositary receipts and transfer the shares to the depositary receipt holder (other than citizens of the People's Republic of China and entities organized under the laws of the People's Republic of China); provided that settlement for trading of shares represented by the depositary receipts through the book-entry system maintained by the Taiwan Securities Central Depositary Co. Ltd. is permitted. As discussed above, because the ROC Securities and Futures Commission approval is for a fixed or maximum number of depositary receipts, we or the foreign depositary bank may not increase the number of depositary receipts by depositing shares in a depositary receipt facility or issuing additional depositary receipts against these deposits without specific ROC Securities and Futures Commission approval, except in limited circumstances. These circumstances include issuances of additional depositary receipts in connection with:

(1) dividends on or free distributions of shares;

(2) the exercise by holders of existing depositary receipts of their pre-emptive rights in connection with capital increases for cash; or

(3) if permitted under the deposit agreement and custody agreement, the purchase directly by any person or through a depositary of the underlying shares on the Taiwan Stock Exchange or the ROC Over-the-Counter Securities Exchange (as applicable) or delivery of the underlying shares for deposit in the depositary receipt facility.

However, the total number of deposited shares outstanding after an issuance under the circumstances described in clause (3) above may not exceed the number of deposited shares previously approved by the ROC Securities and Futures Commission plus any depositary receipts created under the circumstances described in clauses (1) and (2) above. Issuances of additional depositary receipts under the circumstances described in clause (3) above will be permitted to the extent that previously issued depositary receipts have been canceled and, for so long as may be required by applicable law, the shares withdrawn from the depositary receipt facility upon cancellation of such depositary receipts have been sold.

Under current ROC law, a non-ROC holder of ADSs who withdraws the underlying shares must appoint an eligible local agent to:

(1) open a securities trading account with a local securities brokerage firm after having obtained consent from the Taiwan Stock Exchange or the ROC Over-the-Counter Securities Exchange;

(2) remit funds; and

(3) exercise rights on securities and perform other matters as may be designated by the holder.

In addition, a withdrawing non-ROC holder must appoint a local bank to act as custodian for handling confirmation and settlement of trades, safekeeping of securities and cash proceeds and reporting of information. Under existing ROC laws and regulations, without this account, holders of ADSs that withdraw and hold the common shares represented by the ADSs would not be able to hold or transfer the common shares, whether on the Taiwan Stock Exchange or otherwise.

Holders of ADSs withdrawing common shares represented by ADSs who are non-ROC persons are required under current ROC law and regulations to appoint an agent in the ROC for filing tax returns and making tax payments. This agent, a "tax guarantor", must meet certain qualifications set by the ROC Ministry of Finance and, upon appointment, becomes a guarantor of the withdrawing holder's ROC tax payment obligations. In addition, under current ROC law, repatriation of profits by a non-ROC withdrawing holder is subject to the submission of evidence of the appointment of a tax guarantor to, and approval thereof by, the tax authority or submission of tax clearance certificates so long as the capital gains from securities transactions are exempt from ROC income tax. As required by the Central Bank of China, if repatriation by a holder is based on a tax clearance certificate, the aggregate amount of the cash dividends or interest on bank deposits converted into foreign currencies to be repatriated by the holder shall not exceed the amount of:

(1) the net payment indicated on the withholding tax voucher issued by the tax authority;

(2) the net investment gains as indicated on the holder's certificate of tax payment; or

(3) the aggregate transfer price as indicated on the income tax return for transfer of tax-deferred dividend shares, whichever is applicable.

Under existing laws and regulations relating to foreign exchange control, a depositary may, without obtaining further approvals from the Central Bank of China or any other governmental authority or agency of the ROC, convert NT dollars into other currencies, including US dollars, in respect of the following: proceeds of the sale of shares represented by depositary receipts, proceeds of the sale of shares received as stock dividends and deposited into the depositary receipt facility and any cash dividends or cash distributions received. In addition, a depositary, also without any of these approvals, may convert inward remittances of payments into NT dollars for purchases of underlying shares for deposit into the depositary receipt facility against the creation of additional depositary receipts. The approval from the Central Bank of China is required for a depositary on a payment-by-payment basis for conversion into NT dollars of subscription payments relating to rights offerings. A depositary may also be required to obtain foreign exchange approval from the Central Bank of China on a payment-by-payment basis for conversion from NT dollars into other currencies relating to the sale of subscription rights for new shares. Proceeds from the sale of any underlying shares by holders of depositary receipts withdrawn from the depositary receipt facility may be converted into other currencies without obtaining Central Bank of China approval. Proceeds from the sale of the underlying shares withdrawn from the depositary receipt facility may be used for reinvestment in the Taiwan Stock Exchange or the ROC Over-the-Counter Securities Exchange, subject to limitations and restrictions applicable to qualified foreign institutional investors or general foreign investors (as described below).

Direct Share Offerings

The ROC Government has promulgated regulations to permit ROC companies listed on the Taiwan Stock Exchange or ROC Over-the-Counter Securities Exchange market to issue shares directly (not through depositary receipt facility) overseas.

Overseas Corporate Bonds. Since 1989, the ROC Securities and Futures Commission has approved a series of overseas bonds issued by ROC companies listed on the Taiwan Stock Exchange in offerings outside the ROC. Under current ROC law, these overseas corporate bonds can be:

(1) converted by bondholders, other than citizens of the People's Republic of China and entities organized under the laws of the People's Republic of China, into shares of ROC companies; or

(2) subject to ROC Securities and Futures Commission approval, may be converted into depositary receipts issued by the same ROC company or by the issuing company of the exchange shares, in the case of exchangeable bonds.

The relevant regulations also permit public issuing companies to issue corporate debt in offerings outside the ROC. Proceeds from the sale of the shares converted from overseas convertible bonds may be used for reinvestment in securities listed on the Taiwan Stock Exchange or traded on the ROC Over-the-Counter Securities Exchange, subject to limitations and restrictions applicable to qualified foreign institutional investors or general foreign investors (as applicable).

Exchange Controls in the ROC

The Foreign Exchange Control Statute and regulations provide that all foreign exchange transactions must be executed by banks designated to handle such business by the Ministry of Finance or by the Central Bank of China. Current regulations favor trade-related foreign exchange transactions. Consequently, foreign currency earned from exports of merchandise and services may now be retained and used freely by exporters, and all foreign currency needed for the importation of merchandise and services may be purchased freely from the designated foreign exchange banks.

Trade aside, ROC companies and resident individuals may, without foreign exchange approval, remit outside the ROC foreign currency of up to US$50 million (or its equivalent) and US$5 million (or its equivalent), respectively, in each calendar year. In addition, ROC companies and resident individuals may, without foreign exchange approval, remit into the ROC foreign currency of up to US$50 million (or its equivalent) and US$5 million (or its equivalent), respectively, in each calendar year. Furthermore, any remittance of foreign currency into the ROC by a ROC company or resident individual in a year will be offset by the amount remitted out of ROC by such company or individual (as applicable) within its annual quota and will not use up its annual inward remittance quota to the extent of such offset. The above limits apply to remittances involving a conversion of NT dollars to a foreign currency and vice versa. A requirement is also imposed on all enterprises to register medium-and long-term foreign debt with the Central Bank of China.

In addition, foreign persons, may, subject to certain requirements, but without foreign exchange approval of the Central Bank of China, remit outside and into the ROC foreign currencies of up to US$100,000 (or its equivalent) for each remittance. The above limit applies to remittances involving a conversion of NT dollars to a foreign currency and vice versa. The above limit does not, however, apply to the conversion of NT dollars into other currencies, including US dollars, in respect of the proceeds of sale of any underlying shares withdrawn from a depositary receipt facility.

Voting of Deposited Securities

Holders may direct the exercise of voting rights with respect to the common shares represented by the ADSs only in accordance with the provisions of the deposit agreement as described below and applicable ROC law. See "Item 3. Key Information—Risk Factors—Risks Relating to Ownership of ADSs—Your voting rights as a holder of ADSs will be limited".

Except as described below, the holders will not be able to exercise the voting rights attaching to the common shares represented by the ADSs on an individual basis. According to the ROC Company Law, a shareholder's voting rights attached to shareholdings in an ROC company must, as to all matters subject to a vote of shareholders (other than the election of directors and supervisors), be exercised as to all shares held by such shareholder in the same manner. Accordingly, the voting rights attaching to the common shares represented by ADSs must be exercised as to all matters subject to a vote of shareholders by the depositary bank or its nominee, who represents all holders of ADSs, collectively in the same manner, except in the case of an election of directors and supervisors. Directors and supervisors are elected by cumulative voting.

In the deposit agreement, the holders will appoint the depositary bank as their representative to exercise the voting rights with respect to the common shares represented by the ADSs.

We will provide the depositary bank with copies (including English translations) of notices of meetings of our shareholders and the agenda of these meetings, including an indication of the number of directors or supervisors to be elected if an election of directors or supervisors is to be held at the meeting. The depositary bank has agreed to request and we will, therefore, also provide a list of the candidates who have expressed their intention to run for an election of directors or supervisors. The depositary bank will mail these materials, together with a voting instruction form to holders as soon as practicable after the depositary bank receives the materials from us. In order to validly exercise its voting rights, the holder of ADSs must complete, sign and return to the depositary bank the voting instruction form by a date specified by the depositary bank. Additional or different candidates may be nominated at the meeting of the shareholders than those proposed in the list provided by us and after the depositary bank has mailed the voting instruction form to the holders. If such change were to occur, the depositary bank may calculate the votes according to procedures not inconsistent with the provisions of the Deposit Agreement, but shall not exercise any discretion regarding the holders' voting rights.

Subject to the provisions described in the second succeeding paragraph, which will apply to the election of directors and supervisors, if persons together holding at least 51% of the ADSs outstanding at the relevant record date instruct the depositary bank to vote in the same manner in respect of one or more resolutions to be proposed at the meeting (other than the election of directors or supervisors), the depositary bank will notify the instructions to the chairman of our board of directors or a person he may designate. The depositary bank will appoint the chairman or his designated person to serve as the voting representative of the depositary bank or its nominee and the holders. The voting representative will attend such meeting and vote all the common shares represented by ADSs to be voted in the manner so instructed by such holders in relation to such resolution or resolutions.

If, for any reason, the depositary bank has not by the date specified by it received instructions from persons together holding at least 51% of all the ADSs outstanding at the relevant record date to vote in the same manner in respect of any resolution specified in the agenda for the meeting (other than the election of directors or supervisors), then the holders will be deemed to have instructed the depositary bank or its nominee to authorize and appoint the voting representative as the representative of the depositary bank and the holders to attend such meeting and vote all the common shares represented by all ADSs as the voting representative deems appropriate with respect to such resolution or resolutions, which may not be in your interests; provided, however, that the depositary bank or its nominee will not give any such authorization and appointment unless it has received an opinion of ROC counsel addressed to the depositary bank and in form and substance satisfactory to the depositary bank, at its sole expense, to the effect that, under ROC law (i) the deposit agreement is valid, binding and enforceable against us and the holders and (ii) the depositary bank will not be deemed to be authorized to exercise any discretion when voting in accordance with the deposit agreement and will not be subject to any potential liability for losses arising from such voting. We and the depositary bank will take such actions, including amendment of the provisions of the deposit agreement relating to voting of common shares, as we deem appropriate to endeavor to provide for the exercise of voting rights attached to the common shares at shareholders' meetings in a manner consistent with applicable ROC law.

The depositary bank will notify the voting representative of the instructions for the election of directors and supervisors received from holders and appoint the voting representative as the representative of the depositary bank

and the owners to attend such meeting and vote the common shares represented by ADSs as to which the depositary bank has received instructions from holders for the election of directors and supervisors, subject to any restrictions imposed by ROC law and our articles of incorporation. Holders who by the date specified by the depositary bank have not delivered instructions to the depositary bank will be deemed to have instructed the depositary bank to authorize and appoint the voting representative as the representative of the depositary bank or its nominee and the holders to attend such meeting and vote all the common shares represented by ADSs as to which the depositary bank has not received instructions from the holders for the election of directors and supervisors as the voting representative deems appropriate, which may not be in your best interests. Candidates standing for election as representatives of a shareholder may be replaced by such shareholder prior to the meeting of the shareholders, and the votes cast by the holders for such candidates shall be counted as votes for their replacements.

By accepting and continuing to hold ADSs or any interest therein, the holders will be deemed to have agreed to the voting provisions set forth in the deposit agreement, as such provisions may be amended from time to time to comply with applicable ROC law.

There can be no assurance that the holders will receive notice of shareholders' meetings sufficiently prior to the date established by the depositary bank for receipt of instructions to enable you to give voting instructions before the cutoff date.

Taxation

ROC Taxation

The following is a general summary of the principal ROC tax consequences of the ownership and disposition of ADSs representing common shares to a non-resident individual or entity. It applies only to a holder that is:

- an individual who is not an ROC citizen, who owns ADSs and who is not physically present in the ROC for 183 days or more during any calendar year; or

- a corporation or a non-corporate body that is organized under the laws of a jurisdiction other than the ROC for profit-making purposes and has no fixed place of business or other permanent establishment in the ROC.

Holders of ADSs are urged to consult their own tax advisors as to the particular ROC tax consequences of owning the ADSs which may affect them.

Dividends. Dividends declared by us out of our retained earnings and distributed to the holders are subject to ROC withholding tax, currently at the rate of 20%, on the amount of the distribution in the case of cash dividends or on the par value of the common shares in the case of stock dividends. However, a 10% ROC retained earnings tax paid by us on our undistributed after-tax earnings, if any, would provide a credit of up to 10% of the gross amount of any dividends declared out of those earnings that would reduce the 20% ROC tax imposed on those distributions.

Dividends paid by us out of our capital reserves are not subject to ROC withholding tax. However, due to the fact that a tax ruling confirming the foregoing was removed from the government tax publication, a question arises as to whether dividends paid out of capital reserve are free from ROC withholding tax. The ROC tax authority is currently studying the issue.

Capital Gains. Under ROC law, capital gains on transactions in the common shares are currently exempt from income tax. In addition, transfers of ADSs by non-resident holders are not regarded as a sale of an ROC security and, as a result, any gains on such transactions are not subject to ROC income tax.

Subscription Rights. Distributions of statutory subscription rights for common shares in compliance with ROC law are not subject to any ROC tax. Proceeds derived from sales of statutory subscription rights evidenced by securities are exempted from income tax but are subject to securities transaction tax at the rate of 0.3% of the gross amount received. Proceeds derived from sales of statutory subscription rights that are not evidenced by securities are subject to capital gains tax at the rate of:

- 35% of the gains realized if you are a natural person; or

- 25% of the gains realized if you are an entity that is not a natural person.

Subject to compliance with ROC law, we, at our sole discretion, can determine whether statutory subscription rights shall be evidenced by issuance of securities.

Securities Transaction Tax. A securities transaction tax, at the rate of 0.3% of the gross amount received, will be withheld upon a sale of common shares in the ROC. Transfers of ADSs are not subject to ROC securities transaction tax. Withdrawal of common shares from the deposit facility is not subject to ROC securities transaction tax.

Estate and Gift Tax. ROC estate tax is payable on any property within the ROC of a deceased who is an individual, and ROC gift tax is payable on any property within the ROC donated by any such person. Estate tax is currently payable at rates ranging from 2% of the first NT$600,000 to 50% of amounts over NT$100,000,000. Gift tax is payable at rates ranging from 4% of the first NT$600,000 to 50% of amounts over NT$45,000,000. Under ROC estate and gift tax laws, common shares issued by ROC companies are deemed located in the ROC regardless of the location of the holder. It is unclear whether a holder of ADSs will be considered to hold common shares for this purpose.

Tax Treaty. The ROC does not have a double taxation treaty with the United States. On the other hand, the ROC has double taxation treaties with Indonesia, Singapore, South Africa, Australia, Vietnam, New Zealand, Malaysia, Macedonia, Swaziland, Gambia and The Netherlands, which may limit the rate of ROC withholding tax on dividends paid with respect to common shares in ROC companies. It is unclear whether the holders will be considered to hold common shares for the purposes of these treaties. Accordingly, if the holders may otherwise be entitled to the benefits of the relevant income tax treaty, the holders should consult their tax advisors concerning their eligibility for the benefits with respect to the ADSs.

United States Federal Income Taxation

This section discusses the material United States federal income tax consequences of owning and disposing of our ADSs. It applies to you only if you hold your ADSs as capital assets for tax purposes. This section does not apply to you if you are a member of a special class of holders subject to special rules, including:

- dealers in securities;

- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;

- tax-exempt organizations;

- life insurance companies;

- persons liable for alternative minimum tax;

- persons that actually or constructively own 10% or more of our voting stock;

- persons that hold ADSs as part of a straddle or a hedging or conversion transaction; or

- persons whose functional currency is not the U.S. dollar.

This section is based on the Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations, published rulings and court decisions, all as currently in effect. These laws are subject to change, possibly on a retroactive basis. In addition, this section is based in part upon the representations of the depositary and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms. In general, for United States federal income tax purposes, if you hold ADRs evidencing ADSs, you will be treated as the owner of the shares represented by those ADSs. Exchanges of shares for ADSs, and ADSs for shares, generally will not be subject to United States federal income tax.

You are a U.S. holder if you are a beneficial owner of ADSs and you are:

- a citizen or resident of the United States;
- an entity organized under the laws of the United States, or any political subdivision thereof, which is taxable as a corporation;
- an estate whose income is subject to United States federal income tax regardless of its source; or
- a trust if a United States court can exercise primary supervision over the trust's administration and one or more United States persons are authorized to control all substantial decisions of the trust.

This discussion addresses only United States federal income taxation of U.S. holders.

You should consult your own tax advisor regarding the United States federal, state and local tax consequences of owning and disposing of ADSs in your particular circumstances.

Taxation of Dividends

Subject to the passive foreign investment company rules discussed below, if you are a U.S. holder, you must include in your gross income the gross amount of any dividend paid by us in respect of your ADSs out of our current or accumulated earnings and profits (as determined for United States federal income tax purposes) including the amount of any ROC tax withheld reduced by any credit against such withholding tax on account of the 10% retained earnings tax imposed on us. The dividend will be ordinary income that you must include in income when the Depositary receives the dividend. The dividend will not be eligible for the dividends-received deduction generally allowed to United States corporations in respect of dividends received from other United States corporations. The amount of the dividend distribution that you must include in your income as a U.S. holder will be the U.S. dollar value of the NT Dollar payments made, determined at the spot NT/U.S. dollar rate on the date the dividend distribution is includible in your income, regardless of whether the payment is in fact converted into U.S. dollars. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date you include the dividend payment in income to the date you convert the payment into U.S. dollars will be treated as ordinary income or loss. The gain or loss generally will be income or loss from sources within the United States for foreign tax credit limitation purposes. Distributions in excess of current and accumulated earnings and profits, as determined for United States federal income tax purposes, will be treated as a non-taxable return of capital to the extent of your basis in the ADSs and thereafter as capital gain.

Subject to generally applicable limitations and restrictions, the ROC taxes withheld from dividend distributions and paid over to the ROC (reduced by any credit against such withholding tax on account of the 10% retained earnings tax) will be eligible for credit against your U.S. federal income tax liabilities. Dividends paid will generally constitute "passive income" or, in the case of some U.S. financial services providers, "financial services income," which is treated separately from other types of income for purposes of computing the foreign tax credit allowable to you.

Pro rata distributions of common shares by us to holders of ADSs will generally not be subject to U.S. federal income tax. Accordingly, such distributions will generally not give rise to U.S. federal income against which the ROC tax imposed on such distributions may be credited. Any such ROC tax will generally only be creditable against a U.S. holder's U.S. federal income tax liability with respect to "general limitation income" and not "passive income" or "financial services income," subject to generally applicable conditions and limitations.

In the event that the ex-dividend date on the New York Stock Exchange or other securities exchange or market for a dividend or distribution that gives rise to ROC withholding tax is after the record date for such dividend or distribution (during which period such ADSs may trade with "due bills"), a purchaser of ADSs during the period from the record date to the ex-dividend date likely would not be entitled to a foreign tax credit for ROC taxes paid in respect of such ADSs even if (i) the purchaser receives the equivalent of such dividend or distribution on the relevant distribution date, and (ii) an amount equivalent to the applicable ROC withholding tax is withheld therefrom or otherwise charged to the account of such purchaser.

Taxation of Capital Gains

Subject to the passive foreign investment company rules discussed below, if you are a U.S. holder and you sell or otherwise dispose of your ADSs, you will recognize capital gain or loss for United States federal income tax purposes equal to the difference between the U.S. dollar value of the amount that you realize and your tax basis, determined in U.S. dollars, in your ADSs. Your tax basis in your ADSs will generally be the cost of the ADSs to you. Capital gain of a noncorporate U.S. holder is generally taxed a maximum rate of 20% where the property is held more than one year. The gain or loss will generally be income or loss from sources within the United States for foreign tax credit limitation purposes.

Passive Foreign Investment Company Rules

We believe that ADSs should not be treated as stock of a passive foreign investment company, or PFIC, for United States federal income tax purposes, but this conclusion is a factual determination that is made annually and thus may be subject to change.

In general, if you are a U.S. holder, we will be a PFIC with respect to you if for any taxable year in which you held our ADSs:

- at least 75% of our gross income for the taxable year is passive income; or
- at least 50% of the value, determined on the basis of a quarterly average, of our assets is attributable to assets that produce or are held for the production of passive income.

Passive income generally includes dividends, interest, royalties, rents (other than certain rents and royalties derived in the active conduct of a trade or business), annuities and gains from assets that produce passive income. If a foreign corporation owns directly or indirectly at least 25% by value of the stock of another corporation, the foreign corporation is treated for purposes of the PFIC tests as owning its proportionate share of the assets of the other corporation, and as receiving directly its proportionate share of the other corporation's income.

If we are treated as a PFIC, and you are a U.S. holder that does not make a mark-to-market election, as described below, you will be subject to special rules with respect to:

- any gain you realize on the sale or other disposition of your ADSs; and
- any excess distribution that we make to you (generally, any distributions to you during a single taxable year that are greater than 125% of the average annual distributions received by you in respect of the ADSs during the three preceding taxable years or, if shorter, your holding period for the ADSs).

Under these rules:

- the gain or excess distribution will be allocated ratably over your holding period for the ADSs,
- the amount allocated to the taxable year in which you realized the gain or excess distribution will be taxed as ordinary income,

- the amount allocated to each prior year, with certain exceptions, will be taxed at the highest tax rate in effect for that year, and

- the interest charge generally applicable to underpayments of tax will be imposed in respect of the tax attributable to each such year.

Special rules apply for calculating the amount of the foreign tax credit with respect to excess distributions by a PFIC.

If you own ADSs in a PFIC that are treated as marketable stock, you may make a mark-to-market election. If you make this election, you will not be subject to the PFIC rules described above. Instead, in general, you will include as ordinary income each year the excess, if any, of the fair market value of your ADSs at the end of the taxable year over your adjusted basis in your ADSs. You will also be allowed to take an ordinary loss in respect of the excess, if any, of the adjusted basis of your ADSs over their fair market value at the end of the taxable year (but only to the extent of the net amount of previously included income as a result of the mark-to-market election). Your basis in the ADSs will be adjusted to reflect any such income or loss amounts. Your gain, if any, recognized upon the sale of your ADSs will be taxed as ordinary income.

If you own ADSs during any year that we are a PFIC, you must file Internal Revenue Service Form 8621.

Documents on Display

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended. In accordance with these requirements, we file reports and other information with the Securities and Exchange Commission. These materials, including this annual report and the exhibits thereto, may be inspected and copied at the Commission's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Commission's Public Reference Room by calling the Commission in the United States at 1-800-SEC-0330. The Commission also maintains a web site at http://www.sec.gov that contains reports, proxy statements and other information regarding registrants that file electronically with the Commission. In addition, material filed by us can be inspected at the offices of the New York Stock Exchange at 20 Broad Street, New York, New York 10005.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

Our exposure to financial market risks derives primarily from changes in interest rates and foreign exchange rates. To mitigate these risks, we utilize derivative financial instruments, the application of which, pursuant to our internal guidelines, is primarily for hedging purposes and not for speculative purposes.

Interest Rate Risks: Our exposure to interest rate risks relates primarily to our long-term debts, which are normally assumed to finance our capital expenditures.

The table below presents annual principal amounts due and related weighted average implied forward interest rates by year of maturity for our debt obligations outstanding as of December 31, 2001.

	2002	2003	2004	2005	2006 and thereafter
		(in millions, except percentages)			
Long-term debt					
US$-denominated debt					
Variable rate	—	US$200	—	US$440	—
Average interest rate	—%	4.54%	—%	5.53%	—%
NT$-denominated debt					
Fixed rate	NT$5,000	NT$4,000	NT$5,000	NT$10,500	NT$4,500
Average interest rate	5.67%	7.71%	5.95%	5.25%	5.36%
Interest rate swaps					
Fixed rate	—	NT$5,000	—	—	—
Average interest rate	—	7.23%	—%	—%	—%

Foreign Currency Risk: Substantial portions of our revenues and expenses are denominated in currencies other than the NT dollar. As of December 31, 2001, approximately 70% of our accounts payable and payables for purchases of capital goods were denominated in currencies other than the NT dollar, primarily in U.S. dollars, Japanese yen and Euros. More than 88% of our accounts receivable and receivables from related parties were denominated in non-NT dollars, mainly in U.S. dollars. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign exchange rates, we utilize derivative financial instruments, mainly currency forward contracts, to hedge our currency exposure. These hedging transactions help to reduce, but do not eliminate, the impact of foreign currency exchange rate movements. Our policy is to account for these contracts on a mark-to-market rate basis and the premiums or discounts are amortized on a straight-line basis over the life of the contract. Please see note 20 of our consolidated financial statements for information on the net assets, liabilities and purchase commitments that have been hedged by these derivative transactions.

The table below presents our outstanding financial derivative transactions as of December 31, 2001. These contracts all have a maturity date of not more than 12 months.

Foreign Currency Forward Exchange Contracts

Hedging assets/liabilities	
(Sell US$/buy NT$)	(in thousands)
Contract amount	US$17,900
Average contractual exchange rate (against NT dollars)	34.67
(Sell US$/buy NT$)	
Contract amount	US$783,000
Average contractual exchange rate (against NT dollars)	34.50

Currency Options

Type	Option	Contract Amount (in thousands)	Range of Exchange Rate	Fair Value (in thousands)	Maturity
Buy	Euro Put	EUR 293,000	0.894~0.934	NT$252,800	Jan - Feb 2002

Other Market Risk. In addition to our interests in our joint ventures, we have made investments in debt and equity securities issued by a significant number of private companies related to semiconductor and other technology industries along with a number of investment funds. As of December 31, 2001, the aggregate carrying value of these investments on our balance sheet was NT$5,001 million (US$143 million). A portion of this amount was invested in shares of three investment funds, which had an aggregate carrying value as of December 31, 2001 of NT$1,062 million (US$30 million). As of December 31, 2001, we have invested approximately NT$3,440 million (US$98 million) of this amount in venture capital investments, typically in private companies, through InveStar Semiconductor

Development Fund, Inc. and InveStar Semiconductor Development Fund (II), Inc., our two 97% owned subsidiaries and Emerging Alliance Fund L.L.P., our 99.5% owned subsidiary. The carrying value of these investments in private companies and in the investment funds are subject to fluctuation based on many factors such as prevailing market conditions. Moreover, because these are investments in unlisted securities, the fair market value may be significantly different from our carrying value. Upon any subsequent sale of our investments, we may not be able to realize our carrying value as of December 31, 2001 or any subsequent date. As of December 31, 2001, we also had NT$1,398 million (US$40 million) in short-term investments in listed stocks.

See "Item 3. Key Information — Exchange Rates" for a summary of the movement between the NT dollar and the U.S. dollar during recent years.

Item 12. Description of Securities Other than Equity Securities

Not applicable.

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15. (Reserved)

Item 16. (Reserved)

Item 17. Financial Statements

The Company has elected to provide the financial statements and related information specified in Item 18 in lieu of Item 17.

Item 18. Financial Statements

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Item 19. Exhibits

(a) See Item 18 for a list of the financial statements filed as part of this annual report.

(b) Exhibits to this Annual Report:

3.1 Articles of Incorporation of Taiwan Semiconductor Manufacturing Company Limited, as amended and restated on May 7, 2002.

3.2 Rules for Election of Directors and Supervisors, as amended and restated on May 7, 2002.

3.3 Rules and Procedures of Shareholders' Meetings, as amended and restated on May 7, 2002.

*4.1 Land Lease with Tainan Science Park Administration relating to the fabs located in Tainan Science Park (effective August 1, 1997 to July 31, 2017) (in Chinese with English summary)

*4.2 Land Lease with Tainan Science Park Administration relating to the fabs located in Tainan Science Park (effective May 1, 1998 to April 30, 2018) (in Chinese with English summary)

*4.3 Land Lease with Tainan Science Park Administration relating to the fabs located in Tainan Science Park (effective November 1, 1999 to October 31, 2019) (in Chinese with English summary)

4.4 Land Lease with Hsinchu Science Park Administration relating to Fab 7 (effective December 4, 1989 to December 3, 2009) (in Chinese with English summary)

4.5 Land Lease with Hsinchu Science Park Administration relating to the Fab 7 (effective July 1, 1995 to June 30, 2015) (in Chinese with English summary)

4.6 Land Lease with Hsinchu Science Park Administration relating to Fab. 8. (effective March 15, 1997 to March 14, 2017) (in Chinese with English summary)

*4.7 Land Lease with Hsinchu Science Park Administration relating to Fab 12 (Phase I), (effective December 1, 1999 to November 30, 2019) (in Chinese with English summary)

8.1 List of the subsidiaries of TSMC

99.1 Consent of T N Soong & Co.

* Previously filed in TSMC's annual report on Form 20-F for the fiscal year ended December 31, 1999, filed by TSMC on June 29, 2000.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant certifies that it meets all the requirements for filing on Form 20-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized, in Hsinchu, Taiwan, Republic of China.

Date: May 9, 2002

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED

By: /s/ Harvey H.W. Chang
Name: Harvey H.W. Chang
Title: Senior Vice President and Chief Financial Officer

EXHIBIT INDEX

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Taiwan Semiconductor Manufacturing Company Limited and Subsidiaries

Consolidated Financial Statements as of December 31, 2000 and 2001

Together with Independent Auditors' Report

Independent Auditors' Report

To the Shareholders of
Taiwan Semiconductor Manufacturing Company Limited

We have audited the accompanying consolidated balance sheets of Taiwan Semiconductor Manufacturing Company Limited (a Republic of China corporation) and subsidiaries as of December 31, 2000 and 2001, and the related consolidated statements of income, changes in shareholders' equity and cash flows for the years ended December 31, 1999, 2000 and 2001, all expressed in New Taiwan dollars. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the Republic of China and the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Taiwan Semiconductor Manufacturing Company Limited and subsidiaries as of December 31, 2000 and 2001, and the results of their operations and their cash flows for the years ended December 31, 1999, 2000, and 2001, in conformity with generally accepted accounting principles in the Republic of China.

Certain accounting practices of the Company used in preparing the accompanying consolidated financial statements conform with generally accepted accounting principles in the Republic of China, but do not conform with accounting principles generally accepted in the United States of America. A description of these differences and the adjustments required to reconcile net income and shareholders' equity to accounting principles generally accepted in the United States of America are set forth in Note 23.

/s/ T N Soong & Co.

T N Soong & Co
Associate Member Firm of Deloitte Touche Tohmatsu effective April 22, 2002
Former Member Firm of Andersen Worldwide, S.C.
Taipei, Taiwan
Republic of China
April 23, 2002

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
(In Millions of New Taiwan and U.S Dollars, Except Shares)

	Notes	December 31, 2000	December 31, 2001	
		NT$	NT$	U.S.$ (Note 3)
ASSETS				
CURRENT ASSETS				
Cash and cash equivalents	2B,4	38,840.2	37,556.3	1,073.0
Short-term investments	2C,5	1,502.1	1,398.1	39.9
Receivables – net	2D,2E,6	27,055.5	16,452.2	470.1
Receivable from related parties	18	948.7	494.7	14.1
Inventories – net	2F,7	12,785.7	9,828.3	280.8
Deferred income tax assets- net	2M,16	8,178.0	2,350.1	67.2
Prepaid expenses and other current assets	18,20	3,034.6	2,721.4	77.8
Total Current Assets		92,344.8	70,801.1	2,022.9
LONG-TERM INVESTMENTS	2G,8	10,663.8	11,599.2	331.4
PROPERTY, PLANT AND EQUIPMENT - NET	2H,9,18	244,747.9	251,287.6	7,179.6
GOODWILL	2I	11,531.0	11,437.6	326.8
OTHER ASSETS				
Deferred income tax assets – net	2M,16	6,629.8	16,245.8	464.1
Deferred charges – net	2J,10	3,335.7	3,769.8	107.7
Refundable deposits	18,19	979.1	784.1	22.4
Assets leased to others	2H	625.6	555.1	15.9
Miscellaneous		28.3	37.4	1.1
Total Other Assets		11,598.5	21,392.2	611.2
TOTAL ASSETS		370,886.0	366,517.7	10,471.9
LIABILITIES AND SHAREHOLDERS' EQUITY				
CURRENT LIABILITIES				
Short-term bank loans	11	3,833.8	6,269.2	179.1
Accounts payable		8,507.8	1,397.9	39.9
Payable to related parties	18	2,606.3	1,048.3	30.0
Payables to contractors and equipment suppliers		25,550.3	12,867.2	367.6
Current portion of long-term liabilities	13	-	5,000.0	142.9
Accrued expenses and other current liabilities	20	6,926.8	6,746.4	192.8
Total Current Liabilities		47,425.0	33,329.0	952.3
LONG-TERM LIABILITIES				
Long-term bank loans	12	23,339.4	22,399.3	640.0
Long-term bonds payable	13,22	29,000.0	24,000.0	685.7
Total Long-term Liabilities		52,339.4	46,399.3	1,325.7

OTHER LIABILITIES				
Accrued pension cost	2K,15	1,511.3	1,856.6	53.0
Deferred gain on sale – leaseback	2L	434.2	268.2	7.6
Guarantee deposits	19	7,086.4	7,212.7	206.1
Others		14.3	141.5	4.1
Total Other Liabilities		9,046.2	9,479.0	270.8
Total Liabilities		108,810.6	89,207.3	2,548.8
Minority Interest in Subsidiaries	2A	321.7	120.2	3.4
SHAREHOLDERS' EQUITY	2G,2H, 2Q,14			
Capital stock – $10 par value				
Authorized : 17,800,000 thousand and 24,600,000 thousand shares in 2000 and 2001, respectively				
Issued:				
Preferred stock – 1,300,000 thousand shares in 2000 and 2001		13,000.0	13,000.0	371.4
Common stock – 11,689,365 thousand and 16,832,554 thousand shares in 2000 and 2001, respectively		116,893.7	168,325.6	4,809.3
Capital surplus		57,089.0	57,128.4	1,632.3
Retained earnings		75,121.0	37,507.5	1,071.6
Unrealized loss on long-term investments		(71.6)	-	-
Cumulative translation adjustments		(278.4)	1,228.7	35.1
Total Shareholders' Equity		261,753.7	277,190.2	7,919.7
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		370,886.0	366,517.7	10,471.9

The accompanying notes are an integral part of the consolidated financial statements.

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME
(In Millions of New Taiwan and U.S Dollars, Except Shares and Earnings Per Share)

	Notes	Year Ended December 31, 1999	2000	2001	
		NT$	NT$	NT$	US$ (Note 3)
NET SALES	2E,18,21	76,305.1	166,197.6	125,884.9	3,596.7
COST OF SALES	18	45,212.6	87,609.6	92,228.1	2,635.1
GROSS PROFIT		31,092.5	78,588.0	33,656.8	961.6
OPERATING EXPENSES					
Research and development	18	4,115.6	7,203.6	10,649.0	304.2
General and administrative	18	2,845.3	7,408.1	7,939.9	226.9
Marketing	2O	1,861.6	2,681.6	2,290.1	65.4
Total Operating Expenses		8,822.5	17,293.3	20,879.0	596.5
INCOME FROM OPERATIONS		22,270.0	61,294.7	12,777.8	365.1
NON-OPERATING INCOME					
Gain on sales of short-term investments-net		48.6	1,060.9	1,619.1	46.2
Interest		1,114.5	1,679.7	1,486.7	42.5
Royalty income	19	-	524.2	1,301.6	37.2
Insurance compensation - net		184.6	1,623.8	860.8	24.6
Premium income – net	2N,20	-	8.2	234.7	6.7
Gain on sales of long-term investments - net	2G	67.8	15.1	105.4	3.0
Technical service income	18	-	138.5	55.1	1.6
Gain on sales of property, plant, and equipment	2H	4.0	62.9	52.4	1.5
Reversal of allowance for losses on short-term investment – net		140.1	0.7	-	
Foreign exchange gain – net	2P	-	828.0	-	-
Other	18,20	58.9	177.8	759.8	21.7
Total Non-Operating Income		1,618.5	6,119.8	6,475.6	185.0
NON-OPERATING EXPENSES					
Investments loss recognized by equity method – net	2G,8	288.5	187.2	3,959.0	113.1
Interest	9,20	2,417.0	2,717.0	3,144.1	89.8
Foreign exchange loss – net	2P	119.1	-	695.6	19.9
Loss on sales of property, plant, and equipment	2H	164.4	114.7	235.6	6.7
Amortization of issuance costs of bonds		114.8	32.7	12.5	0.4
Premium expenses - net	2N,20	23.0	-	-	-
Permanent loss on long - term investments	2G	31.6	-	-	-
Other		101.8	461.4	420.1	12.0
Total Non-Operating Expenses		3,260.2	3,513.0	8,466.9	241.9
INCOME BEFORE INCOME TAX		20,628.3	63,901.5	10,786.5	308.2

INCOME TAX BENEFIT	2M,16	2,382.8	1,167.9	3,740.7	106.9
INCOME BEFORE MINORITY INTEREST		23,011.1	65,069.4	14,527.2	415.1
MINORITY INTEREST IN LOSS (INCOME) OF SUBSIDIARIES	2A	515.9	36.8	(44.0)	(1.3)
NET INCOME		23,527.0	65,106.2	14,483.2	413.8
EARNINGS PER SHARE		1.57	3.97	0.83	0.02
EARNINGS PER EQUIVALENT ADS	2S	7.85	19.85	4.17	0.12
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	2S	14,980,398,000	16,417,270,000	16,832,553,051	

The accompanying notes are an integral part of the consolidated financial statements.

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(In Millions of New Taiwan Dollars Except Shares and Par Value)

	CAPITAL STOCK (NT$10 PAR VALUE)										
	Authorized	Preferred Stock		Common Stock		Subscribed	CAPITAL	RETAINED	UNREALIZED LOSS ON LONG-TERM	CUMULATIVE TRANSLATION	TOTAL SHAREHOLDERS'
	Shares	Shares	Amount	Shares	Amount	Capital	SURPLUS	EARNINGS	INVESTMENTS	ADJUSTMENTS	EQUITY
			NT$		NT$	NT$	NT$	NT$	NT$	NT$	NT$
BALANCE, JANUARY 1, 1999	8,500,000,000	-	-	6,647,175,967	66,471.8	-	7,284.2	23,256.7	-	(727.4)	96,285.3
Increase in authorized shares	600,000,000	-	-	-	-	-	-	-	-	-	-
Appropriations of prior year's earnings											
Stock dividends – 23%	-	-	-	1,390,850,473	13,908.5	-	-	(13,908.5)	-	-	-
Bonus to employees – stock	-	-	-	110,456,595	1,104.6	-	-	(1,104.6)	-	-	-
Bonus to directors and supervisors	-	-	-	-	-	-	-	(138.1)	-	-	(138.1)
Issuance of shares on April 15, 1999	-	-	-	250,000,000	2,500.0	-	5,000.0	-	-	-	7,500.0
Subscribed capital	-	-	-	-	-	13,118.0	-	-	-	-	13,118.0
Net income in 1999	-	-	-	-	-	-	-	23,527.1	-	-	23,527.1
Conversion of foreign bonds	-	-	-	122,398,682	1,223.9	-	11,290.0	-	-	-	12,513.9
Gain on sale of properties	-	-	-	-	-	-	4.0	(4.0)	-	-	-
Gain on sale of properties from investees	-	-	-	-	-	-	246.2	(246.2)	-	-	-
Adjustments arising from changes in ownership percentage in investees	-	-	-	-	-	-	127.0	-	-	-	127.0
Translation adjustments	-	-	-	-	-	-	-	-	-	(362.7)	(362.7)
BALANCE, DECEMBER 31, 1999	9,100,000,000	-	-	8,520,881,717	85,208.8	13,118.0	23,951.4	31,382.4	-	(1,090.1)	152,570.5
Increase in authorized shares	8,700,000,000	-	-	-	-	-	-	-	-	-	-
Appropriations of prior year's earnings											
Stock dividends – 25.55%	-	-	-	1,959,910,279	19,599.1	-	-	(19,599.1)	-	-	-
Bonus to employees – stock	-	-	-	172,120,825	1,721.2	-	-	(1,721.2)	-	-	-
Bonus to directors and supervisors	-	-	-	-	-	-	-	(215.2)	-	-	(215.2)
Capital transferred from capital surplus – 2.45%	-	-	-	187,936,602	1,879.4	-	(1,879.4)	-	-	-	-
Issuance of shares on January 28, 2000	-	-	-	300,000,000	3,000.0	(13,118.0)	12,000.0	-	-	-	1,882.0

(Forward)

	CAPITAL STOCK (NT$10 PAR VALUE)								UNREALIZED LOSS ON		
	Authorized	Preferred Stock		Common Stock		Subscribed	CAPITAL	RETAINED	LONG-TERM	CUMULATIVE TRANSLATION	TOTAL SHAREHOLDERS'
	Shares	Shares	Amount	Shares	Amount	Capital	SURPLUS	EARNINGS	INVESTMENTS	ADJUSTMENTS	EQUITY
			NT$		NT$	NT$	NT$	NT$	NT$	NT$	NT$
Issuance of shares on June 8, 2000	-	-	-	115,000,000	1,150.0	-	23,172.6	-	-	-	24,322.6
Issuance of shares for the acquisition of TASMC on June 30, 2000	-	-	-	433,515,164	4,335.2	-	52,225.0	-	-	-	56,560.2
Elimination TASMC goodwill against capital surplus	-	-	-	-	-	-	(52,212.7)	-	-	-	(52,212.7)
Issuance of preferred stocks on November 29, 2000	-	1,300,000,000	13,000.0	-	-	-	-	-	-	-	13,000.0
Net income in 2000	-	-	-	-	-	-	-	65,106.2	-	-	65,106.2
Gain on sale of properties	-	-	-	-	-	-	58.2	(58.2)	-	-	-
Gain on sale of properties from investees	-	-	-	-	-	-	5.5	(5.5)	-	-	-
Adjustments arising from changes in shareholder's equity of in investees	-	-	-	-	-	-	(231.6)	231.6	-	-	-
Unrealized loss on long-term investments	-	-	-	-	-	-	-	-	(71.6)	-	(71.6)
Translation adjustments	-	-	-	-	-	-	-	-	-	811.7	811.7
BALANCE, DECEMBER 31, 2000	17,800,000,000	1,300,000,000	13,000.0	11,689,364,587	116,893.7	-	57,089.0	75,121.0	(71.6)	(278.4)	261,753.7
Increase in authorized shares	6,800,000,000	-	-	-	-	-	-	-	-	-	-
Appropriations of prior year's earnings											
Bonus to employees – stock	-	-	-	467,442,629	4,674.4	-	-	(4,674.4)	-	-	-
Cash dividends – preferred shares	-	-	-	-	-	-	-	(41.1)	-	-	(41.1)
Stock dividends – 40%	-	-	-	4,675,745,835	46,757.5	-	-	(46,757.5)	-	-	-
Bonus to directors and supervisors	-	-	-	-	-	-	-	(584.3)	-	-	(584.3)
Net income in 2001	-	-	-	-	-	-	-	14,483.2	-	-	14,483.2
Gain on sales of properties	-	-	-	-	-	-	39.3	(39.3)	-	-	-
Gain on sales of properties from investees	-	-	-	-	-	-	0.1	(0.1)	-	-	-
Reversal of unrealized losses on long term investments	-	-	-	-	-	-	-	-	71.6	-	71.6
Translation adjustments	-	-	-	-	-	-	-	-	-	1,507.1	1,507.1
BALANCE, DECEMBER 31, 2001	24,600,000,000	1,300,000,000	$ 13,000.0	16,832,553,051	$ 168,325.6	$ -	$ 57,128.4	$ 37,507.5	$ -	$ 1,228.7	$ 277,190.2

The accompanying notes are an integral part of the consolidated financial statements

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Millions of New Taiwan and U.S. Dollars)

	Year Ended December 31,			
	1999	2000	2001	
	NT$	NT$	NT$	U.S.$ (Note 3)
CASH FLOWS FROM OPERATING ACTIVITIES				
Net income	23,527.0	65,106.2	14,483.2	413.8
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization	25,197.9	41,446.1	55,323.0	1,580.6
Deferred income taxes	(2,481.8)	(956.1)	(3,788.1)	(108.2)
Equity in net losses of investee companies - net	288.5	187.2	3,959.0	113.1
Gain on sales of long-term investments - net	(67.8)	(15.1)	(105.4)	(3.0)
Loss on sales of property, plant and equipment - net	160.4	51.8	183.2	5.2
Reversal of provision for losses on short-term investments - net	-	-	(13.2)	(0.4)
Permanent loss on long-term investments	31.6	-	-	-
Accretion in redemption value of bonds	585.6	-	-	-
Accrued pension cost	260.4	370.3	345.3	9.9
Allowance for doubtful receivables	148.6	524.5	153.8	4.4
Allowance for sales returns and others	402.1	1,679.3	123.3	3.5
Transfer property into expenses	39.1	-	-	-
Minority interest in income (loss) of subsidiaries	(515.9)	(36.8)	44.0	1.3
Changes in operating assets and liabilities				
Forward exchange contract receivable	-	(113.7)	49.5	1.4
Receivables	(6,391.8)	(15,428.2)	10,326.2	295.0
Receivable from related party	(273.2)	(737.1)	454.0	13.0
Inventories – net	(2,765.2)	(4,033.8)	2,957.4	84.5
Prepaid expenses and other current assets	(1,278.1)	352.0	202.3	5.8
Accounts payables	985.9	3,170.7	(7,109.9)	(203.1)
Payable to related parties	878.4	2,334.2	(1,558.0)	(44.5)
Forward exchange contract payables	6.1	(987.6)	218.1	6.2
Accrued expenses and other current liabilities	1,514.9	1,872.3	(430.0)	(12.3)
Net Cash Provided by Operating Activities	40,252.7	94,786.2	75,817.7	2,166.2
CASH FLOWS FROM INVESTING ACTIVITIES				
Decrease (increase) in short-term investments	5,049.7	(524.1)	117.1	3.4
Acquisitions of:				
Long-term investments	(10,057.9)	(2,956.8)	(5,120.6)	(146.3)
Property, plant and equipment	(51,459.1)	(103,761.9)	(70,201.2)	(2,005.8)
Proceeds from sales of:				
Long-term investments	150.0	49.4	559.1	16.0
Property, plant and equipment	413.1	364.9	301.4	8.6
Decrease in restricted cash	7.2	-	-	-
Decrease (increase) in pledge time deposits	(2,290.0)	3,161.7	-	-
Increase in deferred charges	(1,179.3)	(1,793.2)	(1,805.2)	(51.6)

Decrease (increase) in refundable deposits	61.4	(915.6)	195.0	5.6
Decrease (increase) in other assets-miscellaneous	13.5	77.4	(9.1)	(0.3)
Decrease in minority interest in subsidiaries	(1,660.8)	(7,165.7)	(249.2)	(7.1)
Increase in goodwill	-	(8,221.2)	(1,019.2)	(29.1)
Cash of TASMC and WSMC as of July 1, 2000	-	736.6	-	-
Net Cash Used in Investing Activities	(60,952.2)	(120,948.5)	(77,231.9)	(2,206.6)
CASH FLOWS FROM FINANCING ACTIVITIES				
Proceeds from:				
Short-term bank loans	2,917.4	-	2,435.4	69.6
Long-term bank loans	7,997.6	-	-	-
Issuance of:				
Long-term bonds	9,450.6	9,000.0	-	-
Capital stock	20,618.0	39,204.5	-	-
Payments on:				
Short-term bank loans	-	(8,592.8)	-	-
Commercial paper	(253.4)	(4,241.0)	-	-
Long-term bank loans	-	(2,648.9)	(940.1)	(26.8)
Increase (decrease) in guarantee deposits and other liabilities	(1,010.4)	2,977.9	75.0	2.1
Issuance costs of financing	(63.3)	(118.3)	(47.7)	(1.4)
Cash dividends paid on preferred shares	-	-	(41.1)	(1.2)
Bonus to directors and supervisors	(138.1)	(215.1)	(584.3)	(16.7)
Net Cash Provided by Financing Activities	39,518.4	35,366.3	897.2	25.6
EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATE	(173.1)	118.5	(766.9)	(21.9)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	18,645.8	9,322.5	(1,283.9)	(36.7)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	10,871.9	29,517.7	38,840.2	1,109.7
CASH AND CASH EQUIVALENTS, END OF YEAR	29,517.7	38,840.2	37,556.3	1,073.0
SUPPLEMENTAL INFORMATION				
Interest paid (excluding the amounts capitalized)	2,441.8	4,036.2	3,468.1	99.1
Income tax paid	594.1	96.5	20.8	0.6
Noncash investing and financing activities:				
Effect of exchange rate changes on cash	(66.4)	1,009.3	1,258.4	36.0
Current portion of long-term liabilities	1.0	51.1	5,001.1	142.9

The accompanying notes are an integral part of the consolidated financial statements.

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED
AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. GENERAL

Taiwan Semiconductor Manufacturing Company Limited (TSMC), a Republic of China (ROC) corporation, is engaged mainly in the manufacture, sale, packaging, testing and design of integrated circuits and other semiconductor devices, and the manufacture of masks. TSMC was incorporated as a venture among the government of the ROC, acting through the Development Fund of the Executive Yuan; Philips Electronics N.V. and certain of its affiliates (Philips); and certain other private investors. In September 1994, its shares were listed on the Taiwan Stock Exchange. In October 1997, TSMC listed its shares of stock on the New York Stock Exchange in the form of American Depositary Shares.

TSMC had acquired TSMC-Acer Semiconductor Manufacturing Corporation (TASMC). It also merged with Worldwide Semiconductor Manufacturing Corporation (WSMC) with TSMC as the surviving company. TASMC and WSMC were subsequently dissolved. The acquisition of the 68% of TASMC not previously owned and the merger with WSMC took effect on June 30, 2000, and, on that date, TSMC issued a total of 1,583,515 thousand common shares to the former shareholders of TASMC and WSMC. The additional shares issued were based on the agreed exchange ratio of three point nine TASMC shares and two WSMC shares for every share of TSMC. Also, the holders of the additional shares issued have the same rights and the obligation as the holders of the previously issued common stock of TSMC.

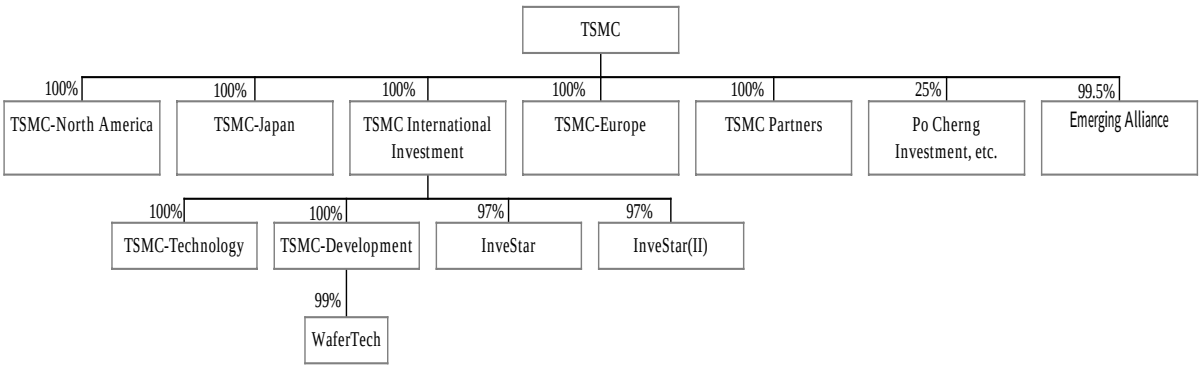
TASMC was incorporated on March 31, 1990, and commenced operations in January 1992. TASMC was engaged mainly in the research, development, design, manufacturing, packaging, testing and sale of dynamic random-access memory (DRAM) semiconductor devices, other memory integrated circuits and logic integrated circuits.

WSMC was incorporated on March 6, 1996 and commenced operations on December 1, 1998. WSMC was engaged mainly in the manufacturing of semiconductor products.

TSMC has five direct wholly-owned subsidiaries, namely, TSMC-North America, Taiwan Semiconductor Manufacturing Company Europe B.V (TSMC-Europe), TSMC-Japan, TSMC International Investment, TSMC Partners, a 99.5% owned subsidiary, Emerging Alliance Fund and several 25% owned affiliates - Po Cherng Investment, Chi Hsin Investment, Kung Cherng Investment, Chi Cherng Investment, Hsin Ruey Investment and Cherng Huei Investment (each company was 25% owned by TSMC and 15% owned evenly by the other five companies). TSMC International Investment has two wholly-owned subsidiaries – TSMC Development, Inc. and TSMC Technology Inc., and two 97%-owned subsidiaries-InveStar Semiconductor Development Fund, Inc. and InveStar Semiconductor Development Fund (II), Inc. which was a new subsidiary in 2000. TSMC Development Inc. has a 99% owned subsidiary, WaferTech, LLC, which has been 57%

owned since its formation, increased to 68% owned in 1998; TSMC Development Inc. acquired an additional 29% and 2% in December 2000, and June 2001, respectively, thereby increasing its proportionate interest to 99% as of December 31, 2001.

The following diagram presents information regarding the relationship and ownership percentages among TSMC and its subsidiaries as of December 31, 2001:



TSMC-North America, TSMC-Europe and TSMC-Japan are engaged mainly in marketing and engineering support activities. Emerging Alliance Fund, TSMC Partners and Po Cherng Investment, etc. are engaged in investments. TSMC International Investment and its subsidiaries are engaged in investing in affairs focused on the design, manufacture, and other related business of semiconductors. WaferTech, LLC. is engaged in the foundry business.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Consolidation

TSMC consolidates the accounts of all majority (directly and indirectly) owned subsidiaries. The consolidated financial statements included, as of December 31, 2000 and 2001 and for the year ended December 31 1999, 2000 and 2001, the accounts of TSMC, TSMC-North America, TSMC-Europe, TSMC-Japan, TSMC Partners, Emerging Alliance Fund (a new entity in 2001), Po Cherng Investment, Chi Hsin Investment, Kung Cherng Investment, Chi Cherng Investment, Hsin Ruey Investment, Cherng Huei Investment, TSMC International Investment and its subsidiaries, InveStar Semiconductor Development Fund, Inc. and InveStar Semiconductor Development Fund (II) Inc., TSMC Development Inc. (including WaferTech, LLC) and TSMC Technology Inc. TSMC and the foregoing subsidiaries are hereinafter referred to collectively as the "Company". All significant inter-company accounts and transactions have been eliminated in these consolidated financial statements.

As stated in Note 1, TSMC merged with WSMC on June 30, 2000. In view of the changes in reporting entities, the consolidated financial statements for all periods

presented have been restated to reflect as if the acquisition of WSMC took place at the inception date. The accompanying consolidated balance sheets, income statements, statements of changes in shareholders' equity and statements of cash flows were restated by including all assets and liabilities, and results of operations, of WSMC (Note 2T).

Minority interests in Emerging Alliance Fund, InveStar, InveStar (II) and WaferTech are presented separately in the consolidated financial statements.

B. Cash and cash equivalents

Government bonds acquired under repurchase agreements that provide for their repurchase with less than three months from date of purchase are classified as cash equivalents.

C. Short-term investments

Short-term investments are carried at the lower of cost or market value. The costs of investments sold are determined by the specific identification method.

D. Allowances for doubtful receivables

Allowances for doubtful receivables is provided based on a review of the collectibility of accounts receivables.

E. Sales and allowance for sales returns and others

The four criteria that recognizing revenue are the existence of evidence of sales, actual shipment, fixed or determinable selling price and reasonable assurance of collectibility. Sales are recognized when title of products and risks of ownerships are transferred to customers based upon shipment. Allowance and related provisions for sales returns and others are provided based on experience; such provisions are deducted from sales and related costs are deducted from cost of sales.

F. Inventories

Inventories are stated at the lower of cost or market value. Inventories are recorded at standard costs and adjusted to approximate weighted average cost at end of the period. Market value represents net realizable value for finished goods and work in process and replacement value for raw materials, supplies and spare parts.

G. Long-term investments

Investments in shares of stock of companies wherein the Company exercises significant influence on their operating and financial decisions are accounted for using the equity method. The difference between the investment cost and the Company's proportionate equity in the net assets of the investee on the date of acquisition is

amortized over five years using the straight-line method. Such amortization and the Company's proportionate share in the net income or net loss of investee companies are recognized as components of "Equity in net income or net loss in investee companies – net" account. When the Company subscribes to additional investee shares at a percentage different from its existing equity interest, the resulting carrying amount of investment in equity investee differs from the amount of the Company's proportionate share in the investee's net equity. The Company records such difference as an adjustment to "Capital surplus" and the "Long-term investments" accounts, respectively.

In the event an investee offsets its capital surplus, excluding reserve from asset revaluation, against its accumulated deficit, which is recorded as a debit to the "Capital surplus" account and a credit to the "Retained earnings" account, the Company also records the entry by its proportionate share of the investee capital surplus that was generated subsequent to its acquisition of investee interest, excluding reserve from asset revaluation.

Other stock investments are accounted using the cost method. These investments are stated at cost less decline in market value of listed stocks or decline in value of unlisted stocks which is considered irrecoverable; such reductions are charged to shareholders' equity or current income, respectively. Cash dividends are recognized as income in the year received but are accounted for as reduction in the carrying value of the long-term investment if the dividends are received in the same year that the related investments are acquired. Stock dividends are recognized only as an increase in the number of shares held on the ex-dividend date.

Investments in foreign mutual funds are stated at the lower of cost or net asset value (NAV). Write-downs of cost and write-ups to original acquisition cost resulting from subsequent recovery of the NAV are debited or credited to shareholders' equity.

Investment in convertible notes are carried at cost.

The costs of investments sold are determined using the weighted-average method.

The Company's proportionate share in the gains from disposal of property, plant and equipment, net of the applicable income tax, included as part of its share in the earnings or losses of investee companies accounted for using the equity method for the current year is transferred into capital surplus from retained earnings. When the Company subsequently disposes of such investments, such capital surplus shall be transferred back to retained earnings. Also, if an investee company has unrealized losses on long-term investments which are valued at the lower-of-cost-or-market, the Company should recognize that unrealized loss in proportion to the Company's equity interest and record it in an account as a component of shareholders' equity.

Gains or losses on transactions with investee companies accounted for using the equity method are eliminated in proportion to the Company's ownership percentage while those with majority-owned subsidiaries are eliminated entirely in consolidation.

H. Property, plant and equipment and assets leased to others

Property, plant and equipment and assets leased to others are stated at cost less accumulated depreciation. Major additions, renewals, betterment and interest expenses incurred during the construction period are capitalized. Maintenance and repairs are expensed currently. Property, plant and equipment covered by agreements qualifying as capital leases are carried at the lower of the present value of all minimum future rental payments, or the leased property's market value at the inception date of the lease. The lessee's periodic rental payment includes the purchase price of the leased property and the interest expense.

Depreciation is computed using the straight-line method over estimated service lives which range as follows: land improvements – 20 years, buildings – 10 to 20 years, machinery and equipment – 5 to 10 years, office equipment – 3 to 7 years.

Upon sale or disposal of an item of property, plant and equipment, the related cost and accumulated depreciation are removed from the accounts, and any gain or loss is credited or charged to income. Any such gain, less applicable income tax, is reclassified to capital surplus at the end of the year (before the relevant regulation was amended).

I. Goodwill

Goodwill represents (i) the excess of purchase price over net equity value of assets of former equity basis investees which have subsequently became controlled consolidated subsidiaries (ii) the excess of goodwill recognized in the acquisition of a subsidiary using shares of the Company (i.e., the excess of the value of the shares issued over the proportionate fair value of the net assets of the acquisition) over the capital surplus recognized (goodwill to the extent of capital surplus recorded is eliminated against such capital surplus) plus (iii) the excess of purchase price over the proportionate fair value of the assets of subsidiaries where shares were acquired for consideration other than shares. Goodwill is amortized by the straight-line method over 10 years.

J. Deferred charges

Deferred charges consist of software and system design costs, technology know-how, bond and financing issue costs, and technology license fees. These are amortized as follows: software and system design costs – three years, technology know-how – five years, bond issue costs – the term of the bonds, financing costs – the term related line of credit, and technology license fee – the term of the contract or economic useful lives of the related technology.

K. Pension costs

Net periodic pension costs are recorded on the basis of actuarial calculations. Unrecognized net transition obligation and unrecognized net gains are amortized over 25 years.

L. Deferred gain on sale – leaseback

The gain resulting from the sale of leased property is deferred. Such deferred gain is then amortized as follows: (a) operating lease – adjustment of rental expenses over the term of lease, and (b) capital lease – adjustment of depreciation over the estimate useful lives or term of the lease, whichever is shorter.

M. Income tax

The Company uses inter-period tax allocation method for income tax. Deferred income tax assets and liabilities are recognized for the tax effects of temporary differences, unused tax credits and operating loss carry forwards. Valuation allowances are provided to the extent, if any, that it is more likely than not that deferred income tax assets will not be realized. A deferred tax asset or liability is, according to the classification of its related asset or liability, classified as current or non-current. However, if a deferred asset or liability does not relate to an asset or liability in the financial statements, then it is classified as current or non-current based on the expected length of time before it is realized.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

Income taxes (10%) on unappropriated earnings of TSMC are recorded as expenses in the year when the shareholders have resolved that the earnings shall be retained.

N. Derivative financial instruments

Foreign currency forward exchange contracts (forward contracts), entered into for purpose other than trading, are recorded as follows: the differences in the New Taiwan dollar amounts translated using the spot rates and the amounts translated using the contracted forward rates are amortized over the terms of the forward contracts using the straight-line method. At the balance sheet dates, the receivables or payables arising from forward contracts are restated using the prevailing spot rates and the resulting differences are recognized in income. Also, the receivables and payables related to the forward contract are netted out and the resulting net amount is presented as either an asset or liability.

The Company enters into interest rate swap transactions to manage exposures to changes in interest rates on existing liabilities. These transactions are accounted for on an accrual basis, in which cash settlement receivable or payable is recorded as an adjustment to interest income or expenses.

The notional amounts of the foreign currency option contracts entered into for hedging purposes are not recognized as either assets or liabilities on the contract dates. The premiums paid or received for the call or put options are amortized using the straight – line method over the terms of contracts.

O. Shipping and handling expense

The Company expenses all shipping and handling costs primarily as marketing expenses for moving the product to the customers' designated location. Shipping and handling expenses incurred in the years ended December 31, 1999, 2000 and 2001 were NT$36.8 million, NT$53.0 million, and NT$49.3 million (US$1.4 million), respectively.

P. Foreign-currency transactions

Foreign-currency transactions are recorded in New Taiwan dollars at the rates of exchange in effect when the transactions occur. Gains or losses caused by the application of different foreign exchange rates when cash in foreign currency is converted into New Taiwan dollars, or when foreign-currency receivables and payables are settled, credited or charged to income in the year of conversion or settlement. At year-end, the balances of foreign-currency assets and liabilities are restated based on prevailing exchange rates and any resulting gains or losses are credited or charged to income.

Q. Translation of foreign-currency financial statements

ROC Financial Accounting Standards (FAS) No. 14, "Accounting for Foreign-Currency Transactions," applies to foreign operations, with the local currency of each foreign subsidiary as its functional currency. The financial statements of foreign subsidiaries are translated into New Taiwan dollars at the following exchange rates: assets and liabilities – current rate; shareholders' equity – historical rates; income and expenses – weighted average rate during the year. The resulting translation adjustment is recorded as a separate component of shareholders' equity.

R. Reclassifications

Certain accounts in 1999 and 2000 have been reclassified to conform to 2001 classifications.

S. Earnings per share

Earnings per share is calculated by dividing net income by the average number of shares outstanding in each period, adjusted retroactively for stock dividends and stock bonuses issued subsequently. Earnings per equivalent American Depository Share (ADS) is calculated by multiplying earnings per share by five (one ADS represents five common shares).

T. Mergers and acquisitions

The acquisition of 68% of TASMC on June 30, 2000 was accounted for as a purchase under the ROC FAS No. 25 "Business Combination – Purchase Method". The operations of TASMC were included in the accompanying financial statements from

the acquisition date. Prior to the acquisition date, TASMC was accounted for under the equity method. The merger with WSMC on June 30, 2000 was, however, accounted for as pooling of interests with the results of operations of WSMC retroactively restated in the consolidated statement of income for all periods presented.

Unaudited Pro forma net sales, net income and earnings per share of TSMC for 1999 and 2000, base on the assumption that the acquisition of TASMC was completed as of January 1, 1999 are as follows:

	Year Ended December 31,	
	1999	2000
	NT$	NT$
	(Unaudited) (in millions)	
Net sales	86,130.1	170,132.4
Net income	20,888.3	66,339.8
Earnings per share		
Based on weighted-average number of shares outstanding – 15,604,655 thousand and 16,729,401 thousand shares in 1999 and 2000, respectively	1.34	3.97

3. U.S. DOLLAR AMOUNTS

The Company maintains its accounts and expresses its consolidated financial statements in New Taiwan dollars. For convenience only, U. S. dollar amounts presented in the accompanying consolidated financial statements have been translated from New Taiwan dollars at the noon buying rate in The City of New York for cable transfers in New Taiwan dollars as certified for customs purposes by the Federal Reserve Bank of New York as of December 31, 2001, which was NT$35.00 to US$1.00. The convenience translations should not be construed as representations that the New Taiwan dollar amounts have been, could have been, or could in the future be, converted into U. S. dollars at this or any other rate of exchange.

4. CASH AND CASH EQUIVALENTS

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Cash and bank deposits	38,229.5	35,830.6
Government bonds acquired under repurchase agreements	610.7	1,725.7
	38,840.2	37,556.3

5. SHORT-TERM INVESTMENTS

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Listed stocks – carrying value	1,502.1	1,398.1
Market value	6,117.5	6,917.1

The market values of listed stocks as of December 31, 2000 and 2001 were based on average closing price in December 2000 and 2001, respectively.

6. RECEIVABLES - NET

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Notes receivable	125.2	176.6
Accounts receivable	30,335.3	19,957.7
	30,460.5	20,134.3
Less - allowance for doubtful receivables	(946.7)	(1,100.5)
Less - allowance for sales returns and others	(2,458.3)	(2,581.6)
	(3,405.0)	(3,682.1)
	27,055.5	16,452.2

The changes in the allowances are summarized as follows:

	1999	2000	2001
	NT$	NT$	NT$
		(in millions)	
Allowance for doubtful receivables			
Balance, beginning of year	283.1	422.2	946.7
Additions - charged to marketing expense	406.8	532.6	165.3
Deductions	(267.7)	(8.1)	(11.5)
Balance, end of year	422.2	946.7	1,100.5
Allowance for sales returns and others			
Balance, beginning of year	442.0	706.9	2,458.3
Additions - charged to sales returns and others	905.7	3,418.5	2,130.1
Deductions	(640.8)	(1,667.1)	(2,006.8)
Balance, end of year	706.9	2,458.3	2,581.6

7. INVENTORIES - NET

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Finished goods	1,762.3	1,790.3
Work in process	9,455.5	7,374.8
Raw materials	770.9	744.7
Supplies and spare parts	1,364.6	1,110.3
	13,353.3	11,020.1
Less - inventory reserve	(567.6)	(1,191.8)
	12,785.7	9,828.3

The changes in inventory reserve are summarized as follows:

	1999	2000	2001
	NT$	NT$	NT$
		(in millions)	
Balance, beginning of year	568.5	1,328.7	567.6
Additional in the year	1,332.7	1,321.6	3,942.1
Write-off in the year	(572.5)	(2,082.7)	(3,317.9)
Balance, end of year	1,328.7	567.6	1,191.8

8. LONG-TERM INVESTMENTS

	December 31,			
	2000		2001	
	Carrying Value	% of Owner-Ship	Carrying Value	% of Owner-Ship
	NT$		NT$	
	(in millions)			
Common stocks				
Accounted for by equity method:				
Vanguard International Semiconductor (VIS) (publicly traded)	5,615.1	25	3,377.5	25
Systems on Silicon Manufacturing Company Pte Ltd. (SSMC) (non-traded)	935.9	32	2,908.0	32
	6,551.0		6,285.5	
Accounted for by cost method:				
Publicly traded				
Amkor Technology	-	-	280.7	-
Taiwan Mask	32.1	2	32.1	2
Non-traded				
Global Test Corp.	175.7	10	180.0	10
United Technology	146.3	10	193.6	11
Hong Tung Venture Capital	120.0	10	150.0	10
Shin-Etsu Handotai Taiwan	105.0	7	105.0	7
Global Investment Holding	-	-	107.3	6
ChipStrate Technology	69.6	9	69.7	9
Programmable Microelectronics	49.6	4	59.3	4
APE	46.7	6	46.7	6
W.K. Technology, Fund IV	50.0	4	50.0	2
Richtek Technology, Inc.	10.0	9	45.0	10
EmpowerTel Networks	-	-	12.0	1
3Dfx Interactive	9.8	-	10.4	-
Ubicom, Inc. (Scenix)	5.7	2	6.0	2
Capella Microsystems	0.3	-	4.7	2
Equator Technologies	3.0	-	3.2	-
Divio	-	-	0.1	-
Taiwan Semiconductor Technology	500.0	19	-	-
	1,323.8		1,355.8	
Preferred stocks (all non–traded)				
Sonics	116.8	7	231.4	7
EmpowerTel Networks	169.6	7	179.5	7
Tropian, Inc.	77.2	5	151.7	5
Atheros Communications	-	-	125.8	2

Monolithic Power System	66.2	17	123.0	18
Quicksilver Technology	-	-	122.5	29
LightSpeed Semiconductor	101.4	6	107.3	1
Memsic	82.7	24	107.1	20
Equator Technologies	93.9	2	99.4	2
Pixim	-	-	87.5	3
OEpic	24.8	-	87.5	6
Capella Miscrosystems	42.9	8	80.4	8
Signia	49.6	22	78.7	20
Newport Opticom	-	-	77.1	15
Rapidstream	69.7	6	73.8	6
Formfactor	66.2	1	70.0	1
Reflectivity	66.2	6	70.0	6
NanoAmp Solutions	61.3	3	64.8	3
NetLogic Microsystems	-	-	64.7	1
Integrated Memory Logic	59.8	10	63.3	10
Match Lab	49.6	11	61.3	10
Y-MEDIA	-	-	52.5	2
Rise Technology	49.6	2	52.5	2
Creosys	49.6	8	52.5	8
Ikanos Communication	-	-	52.5	3
Ralink Technology	-	-	52.5	7
SiRF Technology	44.1	1	51.3	1
Ubicom, Inc. (Scenix)	45.0	2	47.6	2
Advanced Analogic Technology	-	-	44.1	2
OmegaBand (Seagull)	41.4	14	43.7	6
Pico Turbo	41.4	9	43.7	7
Sensory	41.4	6	43.7	4
HINT Corporation	33.1	5	35.0	5
Litchfield	-	-	35.0	6
Quake Technology	-	-	35.0	1
Procoat Technology	-	-	30.0	10
Angstron System	-	-	26.2	7
Divio	16.5	4	17.5	4
Incentia Design Systems	16.5	2	17.5	2
Silicon Data, Inc.	-	-	8.9	2
T-Span System	45.8	3	-	-
Lara Networks, Inc.	75.1	7	-	-
FabCentric	8.3	-	-	-
	1,705.7		2,868.5	
Convertible notes (all non – traded)				
Rise Technology	9.9	-	10.5	-
Pico Turbo	-	-	10.3	-
OmegaBand (Seagull)	-	-	6.8	-
FabCentric	8.3	-	-	-

Signia Technologies	16.5	-	-	-
Advanced Analogic Technology	41.3	-	-	-
	76.0		27.6	
Funds				
BIAM Global Opportunity Fund	959.6	-	909.0	-
Horizon Ventures	93.3	-	125.7	-
Crimson Asia Capital	64.5	-	27.1	-
	1,117.4		1,061.8	
Subtotal	10,773.9		11,599.2	
Less - allowance for loss	(110.1)		-	
	10,663.8		11,599.2	

The equity in net income or (net loss) of investee companies consisted of the following:

	Year Ended December 31,		
	1999	2000	2001
	NT$	NT$	NT$
	(in millions)		
VIS	(527.8)	597.8	(2,236.9)
SSMC	(76.0)	(473.7)	(1,722.1)
TASMC (through June 29, 2000, see Note 2T)	315.3	(311.3)	-
	(288.5)	(187.2)	(3,959.0)

The carrying values of investments accounted for using the equity method and the related investment income and loss for the years ended December 31,1999, 2000 and 2001 were based on audited financial statements of the investees in the same periods:

Information on the long-term investments is as follows:

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Market value of traded stocks	8,729.6	7,056.9
Equity in the net assets of unlisted stocks	5,466.2	8,286.5
Net asset value of funds	1,007.3	1,202.5

9. PROPERTY, PLANT AND EQUIPMENT – NET

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Cost		
Land and land improvements	829.2	877.4
Buildings	53,874.7	60,523.5
Machinery and equipment	241,995.9	280,023.7
Office equipment	4,865.6	6,062.5
	301,565.4	347,487.1
Advance payments	990.2	330.8
Construction in progress	46,077.2	59,418.7
	348,632.8	407,236.6
Accumulated depreciation		
Land and land improvements	64.0	108.8
Buildings	10,692.1	16,604.1
Machinery and equipment	90,956.2	136,033.3
Office equipment	2,172.6	3,202.8
	103,884.9	155,949.0
	244,747.9	251,287.6

Depreciation expense on property, plant and equipment was NT$24,158.4 million, NT$40,135.2 million and NT$52,762.9 million in the years ended December 31, 1999, 2000 and 2001, respectively.

Interest expense (before deducting capitalized amounts of NT$845.2 million, NT$541.1 million and NT$507.0 million in 1999, 2000 and 2001, respectively) for the years ended December 31, 1999, 2000 and 2001 was NT$3,262.2 million, NT$3,258.1 million and NT$3,651.1 million, respectively. The interest rates used for purpose of calculating the capitalized amount were 5.81% to 6.7% in 1999, 6.62% to 7.663% in 2000 and 2.54% to 5.283% in 2001.

Information on the status of the expansion or construction plans of TSMC's manufacturing plants as of December 31, 2001, is as follows:

Expansion Plan	Estimated Total Cost	Accumulated Expenditures	Actual Operations Start Date	Expected Operations Start Date
	NT$	NT$		
	(in millions)			
Fab 6	76,889.0	69,986.0	March 2000	-
Fab 7	5,930.5	2,867.5	March 2001	-
Fab 8	28,322.1	11,355.3	March 2001	-
Fab 12 – phase 1	38,280.8	28,988.7	-	April 2002
Fab 14 – phase 1	9,711.0	8,449.6	-	June 2003

10. DEFERRED CHARGE – NET

	December 31, 2000	December 31, 2001
	NT$	NT$
	(in millions)	
Cost		
Technology	2,228.6	2,228.6
Software and system design costs	2,557.0	4,022.7
Technology know-how	270.0	270.0
Bond issue and financing costs	429.2	492.7
Others	210.8	549.2
	5,695.6	7,563.2
Accumulated amortization		
Technology	(786.3)	(1,232.0)
Software and system design costs	(1,136.4)	(1,948.8)
Technology know-how	(112.5)	(166.5)
Bond issue and financing costs	(286.3)	(342.6)
Others	(38.4)	(103.5)
	(2,359.9)	(3,793.4)
	3,335.7	3,769.8

Amortization expenses on deferred charges were NT$1,039.4 million, NT$1,136.8 million and NT$1,465.9 million for the years ended December 31, 1999, 2000 and 2001, respectively.

11. SHORT-TERM BANK LOANS

	December 31, 2000	December 31, 2001
	NT$	NT$
	(in millions)	
Secured loan in NT dollars:		
NT$107.1 million, repayable by October 2002, annual interest at 3.2%~3.8%	-	107.1
NT$329.4 million, repayable by October 2001, annual interest at 5.8%	329.4	-
Secured loan in US dollars:		
US$6.9 million, repayable by December 2001, annual interest of 9.25%	229.6	-
Unsecured loan:		
US$82.0 million, repayable by March 2002, annual interest at 2.679%	-	2,869.9
US$5.5 million, repayable by June 2002, annual interest at 3.188%	-	192.5
US$21.5 million, repayable by October 2002, annual interest at 2.590%	-	754.7

US$46.0 million, repayable by October 2002, annual interest at 2.548%	-	1,610.0
US$21.0 million, repayable by May 2002, annual interest at 2.33%	-	735.0
US$70.0 million, repayable by March 2001, annual interest at 7.53%	2,315.5	-
US$29.0 million, repayable by January, 2001, annual interest at 7.05%	959.3	-
	3,833.8	6,269.2

Unused credit lines as of December 31, 2001 aggregated approximately NT$17,941.0 million (including NT$6,571.9 million and US$324.8 million).

As of December 31, 2001, the NT$107.1 million loan is secured by a short-term investment with a carrying amount of NT$71.4 million.

12. LONG-TERM BANK LOANS

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Secured loan:		
US$440.0 million, repayable by February 2005, annual interest at 2.578%	-	15,399.5
US$438.0 million, repayable by March 2005, annual interest at 7.663%, refinanced in September 2001	14,488.6	-
Unsecured loan:		
US$200.0 million, repayable by December 2003, annual interest at 6.91% and 2.54% in 2000 and 2001, respectively	6,615.8	6,999.8
US$46.0 million, repayable by October 2002, annual interest at 7.36%	1,521.7	-
US$21.6 millions, repayable by October 2002, annual interest at 7.41%	713.3	-
	23,339.4	22,399.3

Unused credit lines for long-term bank loans as of December 31, 2001 aggregate approximately NT$4,321.0 million (including NT$3,000.0 million and US$37.8 million).

Future minimum principal payments under the Company's loan arrangements as of December 31, 2001 are as follows:

Year	Amount NT$ (in millions)
2003	6,999.8
2004	-
2005	15,399.5
	22,399.3

As of December 31, 2001, the above US$440.0 million loan is secured by the total assets of WaferTech, LLC with reported carrying amounts of approximately NT$28,378.0 million (US$811.0 million). In addition, a portion of the unused credit line for long-term bank loans is secured by properties owned by TSMC with carrying value of approximately NT$1,378.0 million.

The Company is required to maintain certain financial covenants which, if violated, could result in obligations under these agreements becoming due prior to the originally scheduled maturity dates. These financial covenants require the Company to, among other things, maintain minimum levels of working capital, earnings before interest, taxes, depreciation and amortization, and net worth.

The Company was in compliance with the requirements under the loan agreements as of December 31, 2001.

13. LONG-TERM BONDS PAYABLE

	December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Domestic unsecured bonds		
Repayable in March 2003, 7.71% annual interest payable semi-annually	4,000.0	4,000.0
Repayable in October 2002, 5.67% annual interest payable annually	5,000.0	5,000.0
Repayable in October 2004, 5.95% annual interest payable annually	5,000.0	5,000.0
Repayable in December 2005, 5.25%annual interest payable annually	10,500.0	10,500.0
Repayable in December 2007, 5.36% annual interest payable annually	4,500.0	4,500.0
	29,000.0	29,000.0

Future minimum principal payments under the Company's bonds arrangements as of December 31, 2001 are as follows:

Year of Repay	Amount NT$ (in millions)
2002	5,000.0
2003	4,000.0
2004	5,000.0
2005	10,500.0
2006 and thereafter	4,500.0
	29,000.0
Less - current portion	(5,000.0)
	24,000.0

14. SHAREHOLDERS' EQUITY

As of December 31, 2001, TSMC has issued 259,006 thousand American Depositary Shares (ADS) listed on the New York Stock Exchange. The number of common shares represented by the ADSs is 1,295,031 thousand shares.

Capital surplus except for that arising from the application of the equity method of accounting, pursuant to ROC Company Law, can only be used to offset a deficit or transferred to capital (as a stock dividend). Such transfer from capital surplus to capital can only be made once a year at a specific percentage. An amendment to the ROC Company Law issued on November 14, 2001, limited the nature of the capital surplus that can be used to offset a deficit or transferred to capital (as a stock dividend) to those that arise from donations (donated capital) and those attributable to the excess of the issue price over the par value of capital stock issued (paid-in capital).

TSMC's Articles of Incorporation provide that the following shall be appropriated from annual net income (less any deficit):

a. 10% legal reserve;

b. Special reserve in accordance with relevant laws or regulations;

c. Bonuses to directors and supervisors and to employees equal to 1% and at least 1% of the remainder, respectively;

d. Dividends to holders of preferred shares equal to a 3.5% annual rate, based on the period during which the preferred shares have been outstanding;

e. The appropriation of the remaining balance after the above shall be decided at the shareholder's meeting;

Dividends are distributed in cash and / or in the form of shares of stock. Since TSMC is in a capital-intensive industry, distribution of profits shall be made preferably by way of stock dividend. The total of cash dividend paid (in any given year) should not exceed 50% of total dividends paid and / or distributed.

These appropriations of net income shall be resolved by the shareholders in the following year and given effect in the financial statements of that year.

The aforementioned appropriation for legal reserve shall be made until the reserve equals the aggregate par value of TSMC's outstanding capital stock. The reserve can only be used to offset a deficit; or, when its balance has reached 50% of the aggregate par value of the outstanding capital stock of TSMC, up to 50% thereof can be distributed as stock dividend.

Pursuant to existing regulations promulgated by the Securities and Futures Commission, a special reserve equivalent to the debit balance of any account shown in the shareholder equity section of the balance sheets, other than the deficit, shall be made from unappropriated retained earnings. The special reserve shall be adjusted accordingly based on the debit balance of such accounts as at year-end. As of December 31, 2001, prior year's accumulated deficit in the amount of NT$1,803.2 million from WSMC is included in the unappropriated retained earnings.

Under the Integrated Income Tax System that became effective on January 1, 1998, ROC resident shareholders are allowed a tax credit for the income tax paid by a company on earnings generated starting January 1, 1998. An Imputation Credit Account (ICA) is maintained by TSMC for such income tax and the tax credit allocated to each shareholder. The maximum credit available for allocation to each shareholder cannot exceed the balance shown in the ICA on the date of distribution of dividends.

TSMC issued 1,300,000 thousand unlisted Series A - preferred shares to certain investors (including Philips) in November 29, 2000. The following are the rights of the preferred shareholders and other terms and conditions:

a. Are entitled to receive cumulative cash dividends at an annual rate of 3.5%.

b. Are not entitled to receive any stock dividends (whether declared out of unappropriated earnings or capital surplus).

c. Have priority over the holders of common shares to the assets of TSMC available for distribution to shareholders upon liquidation or dissolution of the Company. However, the preemptive rights to the assets shall not exceed the issue value of the shares.

d. Have voting rights similar to that of the holders of common shares.

e. Have no right to convert their shares into common shares.

f. Will be redeemed within thirty months from their issuance. The holder's will have the aforementioned rights and TSMC's related obligations would remain the same, until the shares are actually redeemed by TSMC.

The aforementioned legal reserve and special reserve are as follow:

	Legal reserve	Special reserve
	NT$	NT$
	(in millions)	
Balance January 1, 1999	6,724.2	-
Appropriations of prior year's earning	1,534.1	-
Balance December 31, 1999	8,258.3	-
Appropriations of prior year's earning	2,431.0	1,091.0
Balance December 31, 2000	10,689.3	1,091.0
Appropriations of prior year's earning	6,490.7	-
Reversal of prior year's special reserve	-	(741.0)
Balance December 31, 2001	17,180.0	350.0

15. PENSION PLAN

TSMC has pension plans covering all regular employees, which provides benefits based on length of service and average monthly salary for the final six months of employment.

TSMC makes monthly contributions, equal to 2% of salaries to a pension fund that is administered by a pension fund monitoring committee and deposited in the committee's name in the Central Trust of China. In addition, TSMC accrues unfunded pension cost.

Certain pension information required by ROC FAS No. 18 as of December 31, 2000 and 2001 were as follows:

	2000	2001
	NT$	NT$
	(in millions)	
a. Components of pension cost		
Service cost	376.7	418.0
Interest cost	91.2	95.9
Projected return on plan assets	(26.7)	(44.0)
Amortization	8.3	8.3
	449.5	478.2

b. Reconciliation of the fund status of the plan and accrued pension cost

Benefit obligation		
Vested benefit obligation	-	0.7
Nonvested benefit obligation	765.7	1,026.4
Accumulated benefit obligation	765.7	1,027.1
Additional benefits based on future salaries	1,550.0	1,407.0
Projected benefit obligation	2,315.7	2,434.1
Fair value of plan assets	(661.1)	(835.6)
Funded status	1,654.6	1,598.5
Unrecognized net transitional obligation	(166.0)	(157.7)
Unrecognized net gain	22.7	415.8
Accrued pension cost	1,511.3	1,856.6

c. Actuarial assumptions

Discount rated used in determining present values	6.0%	5.0%
Future salary increase rate	6.0%	5.0%
Expected rate of return plan on assets	6.0%	5.0%

d.	Contributions to pension fund	$ 95.9	$ 131.9
e.	Funds transferred from TASMC and WSMC	$ 173.3	$ -
f.	Payments from pension fund	$ 1.5	$ -

16. INCOME TAX BENEFIT

a. A reconciliation of income tax expense - current before tax credits and income tax expense on income before income tax at statutory rate is shown below:

	1999	2000	2001
	NT$	NT$	NT$
		(in millions)	
Income tax expense base on "income before income tax" at statutory rate	(4,889.2)	(12,787.7)	(2,699.6)
Tax-exempt income	3,434.8	7,770.0	1,089.0
Permanent and temporary differences	(221.1)	(49.5)	(986.6)
Income tax expense – current before tax credit	(1,675.5)	(5,067.2)	(2,597.2)

The statutory rates for 1999, 2000 and 2001 were 20%, 20% and 25%, respectively.

b. Income tax benefits consist of:

	1999	2000	2001
	NT$	NT$	NT$
	(in millions)		
Income tax expense - current before tax credits	(1,675.5)	(5,067.2)	(2,597.2)
Additional 10% on the unappropriated earnings	-	(88.0)	(322.3)
Income tax credits	1,587.0	5,128.0	2,888.4
Other income tax	-	-	(16.3)
Income tax for the current year	(88.5)	(27.2)	(47.4)
Net change in deferred income tax assets (liabilities) for the period			
Investment tax credits	3,798.3	3,146.4	3,044.1
Temporary differences	(111.1)	(462.2)	(1,918.0)
Valuation allowance	(1,303.5)	(1,678.8)	2,662.0
Adjustment of prior years' taxes	87.6	189.7	-
	2,382.8	1,167.9	3,740.7

c. Deferred income tax assets (liabilities) consisted of:

	2000	2001
	NT$	NT$
	(in millions)	
Current:		
Investment tax credits	8,422.0	2,347.0
Temporary differences	56.0	3.1
	8,478.0	2,350.1
Less - valuation allowance	(300.0)	-
	8,178.0	2,350.1
Noncurrent:		
Investment tax credits	12,591.3	21,710.4
Temporary differences	(498.8)	(2,363.9)
	12,092.5	19,346.5
Less - valuation allowance	(5,462.7)	(3,100.7)
	6,629.8	16,245.8

The effective rates for deferred income tax of TSMC were 7.54% and 17.56% as of December 2000 and 2001, respectively, and 32-54% and 34%-41% for TSMC's subsidiaries as of December 2000 and 2001, respectively.

d. Integrated income tax information:

The balances of the imputation credit account (ICA) as of December 31, 2000 and 2001 were NT$5.9 million and NT$9.4 million, respectively.

The tax credit ratio computed as of December 31, 2001 was 0.02% while the tax credit on earnings as of December 31, 2000 on dividend distributed in 2001 was 0.01%.

The imputation credit allocated to each shareholder shall be based on the balance in the ICA on the date of distribution of dividends; thus the expected creditable ratio for 2001 may be adjusted according to the difference between the expected and actual imputation credit allowed under the regulation.

e. The unappropriated retained earnings as of December 31, 2000 and 2001 included the earnings generated up to December 31, 1997 of NT$4.8 million.

f. Unused investment tax credits arising from purchase of machinery and equipment, and research and development expenditures as of December 31, 2001 will expire as follows:

Year of Expiry	Amount NT$ (in millions)
2002	4,487.9
2003	5,500.7
2004	10,720.9
2005	3,347.9
	24,057.4

g. The income from the following expansion and construction of TSMC's manufacturing plants is exempt from income tax:

	Tax-Exemption Period
Expansion of Fab 1 and Fab 2-modules A and B, Fab3 and Fab 4, and construction of Fab 5	1999 to 2002
Expansion of Fab 7	1998 to 2001

h. The tax authorities have examined income tax returns of TSMC through 1999, excluding 1998. However, TSMC is contesting the assessment of the tax authority for 1992, 1993, 1996 and 1997.

17. SIGNIFICANT LONG-TERM LEASES

TSMC leases the land, building and certain machinery and equipment of its first manufacturing plant from ITRI under agreements, which will expire in March 2002, at annual rentals and other charges aggregating NT$161.6 million.

TSMC leases the land sites of its second through fourteenth manufacturing plants from the Science-Based Industrial Park Administration under agreements, which will expire on various dates from March 2008 to December 2020 with annual rentals aggregating NT$208.7 million. The agreements can be renewable upon their expiration.

TSMC-North America leases its office premises and certain equipment under non-cancelable operating agreements, which will expire in September 2020. TSMC-Europe entered into a lease agreement for its office premises, which will expire in 2004. Annual rent currently is totaled to NT$101.4 million.

Future minimum rentals under aforementioned leases as of December 31, 2001 are as follows:

Year	Amount NT$ (in millions)
2002	347.7
2003	310.1
2004	312.9
2005	311.2
2006	314.2
2007 and thereafter	2,218.4
	3,814.5

Rental expenses for the years ended December 31, 1999, 2000 and 2001were NT$352.6 million, NT$1,112.4 million, and NT$1,552.1 million, respectively.

18. RELATED PARTY TRANSACTIONS

The Company engaged in business transactions with the following related parties:

a. Industrial Technology Research Institute (ITRI), the Chairman of TSMC is one of its directors.

b. Philips Electronics N.V., (Philips), a major shareholder of TSMC.

c. Investees of TSMC.
Vanguard International Semiconductor Corporation (VIS)

Systems on Silicon Manufacturing Company Pte. Ltd. (SSMC)

d. TSMC-ACER Semiconductor Manufacturing Corporation (TASMC), an investee of TSMC until June 30, 2000 (after which it has become a wholly owned subsidiaries).

e. Winbond Electronics Corporation (Winbond), a major shareholder of WSMC.

f. Taisil Electronic Materials Corporation (Taisil), a major shareholder of WSMC.

The transactions with the aforementioned parties, in addition to those disclosed in other notes, are summarized as follows:

	Year Ended December 31,		
	1999	2000	2001
	NT$	NT$	NT$
	(in millions)		
During the year			
Sales			
Philips	2,864.1	5,289.9	2,389.3
VIS	48.5	17.0	1,177.1
ITRI	132.5	198.2	114.5
TASMC	22.3	-	-
Winbond	625.2	-	-
Taisil	58.9	-	-
SSMC	-	-	49.0
	3,751.5	5,505.1	3,729.9
Purchase			
VIS	382.0	6,572.1	3,802.0
SSMC	-	-	43.0
TASMC	808.9	-	-
Taisil	30.8	-	-
	1,221.7	6,572.1	3,845.0
Rental – ITRI	161.5	161.6	161.6
Manufacturing expenses -			
Technical service fee – Philips (see Note 19a)	862.4	2,137.2	2,418.3
Technology license fee - Winbond	300.0	-	-
	1,162.4	2,137.2	2,418.3
General and administrative expenses			
Consulting fee – VIS	20.4	-	-

Research and development expenses			
Testing expenses - Winbond	3.5	-	-
Sales of properties - VIS	-	87.2	268.9
Non-operating income			
SSMC (see Note 19f)	-	152.4	95.3
VIS	-	5.6	0.5
	-	158.0	95.8
At end of year			
Receivable			
Philips	133.2	643.6	116.5
VIS	25.7	159.9	320.2
SSMC	5.3	89.1	20.6
ITRI	18.5	56.1	37.4
TASMC	23.1	-	-
Winbond	131.9	-	-
Others	3.2	-	-
	340.9	948.7	494.7
Prepaid expenses			
Rental – ITRI	42.5	42.7	42.7
Refundable deposits – VIS (see Note 19h)	-	940.4	750.8
Payable			
VIS	184.7	1,808.9	548.5
Philisps	305.8	797.4	499.3
SSMC	-	-	0.5
TASMC	539.5	-	-
Taisil	6.4	-	-
	1,036.4	2,606.3	1,048.3

Sales to related parties are based on regular selling prices and collection terms, except for sales of properties and technical service fees, which were in accordance with the related contracts.

19. OTHER SIGNIFICANT COMMITMENTS AND CONTIGENCIES AS OF DECEMBER 31, 2001

a. Under a Technical Cooperation Agreement with Philips, as amended on May 12, 1997, TSMC shall pay technical assistance fees as a percentage of net sales, as defined in the agreement, of certain products. The agreement shall remain in force up to July 9, 2007 and thereafter be automatically renewed once for successive periods of three years. Under the amended agreement, the fee is subject to deduction by the amounts TSMC pays to any third party for settling any licensing/infringement issue after the first five-year period of the amended agreement, provided that the fee after reduction will not be below a certain percentage of the net selling price.

b. Subject to certain equity ownership and notification requirements, Philips and its affiliates can avail themselves each year up to 30% of TSMC's production capacity.

c. Under a Technical Cooperation Agreement with ITRI, TSMC shall reserve and allocate up to 35% of certain of its production capacity for use by the Ministry of Economic Affairs (MOEA) or any other party designated by the MOEA.

d. Under several foundry agreements, TSMC shall allocate a portion of its production output for sale to certain major customers from whom guarantee deposits of US$205.9 million (NT$7,208.0 million) had been received as of December 31, 2001.

e. Under a Shareholders Agreement entered into with Philips and EDB Investments Pte Ltd. dated March 30, 1999, the parties agreed to: (a) form a joint venture company to be named Systems on Silicon Manufacturing Company Pte Ltd. (SSMC) for the purpose of constructing an integrated circuit foundry in Singapore, (b) set SSMC's total authorized capital at about S$1.2 billion, and, (c) allow TSMC to invest in 32% of SSMC's capital. The Company started to make its investment in SSMC in 1999, and has reached its committed contribution to SSMC of S$384 million in 2002. TSMC and Philips committed to buy a specific percentage of the production capacity of SSMC. If any party defaults on the agreement and the capacity utilization of SSMC falls below a specific percentage of its total capacity, the defaulting party should compensate SSMC for all related unavoidable costs.

f. The Company provides of technical services to SSMC under a Technical Cooperation Agreement (the "Agreement") entered into on May 12, 1999. The Company receives compensation for such services computed at a specific percentage of net selling prices of specific products sold by SSMC. The Agreement remains in force for ten years and is automatically renewed for successive periods of five years unless pre-terminated by either party under certain conditions.

g. Under a Technical Transfer Agreement with National Semiconductor Corporation ("National") entered into on June 27, 2000, TSMC shall receive payments for the technology transferred to National. The agreement will remain in force for ten years.

After expiration, this agreement will be automatically renewed for successive periods of two years unless pre-terminated by either party under certain conditions.

h. TSMC entered into a Manufacturing Agreement with Vanguard International Semiconductor Corporation ("VIS"). VIS agreed to reserve specific capacity to manufacture for TSMC certain devices on logic or other technologies required by TSMC's customers, at a discount to the selling prices as agreed by the parties. TSMC paid NT$1,200.0 million to VIS as Security Bond (i.e. security deposit). VIS shall return certain amount of the Bond without any interest to TSMC upon the purchase of wafers by TSMC. The contract will remain in force for five years.

i. Under a management agreement, InveStar Capital Inc. (ISC) of the Cayman Islands provides investment and administrative services to TSMC. ISC should receive quarterly, starting from October 1, 1996, a management fee of 2% each year of total weighted average paid-in capital and capital surplus of TSMC, excluding retained earnings and losses.

j. Under a patent license agreement, the Company has entered into a cross license arrangement for certain semiconductor patents with a US-based company for a term starting from October 26, 2001 through December 31, 2006. TSMC shall pay royalty fees to such company.

k. WaferTech, a subsidiary, had recorded a reserve of US$ 5.3 million (NT$183.8 million) for a litigation being brought by various construction contractors. The litigation alleges that WaferTech caused the contractors to incur additional labor and material costs outside the contracts. The reserve is reflected in accrued construction and equipment payable with a corresponding asset recorded in construction in progress.

l. During 2000, WaferTech received a tax assessment from State of Washington Department of Revenue, which was recently revised, assessing approximately US$6.9 million (NT$241.5 million) in additional taxes related to State's sales and use tax. The tax amount is due to a difference in interpretation of the current tax code and WaferTech intends to appeal the assessment. As of December 31, 2001, WaferTech has recorded a reserve that management believes is sufficient to address any exposure related to this tax assessment.

m. Unused letter of credit for TSMC as of December 31, 2001 is approximately NT$1.2 million.

20. FINANCIAL INSTRUMENTS

The Company entered into derivative financial instrument transactions in 2000 and 2001 to hedge foreign-currency denominated receivables or payables, and interest rate fluctuations. The strategy is to hedge most of the market price risks. Certain information on these contracts is as follows:

a. Outstanding forward exchange contracts as of December 31, 2000 and 2001:

2000	Currency to Be Received	Amounts (in millions)	Currency To Pay	Amounts (in millions)	Maturity	Fair Value (in millions)
Buy	US$	US$ 60.0	NT$	NT$ 1,989.0	Jan. 2001	NT$ 1,979.0
Buy	EUR	EUR 29.0	US$	US$ 24.7	Jan. to Sep. 2001	NT$ 895.8
Buy	JPY	JPY 42.8	US$	US$ 0.4	Jan. 2001	NT$ 12.4
Sell	EUR	EUR 116.0	US$	US$ 107.0	Jan. to Feb. 2001	NT$ 3,583.0
Sell	JPY	JPY 17,605.7	US$	US$ 156.9	Jan. 2001	NT$ 5,100.4
Sell	NT$	NT$ 12,032.5	US$	US$ 365.0	Jan. to Dec. 2001	NT$ 12,105.5
2001						
Sell	US$	US$ 17.9	NT$	NT$ 620.6	Jan. 2002	NT$ 618.2
Sell	US$	US$ 783.0	NT$	NT$27,013.4	Jan. to Mar. 2002	NT$ 26,985.7

As of December 31, 2000, receivables from forward exchange contracts (shown in the balance sheets as part of "Other current assets" account) aggregate about NT$119.2 million, and as of December 31, 2000 and 2001, payables from forward exchange contracts (shown in the balance sheets as part of "Other current liabilities" account) aggregate about NT$180.3 million and NT$397.1 million, respectively. Net exchange gains for the years ended December 31, 1999 and 2000 were NT$105.9 million and NT$266.4 million, respectively. Net exchange loss for the year ended December 31, 2001 was NT$1,943.6 million.

The net assets, liabilities and purchase commitments that have been hedged by the above forward exchange contracts are as follows:

	December 31,	
	2000	2001
	(in millions)	
Accounts receivable	US$ 813.7	US$ 519.0
Accounts Payable	-	US$ 169.7
Time deposits	-	US$ 707.4
Payable to contractors and equipment supplier	US$ 571.3	-
	JPY21,237.7	-
	EUR 62.5	-

b. Interest rate swaps

The Company has entered into interest rate swap transactions to hedge exposure to rising interest rates on its floating rate for long-term bank borrowings. These transactions as of December 31, 2000 and 2001 were summarized as follows:

Contract Date	Notional Amount	Contract Period	Interest Rate Received	Interest Rate Paid
2000				
April 28, 1998	NT$ 2,000.0	May 21, 1998 to May 21, 2003	One month LIBOR	7.25%
April 29, 1998	NT$ 1,000.0	May 21, 1998 to May 21, 2003	One month LIBOR	7.25%
June 26, 1998	NT$ 1,000.0	June 26, 1998 to June 26, 2003	One month LIBOR	7.20%
June 26, 1998	NT$ 1,000.0	July 6, 1998 to July 6, 2003	One month LIBOR	7.20%
2001				
April 28, 1998	NT$ 2,000.0	May 21, 1998 to May 21, 2003	One month LIBOR	7.25%
April 29, 1998	NT$ 1,000.0	May 21, 1998 to May 21, 2003	One month LIBOR	7.25%
June 26, 1998	NT$ 1,000.0	June 26, 1998 to June 26, 2003	One month LIBOR	7.20%
June 26, 1998	NT$ 1,000.0	July 6, 1998 to July 6, 2003	One month LIBOR	7.20%

Interest paid under those contracts in 1999, 2000 and 2001 were NT$112.2 million, NT$113.7 million and NT$473.4 million, respectively.

c. Options contracts

The Company has entered into foreign currency option contracts to hedge risks of exchange rate fluctuations arising from its anticipated U.S. dollar and Japanese Yen cash receipts from its export sales or obligations related to its importation of materials and machinery and equipment.

Outstanding option contracts as of December 31, 2000 and 2001 were as follows:

Contract	Currency	Contract Amounts (in millions)	Fair Value (in millions)	Strike Price	Maturity
2000					
Put option written	EUR	EUR 525.5	(NT$ 189.7)	0.8870~0.9680(US$/EUR)	May 2001
Call option written	US$	US$ 203.5	(264.9)	107.77~110.5(US$/JPY)	Mar. 2001
Call option written	US$	US$ 20.0	(1.5)	32.42(US$/NT$)	Jan. 2001
Put option bought	US$	US$ 15.0	0.0	110~110.5(US$/JPY)	Feb. 2001
2001					
Put option written	EUR	EUR 293.0	(252.8)	0.8940~0.9340(EUR/US$)	Jan.~Feb. 2002

For the year ended December 31, 1999, 2000 and 2001, the Company realized premium income of NT$63.7 million, NT$116.3 million and NT$328.2 million on foreign currency options written and incurred premium expenses of NT$86.7 million, NT$108.1 million and NT$93.5 million, respectively, on foreign currency options bought.

d. Transaction risk

1) Credit risk: The banks, which are the counter-parties to the foregoing derivative financial instruments, are reputable financial institutions.

Management believes its exposures related to the potential default by those counter parties are low.

2) Market price risk: All derivative financial instruments are intended as hedges for fluctuations in currency exchange rates on the Company foreign currency denominated receivables or payables and interest rate fluctuations on its floating rate long-term loans. Gains or losses from forward exchange contracts are likely to be offset by gains or losses from receivables and payables. Interest rate risks are also controlled as the expected cost of capital is fixed. Thus, market price risks from exchange rate and interest rate fluctuations are minimal.

3) Liquidity and cash flow: The cash flow requirements on the derivative instruments are limited to the net differences between the spot rates and contracted forward rates at settlement dates (for forward contracts); and amounts payable arising from the differences in the rates (for interest rate swap contracts). Also, options may not have to be exercised at all in cases where the strike price is higher than the related market price at exercise dates. Management believes that the foregoing requirements are not material.

e. The estimated fair values of the Company's financial instruments are as follows:

	December 31, 2000		December 31, 2001	
	Carrying / Notional Amount	Fair Value	Carrying / Notional Amount	Fair Value
	NT$	NT$	NT$	NT$
Non-derivative financial instruments		(in millions)		
Assets				
Cash and cash equivalents	38,840.2	38,840.2	37,556.3	37,556.3
Pledged time deposits	10.8	10.8	26.2	26.2
Short-term investments	1,502.1	6,117.5	1,398.1	6,917.1
Receivables - net	27,055.5	27,055.5	16,452.2	16,452.2
Receivable from related parties	948.7	948.7	494.7	494.7
Long-term investments	10,663.8	15,203.2	11,599.2	16,545.9
Refundable deposits	979.1	979.1	784.1	784.1
Liabilities				
Short-term bank loans	3,833.8	3,833.8	6,269.2	6,269.2
Accounts payable	8,507.8	8,507.8	1,397.9	1,397.9
Payable to related parties	2,606.3	2,606.3	1,048.3	1,048.3
Payable to contractors and equipment Supplier	25,550.3	25,550.3	12,867.2	12,867.2
Long-term bank loans (including current portion)	23,339.4	23,339.4	23,399.3	22,399.3
Long-term bonds payable (including current portion)	29,000.0	29,035.8	29,000.0	29,703.1
Guarantee deposits	7,086.4	7,086.4	7,212.7	7,212.7

Derivative financial instruments

Foreign currency forward contracts				
Hedging assets / liabilities				
-Buy	2,820.2	2,887.1	-	-
-Sell	20,802.3	20,788.8	28,031.1	27,603.9
Interest rate swaps	1.6	234.0	(27.0)	(343.1)
Options	-	(456.1)	(39.5)	(252.8)

Fair values of financial instruments were determined as follows:

(1) Short-term financial instruments – market values.

(2) Short-term investments – market values.

(3) Long-term investments – market value for listed companies and net equity value for the others.

(4) Refundable deposits and guarantees deposits – future values.

(5) Long-term liabilities – based on forecasted cash flows discounted at interest rates of similar long-term liabilities. Long-term bonds payable are discounted at present value. Fair values of other long-term liabilities are also their carrying values as they use floating interest rates.

(6) Derivative financial instruments – based on outright forward rates and interest rate in each contract.

The fair values of non-financial instruments were not included in the fair values disclosed above. Accordingly, the sum of the fair values of the financial instruments listed above are not equal to the fair value of the Company.

21. SEGMENT INFORMATION

a. The Company engages mainly in one industry, namely, integrated circuits and other semiconductor devices. In accordance with SFAS 131, "Disclosures About Segments of an Enterprise and Related Information," the Company's chief operating decision maker has been identified as the Chief Executive Officer, which reviews consolidated results when making decisions about allocating resources and assessing performance of the Company. Since the Company operates in one segment, all financial segment information required by SFAS 131 can be found in the consolidated financial statements.

b. Geographic information

	Overseas NT$	Taiwan NT$	Adjustments and Elimination NT$	Consolidated NT$
		(in millions)		
1999				
Sale to unaffiliated customers	5,193.0	71,112.1	-	76,305.1
Transfers between geographic areas	975.4	4,696.2	(5,671.6)	-
Total sales	6,168.4	75,808.3	(5,671.6)	76,305.1
Income from operations	(1,086.6)	23,356.6		22,270.0
Non-operating income				1,618.5
Non-operating expenses				(3,260.2)
Income before income tax				$20,628.3
Identifiable assets	34,807.9	185,054.1	(591.2)	219,270.8
Long-term investments	1,329.0	14,835.7		16,164.7
Total assets				235,435.5
2000				
Sales to unaffiliated customers	-	166,197.6	-	166,197.6
Transfers between geographic areas	14,451.2	30.8	(14,482.0)	-
Total sales	14,451.2	166,228.4	(14,482.0)	166,197.6
Income from operations	755.1	60,539.6		61,294.7
Non-operating income				6,119.8
Non-operating expenses				(3,513.0)
Income before income tax				63,901.5
Identifiable assets	63,810.3	320,273.3	(23,861.4)	360,222.2
Long-term investments	3,001.6	7,662.2		10,663.8
Total assets				370,886.0

2001				
Sales to unaffiliated customers	-	125,884.9	-	125,884.9
Transfers between geographic areas	8,152.1	3.1	(8,155.2)	-
Total sales	8,152.1	125,888.0	(8,155.2)	125,884.9
Income from operations	(4,563.8)	17,341.6		12,777.8
Non-operating income				6,475.6
Non-operating expenses				(8,466.9)
Income before income tax				10,786.5
Identifiable assets	73,433.6	303,954.1	(22,469.2)	354,918.5
Long-term investments				11,599.2
Total assets				366,517.7

c. Gross export sales

	Year Ended December 31,		
	1999	2000	2001
Area	NT$	NT$	NT$
	(in millions)		
America	38,418.4	81,656.0	63,893.6
Asia	16,744.9	42,907.0	23,874.4
Europe	4,778.6	11,360.5	7,523.9
	59,941.9	135,923.5	95,291.9

The export sales information is presented by billed regions.

d. Gross sales to major customers

	Year Ended December 31,					
	1999		2000		2001	
Customers	Amount	%	Amount	%	Amount	%
	NT$		NT$		NT$	
			(in millions)			
NVIDIA	4,647.9	6.0	10,307.2	6.1	21,789.8	16.9

22. SUBSEQUENT EVENTS

On November 6, 2001, the board of directors approved the issuance of domestic unsecured bonds with an aggregate principal amount of NT$15,000.0 million. The issuance of the domestic unsecured bond has been approved by the Securities and Futures Commission of ROC (SFC). As of January 31, 2002, the proceeds from this issuance have been collected.

The SFC has, on January 4, 2002, approved TSMC's sponsorship of the offer by certain existing shareholders of up to 350,000 thousand common shares in the form of ADSs. The decision to sponsor the offering of common shares in the form of ADSs was approved by the Board of Directors on December 3, 2001. As of February 7, 2002, the process of offering has been completed and 318,806 thousand ADSs are outstanding after this offering.

23. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND GENERALLY ACCEPTED ACCOUNTING PRINCIPLES IN THE UNITED STATES

The accompanying financial statements have been prepared in accordance with generally accepted accounting principles in the Republic of China ("ROC GAAP"), which differ in the following respects from generally accepted accounting principles in the United States ("U.S. GAAP"):

a. Pension benefits

U.S. Statement of Financial Accounting Standards (FAS) 87, "Accounting for Pensions", was effective no later than the beginning of the first period for which a U.S. GAAP reconciliation is required for foreign issuers. A portion of the unrecognized net transition obligation on the adoption date is to be allocated directly to equity. The Company adopted FAS 87 at the beginning of 1993. ROC SFAS 18, which is similar in many respects to FAS 87, was effective in 1996 for listed companies. However, the treatment of certain expenses that comply with ROC SFAS 18 is different from FAS 87.

b. Marketable securities

Under ROC GAAP, marketable equity securities are carried at the lower of aggregate cost or market, and debt securities are carried at cost, with only unrealized losses recognized. Under U.S. FAS 115, "Accounting for Certain Investments in Debt and Equity Securities", debt and equity securities that have readily determinable fair values are to be classified as either trading, available-for-sale or held-to-maturity securities. Debt securities that the Company has the positive intent and ability to hold to maturity are classified as held-to-maturity securities and reported at amortized cost. Debt and equity securities that are bought and traded for short-term profit are classified as trading securities and reported at fair value, with unrealized gains and losses included in earnings. Debt and equity securities not classified as either held-to-maturity or trading are classified as available-for-sale securities and reported at fair value, with unrealized gains and losses excluded from earnings and reported in a

separate component of shareholders' equity. The adjustment relates to the Company's securities that are classified as trading and available-for-sale securities.

c. Bonuses to employees, directors and supervisors

According to ROC regulations and the Company's Articles of Incorporation, a portion of the Company's distributable earnings should be set aside as bonuses to employees, directors and supervisors. Bonuses to directors and supervisors are always paid in cash. However, bonuses to employees may be granted in cash or stock or both. All of these appropriations, including stock bonuses which are valued at par value of NT$10, are charged against retained earnings under ROC GAAP after such appropriations are formally approved by the shareholders in the following year. Under U.S. GAAP, such bonuses are charged against income. Shares issued as part of these bonuses are recorded at fair market value. Since the amount and form of such bonuses are not finally determinable until the shareholders' meeting in the subsequent year, the total amount of the aforementioned bonuses is initially accrued based on management's estimate regarding the amount to be paid based on the Company's Articles of Incorporation. Any difference between the initially accrued amount and the fair market value of the bonuses upon the issuance of shares is recognized in the year of approval by shareholders.

d. Technologies transferred in payment of capital stock

In 1998, certain employees had received common shares of WSMC prior to its merger with the Company. In exchange therefore, they contributed technologies related to the testing and packaging of integrated circuits at an agreed valuation of NT$270.0 Million. Under ROC GAAP, such technology transfers in payment of capital stock are recorded as intangible assets, and amortized by systematic charges against income over the periods estimated to be benefited thereby. As permitted under ROC GAAP, the Company amortized such assets over a 5 years period. Under U.S. GAAP, the technology contribution cannot be recognized due to the unavailability of a fair value for the technology. Therefore, the carrying value of the technology has been adjusted to zero under U.S. GAAP, and the relevant shares issued to those employees were recorded as deferred compensation based upon the fair value of stock. The deferred compensation is amortized over 3 years, which is the period that employees are restricted to sell the stocks since the date they started working for the Company.

e. Impairment of long-lived assets

Under U.S. GAAP, impairment losses are recorded in current period earnings and create a new cost basis for related assets going forward, and cannot be reversed subsequently. Under U.S. GAAP, in accordance with Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for the Long-Lived Assets to be Disposed of " (SFAS 121), long-lived assets held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. For purposes of evaluating the recoverability of long-lived assets, the recoverability

test is performed by comparing undiscounted net cash flows of the assets against the net book value of the assets. If the recoverability test indicates that impairment has occurred, the impairment loss is the amount of the asset's net book value in excess of the related fair value. Under ROC GAAP, there is no requirement to provide for impairment of long-lived assets. Therefore, the impaired long-lived assets under U.S. GAAP are continuously depreciated based on the carrying values before the impairment losses were taken.

f. Derivative financial instruments

Under ROC GAAP, there are no specific rules related to accounting for derivative financial instruments, nor criteria for hedge accounting. Therefore, companies have the flexibility in choosing when to recognize derivative financial instruments and when to follow hedge accounting versus fair value accounting for such instruments. U.S. GAAP has restricted rules on hedge accounting under SFAS 133 and SFAS 138. SFAS 133 and SFAS 138 are effective for fiscal years beginning after June 15, 2000, and establish accounting and reporting standards for all derivative financial instruments. The Company adopted those statements on January 1, 2001. The adoption of SFAS 133 and SFAS 138 has had no material impacts to the Company's financial statements for all periods presented. Under U.S. GAAP, the Company did not apply hedge accounting and derivatives have historically been, and continue to be, recorded on the balance sheets at fair value, with the changes in fair values recorded through current period earnings under U.S. GAAP. In addition, the Company has no embedded derivatives from January to December 31, 2001. The reconciling adjustments for all periods presented reflect those reconciling from hedge accounting under ROC GAAP to non-hedge accounting under U.S. GAAP.

g. Treasury stocks

Under U.S. GAAP, when a subsidiary holds stock of its parent as an investment, the stock is treated as treasury stock in the consolidated balance sheet as a reduction in shareholders' equity. Under ROC GAAP, such treatment is not required; the treasury stock is treated as an asset.

h. Stock-based compensation

The Company has elected to follow Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB Opinion No.25"), which measures compensation expenses based on the difference, if any, between the fair value of a common stock and the option's exercise price on the date of the grant. In addition, the Company complies with the disclosure provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock-based Compensation".

i. Goodwill

Under ROC GAAP, goodwill related to subsidiaries is amortized over 10 years; for U.S. GAAP, goodwill related to subsidiaries is amortized over 5 or 10 years. In addition, the

goodwill from the acquisition of the 68% interest in 2000 in TASMC was netted against capital surplus under ROC GAAP because it was an acquisition paid in the form of a share exchange. However, the goodwill from the prior acquisition of 32% interest in 1999 in TASMC was not netted against capital surplus, but deferred and amortized under ROC GAAP because it was from an acquisition paid in cash. Under U.S. GAAP, all goodwill from TASMC acquisitions is recognized and amortized over 5 years.

j. Earnings per share

Under ROC GAAP, earnings per share is calculated as described in Note 2(S). Under U.S. GAAP, the earnings per shares is calculated by dividing net income by the average number of shares outstanding in each period, adjusted retroactively for stock dividends issued subsequently. Earnings per equivalent American Depository Share (ADS) is calculated by multiplying earnings per share by five (one ADS represents five common shares).

k. Mandatorily redeemable preferred stock

Preferred stock subject to mandatory redemption is classified outside shareholders' equity under U.S. GAAP, but included in shareholders' equity under ROC GAAP.

The following reconciles net income and shareholders' equity under ROC GAAP as reported in the consolidated financial statements to the approximate net income and shareholders' equity amounts determined under U.S. GAAP, giving effect to adjustments for the differences listed above.

	Year Ended December 31,			
	1999	2000	2001	
	NT$	NT$	NT$	US$
	(in millions)			
Net income				
Net income based on ROC GAAP	23,527.0	65,106.2	14,483.2	413.8
Adjustments:				
Pension benefits	2.9	21.3	0.7	0.0
Unrealized holding gain on marketable securities classified as trading	1,209.3	2,092.6	587.4	16.8
Bonuses to employees:				
Accrual	(1,936.4)	(5,258.7)	(1,201.4)	(34.3)
Adjustment to fair market value	(8,414.5)	(23,290.1)	(25,208.5)	(720.3)
Derivative financial instruments	(9.7)	(434.1)	(518.4)	(14.8)
Effects of GAAP adjustments on Equity investees	(405.0)	135.8	(634.0)	(18.1)
Amortization of goodwill	-	(5,395.5)	(10,791.0)	(308.3)
Technology transfer in payment of capital stocks	54.0	54.0	54.0	1.5
Amortization of compensation cost	(143.3)	(143.3)	(107.5)	(3.1)
Gain on sale of treasury stock	-	(230.0)	(95.0)	(2.7)
Impairment loss	-	(10,916.1)	-	-
Depreciation on assets impaired under U.S. GAAP	-	-	1,455.5	41.6

Income tax	(0.2)	(1.7)	(0.1)	0.0
Net decrease in net income	(9,642.9)	(43,365.8)	(36,458.3)	(1,041.7)
Net income (loss) based on U.S. GAAP	13,884.1	21,740.4	(21,975.1)	(627.9)
Cumulative preferred dividends	-	-	(455.0)	(13.0)
Income (loss) attributable to common shareholders	13,884.1	21,740.4	(22,430.1)	(640.9)
Earnings (loss) per common share	0.97	1.37	(1.37)	(0.04)
Number of weighted average shares outstanding under U.S. GAAP (Note 23j)	14,249,102,000	15,859,173,000	16,326,111,000	
Earnings (loss) per ADS	4.87	6.85	(6.87)	

	December 31,		
	2000	2001	
	NT$	NT$	US$
		(in millions)	
Shareholders' equity			
Shareholders' equity based on ROC GAAP	261,753.7	277,190.2	7,919.7
Adjustments:			
Pension benefits	(49.1)	(48.4)	(1.4)
Unrealized holding gain (loss) of marketable securities classified as available-for-sale			
TSMC	40.2	168.9	4.8
Investee	(14.0)	499.3	14.3
Marketable securities - trading	3,305.0	3,936.2	112.5
Bonuses to employees, directors and supervisors	(5,258.7)	(1,201.4)	(34.3)
Effects of GAAP adjustments on equity investees	(842.5)	(1,476.5)	(42.2)
Derivative financial instruments	(443.8)	(962.2)	(27.5)
Reclassification of treasury stock	(1,285.8)	(2,115.7)	(60.4)
Goodwill	46,817.2	36,026.2	1,029.3
Technology transfer in payment of capital Stocks	(157.5)	(103.5)	(3.0)
Impairment loss	(10,916.1)	(10,916.1)	(311.9)
Depreciation on assets impaired under U.S. GAAP	-	1,455.5	41.6
Effect of above U.S. GAAP adjustments on income taxes	(2.5)	(2.6)	(0.1)
Mandatorily redeemable preferred stock	(13,000.0)	(13,000.0)	(371.4)
Net increase in shareholders' equity	18,192.4	12,259.7	350.3
Shareholders' equity based on U.S.GAAP	279,946.1	289,449.9	8,270.0

	Year Ended December 31,			
	1999	2000	2001	
	NT$	NT$	NT$	US$
		(in millions)		
Changes in shareholders' equity based on U.S. GAAP:				
Balance, beginning of year	94,293.2	151,977.3	279,946.1	7,998.5
Unrealized holding gain (loss) of marketable securities classified as available-for-sale				
TSMC	33.3	(71.6)	128.7	3.7
Equity investees	1,590.5	(14.0)	513.3	14.7
Reversal of unrealized loss (gain) on long-term investments				
TSMC	-	(343.3)	71.6	2.0
Equity investee	-	(1,590.5)	-	-
Net income (loss) for year	13,884.1	21,740.4	(21,975.1)	(627.9)
Common shares issued as bonuses to Employees	9,519.0	25,011.3	29,882.9	853.8
Translation adjustment	(362.7)	811.7	1,507.1	43.0
Adjustment from changes in ownership percentage of investees	127.0	-	-	-
Purchases of treasury stocks	(382.4)	(975.4)	(923.0)	(26.4)
Amortization of deferred Compensation	143.3	143.3	107.5	3.1
Proceeds from sales of treasury Stock	-	492.1	188.1	5.4
Issuance of capital stock	20,618.0	26,204.6	-	-
Issuance of capital stock for the acquisition of TASMC	-	56,560.2	-	-
Conversion of foreign bonds	12,514.0	-	-	-
Cash dividends	-	-	(41.1)	(1.2)
Other	-	-	43.8	1.3
Balance, end of year	151,977.3	279,946.1	289,449.9	8,270.0

A reconciliation of the significant balance sheet accounts to the approximate amounts determined under U.S. GAAP is as follows:

	December 31,		
	2000	2001	
	NT$	NT$	US$
Short-term investments		(in millions)	
As reported	1,502.1	1,398.1	39.9
U.S. GAAP adjustments			
Restatement of investments to fair value	3,305.0	3,936.2	112.5
Treasury stock	(1,285.8)	(1,206.8)	(34.4)
As adjusted	3,521.3	4,127.5	118.0

Long-term investments			
As reported	10,663.8	11,599.2	331.4
U.S. GAAP adjustments			
Equity investments	(842.5)	(1,476.5)	(42.2)
Unrealized holding gain of marketable securities classified as available for sale			
- TSMC	40.2	168.9	4.8
- Investee	(14.0)	499.3	14.3
Treasury Stock	-	(908.9)	(26.0)
As adjusted	9,847.5	9,882.0	282.3
Property, plant and equipment - net			
As reported	244,747.9	251,287.6	7,179.6
U.S. GAAP adjustments			
Impairment loss	(10,916.1)	(10,916.1)	(311.9)
Depreciation	-	1,455.5	41.6
As adjusted	233,831.8	241,827.0	6,909.3
Deferred income tax			
As reported	14,807.8	18,595.9	531.3
U.S. GAAP adjustments			
Effect of U.S. GAAP adjustments on deferred income tax	(2.5)	(2.6)	(0.1)
As adjusted	14,805.3	18,593.3	531.2
Deferred charge - net			
As reported	3,335.7	3,769.8	107.7
U.S. GAAP adjustments			
Technology transfer in payment of capital Stock	(157.5)	(103.5)	(3.0)
As adjusted	3,178.2	3,666.3	104.7
Goodwill			
As reported	11,531.0	11,437.6	326.8
U.S. GAAP adjustments			
Goodwill	46,817.2	36,026.2	1,029.3
As adjusted	58,348.2	47,463.8	1,356.1

Current liabilities			
As reported	47,425.0	33,329.0	952.3
U.S. GAAP adjustments			
Financial instruments	443.8	962.2	27.5
Bonuses to employees, directors and supervisors	5,258.7	1,201.4	34.3
As adjusted	53,127.5	35,492.6	1,014.1
Accrued pension cost			
As reported	1,511.3	1,856.6	53.0
U.S. GAAP adjustments			
pension expenses	49.1	48.4	1.4
As adjusted	1,560.4	1,905.0	54.4

As a result of the adjustments presented above, the approximate amounts of total assets based on U.S. GAAP are NT$407,830.0 million and NT$393,989.4 million as of December 31, 2000 and 2001, respectively.

The following U.S. GAAP condensed statements of operations for the years ended December 31, 1999, 2000 and 2001 have been derived from the audited financial statements and reflect the adjustments presented above.

	Year Ended December 31,			
	1999 *	2000 *	2001	
	NT$	NT$	NT$	US$
	(in millions)			
Net sales	76,305.1	166,860.3	127,241.6	3,635.5
Cost of sales	52,162.8	105,358.7	107,193.7	3,062.7
Gross profit	24,142.3	61,501.6	20,047.9	572.8
Operating expenses	12,309.6	44,472.6	41,711.6	1,191.8
Income (loss) from operation	11,832.7	17,029.0	(21,663.7)	(619.0)
Non-operating income (expenses) - net	(847.1)	3,508.4	(4,008.0)	(114.5)
Income (loss) before income Tax	10,985.6	20,537.4	(25,671.7)	(733.5)
Net income (loss)	13,884.1	21,740.4	(21,975.1)	(627.9)
Cumulative preferred dividends	-	-	(455.0)	(13.0)
Income (loss) attributable to common shareholders	13,884.1	21,740.4	(22,430.1)	(640.9)

* Consistent with reclassifications made under ROC GAAP as described in Note 2(R), operating expenses above reflect the reclassification of NT$1,024.8 million and NT$2,072.1 million from costs of sales to research and development expenses for the years ended December 31, 1999 and 2000.

24. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP

a. Recent accounting pronouncements

The Company is required by SEC Staff Accounting Bulletin No. 74, to make certain disclosures about recently issued accounting standards will have on its financial statements adopted in a future period.

In June 2001, the Financial Accounting Standards Board issued SFAS No. 141, "Accounting for business combinations", and SFAS No. 142, "Goodwill and other intangible assets". The Company must adopt these standards on January 1, 2002, which may affect accounting for business combinations consummated after June 30, 2001 and accounting for existing goodwill and other intangible assets of the Company upon adoption. The standards require, among other provisions, companies to review for possible impairment of goodwill existing on the date of adoption and perform subsequent impairment tests on an annual basis. Unamortized goodwill amounted to NT$ 47,463.8 million under U.S. GAAP as of December 31, 2001. Additionally, existing goodwill and intangible assets must be reassessed and classified consistently in accordance with the Statements' criteria. Under the new standards, the Company will no longer incur goodwill amortization expense, which amounted to NT$12,051.2 million under U.S. GAAP for the year ended December 31, 2001. At the same time, intangible assets will continue to be amortized over their estimated useful lives, which, if supportable, may be a period that exceeds the current maximum period of 40 years. Intangible assets with indeterminable useful lives and goodwill will not be amortized but assessed for impairment each year. The Company has not yet completed its assessment of the impact these new standards may have on its financial information relating to U.S. GAAP and cannot determine whether there will be impact to be recognized upon adoption.

In June 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations". The Statement requires, among other provisions, retirement obligations to be recognized when they are incurred and displayed as liabilities, with a corresponding amount capitalized as part of the related long-lived asset. The capitalized element is required to be expensed using a systematic and rational method over its useful life. SFAS No. 143 will be adopted by the Company on January 1, 2003 and is not expected to have a material impact on its financial information relating to U.S. GAAP.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", which is required to be applied by the Company by January 1, 2002. The Statement supercedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" and APB Opinion No. 30, "Reporting the Results of Operations – Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently

Occurring Events". For long-lived assets to be held and used, the Statement retains the requirement of SFAS No. 121 whereby an impairment loss is recognized if the carrying value of the asset is not recoverable from its undiscounted cash flows and an impairment loss is measured as the difference between fair values and carrying values of the asset. The new Statement requires long-lived assets to be disposed of other than by sale to be considered held and used until they are disposed. The Statement also broadens the scope of APB Opinion No. 30 for the presentation of discontinued operations separately from continuing operations to include a component of an entity that either has been disposed of or is classified as held for sale. In addition, discontinued operations are no longer measured on a net realizable value basis, and expected future operating losses must be reflected in the periods incurred, rather than at the measurement date as previously required under APB Opinion No. 30. The adoption of the Statement is not expected to have a material impact on its financial information relating to U.S. GAAP.

b. Marketable securities

On December 31, 2000 and 2001, certain investments carried at cost under ROC GAAP were adjusted to fair value under U.S. GAAP for purposes of U.S. GAAP presentation:

	(ROC GAAP) Carrying value		(U.S. GAAP) Fair value	
	2000	2001	2000	2001
	NT$		NT$	
	(in millions)			
Investment in trading securities	216.3	191.3	3,521.3	4,127.5
Long-term investments-available for sale (Note 8)	32.1	312.8	72.3	481.7

The Company uses the average cost method for trading securities and available-for-sale securities when determining cost basis. Proceeds from sales of investment securities available-for-sale during 1999, 2000 and 2001 are NT$150.0 million, NT$49.4 million and NT$559.1 million, respectively. Gross realized gains on these sales are NT$67.8 million, NT$15.1 million and NT$105.4 million, respectively.

The gross gains included in earnings from transfers of securities from the available-for-sale category into the trading category for the year ended December 31, 2000 was NT$17.5 million. There were no transfers of securities from the available-for-sale category into the trading category for the year ended December 31, 1999 and 2001.

c. Pension

	December 31,		
	1999	2000	2001
	NT$	NT$	NT$
		(in millions)	
Actuarial present value of benefit obligations			
Vested benefit obligation	-	-	-
Accumulated benefit obligation	(430.1)	(765.7)	(1,027.1)
Projected benefit obligation	(1,405.4)	(2,315.7)	(2,434.1)
Plan assets at fair value	371.0	684.0	855.8
Projected benefit obligation in excess of plan assets	(1,034.4)	(1,631.7)	(1,578.3)
Unrecognized net transition obligation	81.5	76.1	70.7
Unrecognized net loss	(117.5)	(4.8)	(397.4)
Unfunded accrued pension cost	(1,070.4)	(1,560.4)	(1,905.0)
Accrued pension cost			
Balance, beginning of year	823.8	1,070.4	1,560.4
Net periodic pension cost			
Service cost	248.4	376.7	418.0
Interest cost	78.9	91.2	95.9
Expected return on assets	(18.5)	(32.6)	(41.0)
Amortization of unrecognized net transition obligation	1.6	11.4	2.5
Net periodic pension cost	310.4	446.7	475.4
Contributions	(63.8)	(107.3)	(130.8)
The “Accrued Pension Cost” transferred from TASMC and WSMC	-	150.6	-
Balance, end of year	1,070.4	1,560.4	1,905.0
Change in benefit obligation:			
Benefit obligation at beginning of year	1,129.8	1,405.4	2,315.7
Service cost	248.4	376.7	418.0
Interest cost	78.9	91.2	95.9
Actuarial (gain) / loss	(48.1)	442.6	(395.5)
Benefit paid	(3.6)	(0.2)	-
Benefit obligation at end of year	1,405.4	2,315.7	2,434.1
Change in plan assets:			
Fair value of plan assets at beginning of year	292.3	371.0	684.0
Actual return on plan assets	18.5	32.6	41.0

Employer contribution	63.8	107.3	130.8
Benefits paid	(3.6)	(0.2)	-
The "Pension Assets" transferred from TASMC and WSMC	-	173.3	-
Fair value of plan assets at end of year	371.0	684.0	855.8
Assumptions used in actuarial calculations:			
Discount rate	6.5%	6.0%	5.0%
Long-term salary increase	6.0%	6.0%	5.0%
Expected long-term rate of return on Plan assets	6.5%	6.0%	5.0%

d. Income tax benefit

	Year Ended December 31,		
	1999	2000	2001
	NT$	NT$	NT$
		(in millions)	
Income tax current payable	(88.5)	(27.2)	(47.4)
Deferred income tax	2,383.5	1,003.7	3,788.0
Adjustment of prior years' income taxes	87.6	189.7	-
Income tax benefit	2,382.6	1,166.2	3,740.6

Reconciliation between income tax calculated on pre-tax financial statement income based on the statutory tax rate and income tax benefit which conforms to U.S. GAAP is as follows:

	Year Ended December 31,		
	1999	2000	2001
	NT$	NT$	NT$
		(in millions)	
Tax on pretax income at ROC statutory rate (25%)	(2,746.4)	(5,134.4)	6,417.9
SBIP tax exemption (5%)	549.3	1,026.9	-
Tax on pretax income at SBIP statutory rate	(2,197.1)	(4,107.5)	6,417.9
Other tax & assessed additional income tax	-	(88.0)	(338.6)
Tax paid by subsidiaries	(763.5)	(7.4)	(31.1)
Tax effects of:			
Tax-exempt income	3,434.8	9,734.9	1,089.0
Expiration of net operating loss	-	(981.1)	-
Permanent difference			

Bonus expense	(2,070.2)	(5,709.8)	(6,602.5)
Amortization of goodwill	-	(1,079.1)	(2,697.8)
Marketable securities	(241.9)	418.5	21.9
Others	602.8	(651.1)	(2,870.6)
Tax credits - Utilized	1,587.0	5,128.0	2,888.4
- Deferred	3,929.0	5,356.3	3,044.1
Valuation allowance	(1,985.9)	(7,037.2)	3,215.1
Change in statutory rate	-	-	(395.2)
Adjustment of prior year's income tax	87.6	189.7	-
Income tax benefit	2,382.6	1,166.2	3,740.6

The roll-forward of deferred income tax is as follows:

	Income Tax Credit	Valuation Allowance	Net Operating Loss	Temporary Differences	Total
	NT$	NT$	NT$ (in millions)	NT$	NT$
Balance as of January 1, 1999	7,169.6	(557.7)	170.1	359.6	7,141.6
Increased (decreased) in 1999	5,516.0	(1,985.9)	811.0	(273.2)	4,067.9
Utilized in 1999	(1,587.0)	-	-	-	(1,587.0)
Balance as of December 31, 1999	11,098.6	(2,543.6)	981.1	86.4	9,622.5
Increased in 2000	10,484.3	(7,037.2)	-	3,616.4	7,063.5
Acquired from 68% of TASMC	4,558.4	(330.0)	-	-	4,228.4
Utilized in 2000	(5,128.0)	-	(981.1)	-	(6,109.1)
Balance as of December 31, 2000	21,013.3	(9,910.8)	-	3,702.8	14,805.3
Change in statutory rate	-	-	-	(395.2)	(395.2)
Increased (decreased) in 2001	5,932.5	-	-	(937.1)	4,995.4
Utilized in 2001	(2,888.4)	3,215.1	-	(1,138.9)	(812.2)
Balance as of December 31, 2001	24,057.4	(6,695.7)	-	1,231.6	18,593.3

The components of net deferred income tax assets were as follows:

	Year Ended December 31,	
	2000	2001
	NT$	NT$
	(in millions)	
Current deferred income tax assets		
Income tax credits	8,422.0	2,347.0

Other	56.0	3.1
Valuation allowance	(300.0)	-
	8,178.0	2,350.1
Non-current deferred income tax assets		
Income tax credits	12,591.3	21,710.4
Impairment loss	4,148.1	3,595.0
Pension	110.7	291.0
Other	245.8	130.0
Valuation allowance	(9,610.8)	(6,695.7)
	7,485.1	19,030.7
Deferred income tax liabilities		
Depreciation	(857.8)	(2,190.1)
Other	-	(597.4)
	(857.8)	(2,787.5)
	14,805.3	18,593.3

e. Impairment loss

WaferTech, a subsidiary, has experienced losses and an extended ramp-up period for its facility. Additionally, economic events had caused WaferTech to substantially alter its forecasts for future years' production and operating results. As a result of these factors, WaferTech performed a valuation and measured the impairment of its long-lived assets in accordance with SFAS 121 as of December 31, 2000.

WaferTech's study concluded that the undiscounted value of the projected cash flows of the facility's long-lived assets as of December 31, 2000 was less than the net book value of such assets as of December 31, 2000.

As a result of this conclusion, WaferTech determined the need to record an impairment charge under U.S. GAAP related to its integrated circuit fabrication facility. To determine the fair value of the assets, WaferTech utilized a combination of valuation techniques, including a cost to capacity method and a discounted cash flow method. The total impairment charge was determined to be US$330.0 million (NT$10,916.1million) and was included as an operating expense in the accompanying U.S. GAAP condensed statements of operations of the Company as of and for the year ended December 31, 2000.

f. Stock based compensation plans

Stock option

In 1996, WaferTech, a subsidiary, adopted an Executive Incentive Plan, which was amended in 1997. Under the 1997 amendment, the Board of Directors approved the Senior Executive Incentive Plan and the Employee Incentive Plan (hereafter referred to

as the Plans) under which officers, key employees and nonemployee directors may be granted option rights, appreciation rights and/or performance units.

As WaferTech is a limited liability company and does not have shares of stock, each option right granted pursuant to the Plans provided grantees rights to purchase ownership interests in WaferTech. The Plans provided for approximately 6 percent of the total ownership interests to be available for grant, represented by 15.15 million option rights. For option rights granted to date, the option purchase price exceeded or was equal to the fair value at the date of grant. While WaferTech may grant option rights to employees which become exercisable at different times or within different periods, WaferTech has generally granted option rights to employees which are exercisable on a cumulative basis in annual instalments of 25 percent each on the first, second, third and fourth anniversaries of the date of grant.

The following table summarizes information about WaferTech's plans:

	Option Rights Available for Grant	Outstanding Option Rights	
		Number of Option Rights	Exercise Price US$
Balance at January 1, 1999	6,400,252	7,099,748	0.74
Options granted			
Option price > fair market value	(3,084,305)	3,084,305	0.86
Option exercised	-	(1,119,323)	0.74
Option cancelled	838,650	(838,650)	0.74
Balance at December 31, 1999	4,154,597	8,226,080	0.78
Additional option rights authorized	1,650,000	–	-
Options granted:			
Option price > fair market value	(3,203,302)	3,203,302	1.86
Option exercised	-	(3,411,867)	0.74
Option cancelled	1,180,871	(1,180,871)	1.09
Balance at December 31, 2000	3,782,166	6,836,644	1.23
Options granted:			
Option price > fair market value	-	-	-
Option exercised	-	(2,949,358)	1.02
Option cancelled	825,906	(825,906)	1.27
Balance at December 31, 2001	4,608,072	3,061,380	1.43

These options will expire if not exercised at specific dates ranging from May 2006 to June 2011. As of December 31, 2001, 478,473 option rights to purchase ownership interests were vested and exercisable at exercise prices of US$0.74 for 1,182,573 option rights and US$ 1.86 for 1,878,807 option rights. The weighted average remaining contractual life of these options is 7.89 years.

WaferTech has elected to follow APB Opinion No. 25, "Accounting for Stock Issued to Employees" in accounting for its option plan. Under APB No. 25, because the exercise price of WaferTech's option rights was equal to or exceeds the market value of the underlying ownership interests on the date of grant, no compensation expense was recognized in WaferTech's financial statements prior to the stock option buyback program discussed below. WaferTech has, under U.S. GAAP, computed for pro forma disclosure purposes the fair value of each option grant, as defined by Statement of Financial Accounting Standards No. 123, "Stock-Based Compensation" (SFAS 123), using the Black-Scholes option pricing model. The value of WaferTech's stock-based awards to employees was estimated assuming no expected dividends and the following assumptions:

	1999	2000	2001
Risk free interest rate	7.00%	7.00%	N / A
Expected dividend yield	-	-	-
Expected lives	5 years	4 years	N / A

As WaferTech is not publicly traded, a volatility factor was not utilized in the pricing computation. No option rights were granted in 2001, the use of the Black-Scholes option pricing model is not relevant in 2001.

In December 2000, WaferTech executed the Stock Option Buyback Program (Buyback) with its employees. The Buyback program provides employees with the right to sell back all vested stock options and outstanding ownership interests granted under the Plans to WaferTech. The repurchase price for outstanding ownership interests is US$6 (NT$210) per share. The repurchase price for vested stock options is US$6 (NT$210) per share, less the exercise price of the option. Unvested option rights continue to vest in accordance with the vesting schedule prescribed under the Plans and can be sold back to WaferTech once vested. As of December 31, 2001, WaferTech has repurchased 2,234,157 outstanding ownership interests at a cost of US$13.4 million (NT$469.2 million), of which US$12.5 million (NT$435.9 million) has been recorded as treasury stock by WaferTech. The difference of US$0.9 million (NT$33.3 million) between the cost and the amount recorded as treasury stock, represents the amount of outstanding ownership interests held less than six months at the date of repurchase. In accordance with U.S. GAAP, this amount was included as a component of stock buyback expense in the financial statements for the year ended December 31, 2000. Outstanding ownership interests that had been held more than six months at the time of sale to WaferTech were recorded as treasury stock at the time of purchase by WaferTech.

Additionally, in December 2000, WaferTech has repurchased 4,876,729 vested stock option rights to purchase ownership interests at a cost of US$24.8 million (NT$869.2 million). In accordance with APB 25, WaferTech recognized compensation expense for the difference between the exercise price of options at the date of grant and the repurchase price at the date of the original offer to repurchase, which was December 2000. WaferTech recorded a charge to income and an accrued liability of US$44.2

million (NT$1,548.4 million), for which the expense was included as stock buyback expense in the financial statements for the year ended December 31, 2000. Of the accrued amount, US$14.0 million (NT$492.0 million) remains as accrued compensation as of December 31, 2001, and is included in accrued liabilities in the accompanying consolidated balance sheets. As of December 31, 2001, WaferTech had 3,061,380 option rights outstanding, of which 478,473 are vested and may be sold back to WaferTech.

For purposes of pro forma disclosure, the estimated fair values of the options are amortized over the option rights' vesting periods. Had TSMC recorded compensation costs based on the estimated fair value on the grant date, as defined by SFAS 123, TSMC's net income under U.S. GAAP would have been reduced to the pro forma amounts below for the years ended December 31, 1999, 2000 and 2001.

	Year Ended December 31,		
	1999	2000	2001
	NT$	NT$	NT$
	(in millions, except per share amounts)		
U.S. GAAP			
Net income (loss) of TSMC as reported	13,884.1	21,740.4	(21,975.1)
Pro forma net income – TSMC	13,876.7	21,919.5	(21,975.1)
Pro forma income per share	1.34	1.92	(1.37)
Pro forma income per ADS	6.68	9.61	(6.85)
Fair Value of granted options	23.6	46.6	-

Stock appreciation rights

In conjunction with the Buyback program, WaferTech, a subsidiary, implemented the Employee Stock Appreciation Incentive Plan (Appreciation). The Appreciation plan is designed to provide WaferTech's employees with a long-term incentive plan that tracks the appreciation of TSMC common stock through Stock Appreciation Rights (SARs). SARs provide each participant the right to receive upon exercise an amount in cash from WaferTech that is the excess of the market price of TSMC common stock at the date of exercise over the exercise price at the date of grant. The exercise price is equivalent to the per share price of TSMC common stock at the date of grant as quoted on the Taiwan Stock Exchange. SARs granted prior to March 10, 2001 vest 25 percent per year beginning one year from the date of grant and expire five years from the date of grant. In May 2001, WaferTech's Board of Directors approved reducing the vesting period from four years to two years for SARs granted after March 10, 2001.

Compensation expenses are recorded based on the different between the grant price and market price at the end of each period. This expense is recognized ratably over the vesting period and adjusted based upon periodic fluctuations in the stock. As of December 31, 2001, WaferTech has granted 10,217,923 appreciation rights under the Appreciation plan at a weighted average exercise price of US$1.93 (NT$66.67). As of December 31, 2001, there were 807,323 vested rights under the Appreciation plan.

TSMC-North America, a subsidiary, started a stock appreciation right program whereby the employees received cash bonuses based on the appreciation of the quoted market price of the shares of stock of TSMC. Compensation expenses are recorded based on the difference between the grant price and market price at the end of each period. This expense is recognized ratably over the vesting period and adjusted based upon periodic fluctuations. As of December 31, 2001, TSMC-North America has recorded compensation expense and related accrued liability of approximately US$3.9 million (NT$136.5 million). No amount was recorded as compensation expense in 2000 as the value of the investment declined in 2000. The compensation expense in 2001 is based on the difference of the grant price of NT$64.85 and the market price NT$87.5 at December 31, 2001.

g. Employee benefit plan

During 1997, WaferTech established a defined contribution plan. Employees who meet certain minimum eligibility criteria can contribute a percentage of their annual compensation subject to certain regulatory and Plan limitations. The Plan provides for matching contributions by the WaferTech on a discretionary basis. For the years ended December 31, 1999, 2000 and 2001, WaferTech made discretionary matching contributions of US$0 million (NT$0 million), US$0.7 million (NT$23.3 million) and US$1.5 million (NT$51.0 million), respectively.

h. Statements of cash flows

We apply ROC Statement of Financial Accounting Standard No. 17, "Statement of Cash Flows". Its objectives and principles are similar to those set out in the FAS 95, "Statement of Cash Flows" (FAS 95). The principle differences between the standards relate to classification. Cash flow from changes in short-term investments, restricted cash, pledge time deposits, refundable deposits, other assets-miscellaneous, guarantee deposits and other liabilities and bonus to directors and supervisors are included as operating activities under FAS 95. Summarized cash flow data by operating, investing and financing activities in accordance with FAS 95 are as follows:

	Year Ended December 31,			
	1999	2000	2001	
	NT$	NT$	NT$	US$
	(in millions)			
Net cash inflow (outflow) from:				
Operating activities	41,938.8	99,348.4	75,611.4	2,160.3
Investing activities	(63,794.0)	(122,747.9)	(77,534.9)	(2,215.3)
Financing activities	40,674.1	32,603.5	1,406.5	40.2
Change in cash and cash equivalents	18,818.9	9,204.0	(517.0)	(14.8)
Cash and cash equivalents at the beginning of period	10,871.9	29,517.7	38,840.2	1,109.7
Effect of changes in foreign exchange rate	(173.1)	118.5	(766.9)	(21.9)
Cash and cash equivalents at the end of period	29,517.7	38,840.2	37,556.3	1,073.0

i. Supplemental information of the mergers:

Effective June 30, 2000, TSMC acquired the remaining 68% of TSMC-Acer Semiconductor Manufacturing Corporation (TASMC) by issuing new shares. The purchase price was allocated to TASMC's assets and liabilities based on fair values as follows:

	NT$ (in millions)
Cash and cash equivalent	736.6
Inventories	1,647.8
Other current assets	2,308.4
Property, plant and equipment - net	19,846.7
Other assets	7,335.5
Current liabilities	(16,699.1)
Long-term liabilities	(2,000.0)
Other liabilities	(654.8)
Tangible net assets	12,521.1
Goodwill	52,212.7
	64,733.8
Purchase price	56,560.2
Carrying value of 32% investment (already owned)	3,318.9
Carrying value of preferred stock	4,854.7
	64,733.8

An additional 29% was acquired at a purchase price of US$474.6 million (NT$14,809.7 million) in December 2000. The purchase price was allocated to WaferTech's assets and liabilities as follows:

	NT$ (in millions)
Current Assets	1,094.0
Plant and Equipment	11,787.7
Other assets	93.7
Current liabilities	(1,817.4)
Long-term liabilities	(4,569.5)
Tangible net assets	6,588.5
Goodwill	8,221.2
Purchase price	14,809.7

j. Statement of comprehensive income

	Year Ended December 31,			
	1999	2000	2001	
	NT$	NT$	NT$	US$
	(in millions)			
Current earnings based on U.S. GAAP	13,884.1	21,740.4	(21,975.1)	(627.9)
Other comprehensive income, net of tax :				
Unrealized holding gain (loss) of marketable securities classified as available for sale				
TSMC	33.3	(71.6)	128.7	3.7
Investee	1,590.5	(14.0)	513.3	14.7
Reversal of unrealized gain of marketable securities classified as available for sale	-	(1,933.8)	71.6	2.0
Translation adjustments	(362.7)	811.7	1,507.1	43.0
	1,261.1	(1,207.7)	2,220.7	63.4
Comprehensive income	15,145.2	20,532.7	(19,754.4)	(564.5)

k. Pro forma information - unaudited

Under APB Opinion No. 16, “Business Combination”, the acquisition of 68% of TASMC on June 30, 2000 were accounted by the purchase method, and the merger with WSMC on June 30, 2000 was accounted for as a pooling of interests, with the results of operations of WSMC retroactively restated in the consolidated statements of income for all periods presented.

Unaudited pro forma net sales, net income and earnings per share of TSMC under U.S. GAAP for 1999 and 2000, based on the assumption that the acquisition of TASMC was completed as of January 1, 1999 are as follows:

	Year Ended December 31,	
	1999	2000
	NT$	NT$
	(in millions)	
Net sales	86,130.1	170,132.4
Net income	(5,372.3)	17,745.3
Earnings per share		
Based on weighted-average number of shares outstanding –14,856,023 thousand shares and 16,162,634 thousand shares in 1999 and 2000	(0.36)	1.10