TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD
Form 20-F
April 15, 2011

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SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
FORM 20-F

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

OR

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

For the fiscal year ended December 31, 2010

OR

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

For the transition period from _____ to _____

OR

o **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

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. 8, Li-Hsin Road 6
Hsinchu Science 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.

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, 2010, 25,910,078,664 Common Shares, par value NT$10 each were outstanding.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes þ No o

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or (15)(d) of the Securities Exchange Act of 1934. Yes o No þ

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 þ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes o No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer þ	Accelerated Filer o	Non-Accelerated Filer o

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP o	International Financial Reporting Standards as issued by the International Accounting Standards Board o	Other þ

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 o Item 18 þ

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No þ

* 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

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Taiwan Semiconductor Manufacturing Company Limited

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This annual report includes statements that are, or may be deemed to be, forward-looking statements within the meaning of U.S. securities laws. The terms anticipates, expects, may, will, should and other similar expressions identify forward-looking statements. These statements appear in a number of places throughout this annual report and include statements regarding our intentions, beliefs or current expectations concerning, among other things, our results of operations, financial condition, liquidity, prospects, growth, strategies and the industries in which we operate.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Forward-looking statements are not guarantees of future performance and our actual results of operations, financial condition and liquidity, and the development of the industries in which we operate may differ materially from those made in or suggested by the forward-looking statements contained in this annual report. Important factors that could cause those differences include, but are not limited to:

the volatility of the semiconductor and microelectronics industry;

overcapacity in the semiconductor industry;

the increased competition from other companies and our ability to retain and increase our market share;

our ability to develop new technologies successfully and remain a technological leader;

our ability to maintain control over expansion and facility modifications;

our ability to generate growth and profitability;

our ability to hire and retain qualified personnel;

our ability to acquire required equipment and supplies necessary to meet business needs;

our reliance on certain major customers;

the political stability of our local region; and

general local and global economic conditions.

Forward-looking statements include, but are not limited to, statements regarding our strategy and future plans, future business condition and financial results, our capital expenditure plans, our capacity management plans, expectations as to the commercial production using 28-nanometer and more advanced technologies, technological upgrades, investment in research and development, future market demand, future regulatory or other developments in our industry as well as our plans to expand into various new businesses. Please see Item 3. Key Information Risk Factors for a further discussion of certain factors that may cause actual results to differ materially from those indicated by our forward-looking statements.

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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 and Operating Data

The selected income statement data, cash flow data and other financial data for the years ended December 31, 2008, 2009 and 2010, and the selected balance sheet data as of December 31, 2009 and 2010, 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 thereto. The selected income statement data, cash flow data and other financial data for the years ended December 31, 2006 and 2007 and the selected balance sheet data as of December 31, 2006, 2007 and 2008, 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 accounting principles generally accepted (GAAP or R.O.C. GAAP) in the Republic of China (R.O.C. or Taiwan), which differ in some material respects from accounting principles generally accepted in the United States of America (U.S. GAAP) as further explained under note 32 to our consolidated financial statements.

	Year ended and as of December 31					
	2006	2007	2008	2009	2010	2010
	NT$	NT$	NT$	NT$	NT$	US$
		(in millions, except for percentages, earnings per share and per ADS, and operating data)				
Income Statement Data:						
R.O.C. GAAP						
Net sales	317,407	322,630	333,158	295,742	419,538	14,397
Cost of sales[7]	(161,597)	(180,280)	(191,408)	(166,413)	(212,484)	(7,292)
Gross profit	155,810	142,350	141,750	129,329	207,054	7,105
Operating expenses[7]	(28,545)	(30,628)	(37,315)	(37,367)	(47,879)	(1,643)
Income from operations	127,265	111,722	104,435	91,962	159,175	5,462
Non-operating income and gains [6]	9,839	11,934	10,822	5,654	13,136	451
Non-operating expenses and losses [6]	(3,742)	(2,014)	(3,785)	(2,153)	(2,041)	(70)
Income before income tax and minority interests	133,362	121,642	111,472	95,463	170,270	5,843
Income tax expense	(7,774)	(11,710)	(10,949)	(5,997)	(7,988)	(274)
Income before cumulative effect of changes in accounting principles	125,588	109,932	100,523	89,466	162,282	5,569
Cumulative effect of changes in accounting principles	1,607					
Income before minority interests	127,195	109,932	100,523	89,466	162,282	5,569
Minority interests in loss (income) of subsidiaries	(185)	(755)	(590)	(248)	(677)	(23)
Net income attributable to shareholders of the parent	127,010	109,177	99,933	89,218	161,605	5,546
Basic earnings per share[1]	4.70	4.04	3.84	3.45	6.24	0.21
Diluted earnings per share[1]	4.69	4.04	3.81	3.44	6.23	0.21
Basic earnings per ADS equivalent[1]	23.49	20.21	19.19	17.27	31.19	1.07

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	Year ended and as of December 31					
	2006 NT$	2007 NT$	2008 NT$	2009 NT$	2010 NT$	2010 US$
	(in millions, except for percentages, earnings per share and per ADS, and operating data)					
Diluted earnings per ADS equivalent[1]	23.47	20.20	19.05	17.21	31.17	1.07
Basic weighted average shares outstanding[1]	27,031	27,005	26,039	25,836	25,906	25,906
Diluted weighted average shares outstanding[1]	27,053	27,026	26,235	25,913	25,920	25,920
U.S. GAAP						
Net sales	317,979	323,221	334,340	296,109	419,988	14,413
Cost of sales	(179,175)	(202,046)	(203,734)	(167,122)	(212,771)	(7,302)
Operating expenses	(37,050)	(44,775)	(44,424)	(37,627)	(48,434)	(1,662)
Income from operations	101,754	76,400	86,182	91,360	158,783	5,449
Income before income tax and noncontrolling interests	106,647	85,973	91,884	94,253	170,088	5,837
Income tax expense	(10,954)	(14,012)	(10,062)	(4,960)	(5,768)	(198)
Cumulative effect of changes in accounting principles	38					
Net income	95,711	71,658	81,473	89,102	164,320	5,639
Income attributable to common shareholders	95,711	71,658	81,473	89,102	163,639	5,616
Basic earnings per share[2]	3.68	2.71	3.15	3.45	6.32	0.22
Diluted earnings per share[2]	3.68	2.71	3.13	3.44	6.31	0.22
Basic earnings per ADS equivalent[2]	18.40	13.57	15.77	17.24	31.58	1.08
Diluted earnings per ADS equivalent[2]	18.38	13.56	15.65	17.19	31.57	1.08
Basic weighted average shares outstanding[2]	26,011	26,409	25,826	25,836	25,906	25,906
Diluted weighted average shares outstanding[2]	26,033	26,430	26,022	25,913	25,920	25,920
Balance Sheet Data:						
R.O.C. GAAP						
Working capital	213,457	201,116	195,812	180,671	138,328	4,747
Long-term investments	53,895	36,461	39,982	37,845	39,776	1,365
Properties	254,094	260,252	243,645	273,675	388,444	13,330
Goodwill	5,985	5,988	6,044	5,931	5,705	196
Total assets	587,485	570,865	558,917	594,696	718,929	24,672
Long-term bank borrowing	654	1,722	1,420	579	302	10
Long-term bonds payable	12,500	12,500	4,500	4,500	4,500	154
Guaranty deposit-in and other liabilities[3]	18,333	17,251	15,817	11,436	12,231	420
Total liabilities	78,347	80,179	78,544	95,648	140,224	4,812

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	Year ended and as of December 31					
	2006	2007	2008	2009	2010	2010
	NT$	NT$	NT$	NT$	NT$	US$
	(in millions, except for percentages, earnings per share and per ADS, and operating data)					
Capital stock	258,297	264,271	256,254	259,027	259,101	8,892
Cash dividend on common shares	61,825	77,489	76,881	76,876	77,708	2,667
Shareholders equity attributable to shareholders of the parent	507,981	487,092	476,377	495,083	574,145	19,703
Minority interests in subsidiaries	1,157	3,594	3,996	3,965	4,560	157
U.S. GAAP						
Goodwill	46,940	46,926	47,028	46,825	46,419	1,593
Total assets	626,108	610,843	599,484	635,275	759,266	26,056
Total liabilities	92,549	94,021	84,424	99,278	144,109	4,945
Capital Stock	258,297	264,271	256,254	259,027	259,101	8,892
Shareholders equity attributable to common shareholders of the parent	532,403	513,228	511,089	532,043	610,597	20,954
Noncontrolling interests in subsidiaries	1,156	3,594	3,971	3,954	4,560	157

	Year ended and as of December 31					
	2006	2007	2008	2009	2010	2010
	NT$	NT$	NT$	NT$	NT$	US$
	(in millions, except for percentages, earnings per share and per ADS, and operating data)					
Other Financial Data:						
R.O.C. GAAP						
Gross margin	49%	44%	42%	44%	49%	49%
Operating margin	40%	35%	31%	31%	38%	38%
Net margin	40%	34%	30%	30%	39%	39%
Capital expenditures	78,737	84,001	59,223	87,785	186,944	6,415
Depreciation and amortization	73,715	80,005	81,512	80,815	87,810	3,013
Cash provided by operating activities	204,997	183,766	221,494	159,966	229,476	7,875
Cash used in investing activities	(119,724)	(70,689)	(8,042)	(96,468)	(202,086)	(6,935)
Cash used in financing activities	(63,783)	(135,410)	(115,393)	(85,471)	(48,638)	(1,669)
Net cash inflow (outflow)	21,353	(22,851)	99,628	(23,338)	(23,389)	(803)
Operating Data:						
Wafer (200mm equivalent) shipment[4]	7,215	8,005	8,467	7,737	11,860	11,860
Billing Utilization Rate[5]	102%	93%	88%	75%	101%	101%

(1) Retroactively adjusted for stock dividends for earning year 2006 to earning year 2008 and profit sharing to employees in stock for earning year 2006 to earning year 2007.

(2) Retroactively adjusted for stock dividends for earning year 2006 to earning year 2008.

(3) Consists of other long-term payables, obligations under capital leases and total other liabilities.

(4) In thousands.

(5) Billing Utilization Rate is equal to annual wafer shipment divided by annual capacity. Capacity for the years 2007, 2008, 2009 and 2010 includes wafers committed by Vanguard. Please see Item 7. Major Shareholders and Related Party Transaction Related Party Transactions Vanguard International Semiconductor Corporation for a discussion of certain Vanguard contract terms.

(6) The specified 2006 and 2007 amounts for gains/losses on settlement and disposal of financial assets at fair value through profit or loss were reclassified into valuation gains/losses on financial instruments for comparison purposes. Such reclassification resulted in a change of non-operating income and gains from NT$9,705 million to NT$9,839 million and a change in non-operating expenses and losses from NT$3,608 million to NT$3,742 million for the year ended December 31, 2006.

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(7) As a result of the adoption of Interpretation 2007-052, Accounting for Bonuses to Employees, Directors and Supervisors, the Company records profit sharing to employees and bonus to directors and supervisors as an expense rather than as an appropriation of earnings starting in 2008. Please refer to note 4 to our consolidated financial statements for more details.

Exchange Rates

We publish our financial statements in New Taiwan dollars, the lawful currency of the R.O.C. In this annual report, $, US$ and U.S. dollars mean United States dollars, the lawful currency of the United States, and NT$ and 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. The translations from NT dollars to U.S. dollars and from U.S. dollars to NT dollars for periods through December 31, 2008 were made at the year-end 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. For January 1, 2009 and all later dates and periods, the exchange rate refers to the exchange rate as set forth in the statistical release of the Federal Reserve Board. Unless otherwise noted, all translations for the year 2010 were made at the exchange rate as of December 30, 2010, which was NT$29.14 to US$1.00. On April 8, 2011, the exchange rate was NT$28.92 to US$1.00.

The following table sets forth, for the periods indicated, information concerning the number of NT dollars for which one U.S. dollar could be exchanged.

	NT dollars per U.S. dollar			
	Average(1)	**High**	**Low**	**Period-End**
2005	32.16	33.77	30.65	32.80
2006	32.51	33.31	31.28	32.59
2007	32.82	33.41	32.26	32.43
2008	31.51	33.55	29.99	32.76
2009	32.96	35.21	31.95	31.95
2010	31.39	32.27	29.14	29.14
October 2010	30.81	31.30	30.42	30.60
November 2010	30.32	30.52	30.12	30.47
December 2010	29.90	30.37	29.14	29.14
January 2011	29.11	29.36	28.98	29.03
February 2011	29.28	29.76	28.78	29.74
March 2011	29.49	29.63	29.35	29.40
April 2011 (through April 8, 2011)	29.11	29.31	28.92	28.92

(1) Annual averages calculated from month-end rates and monthly averages calculated from daily closing rates.

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.

Capitalization and Indebtedness

Not applicable.

Reasons for the Offer and Use of Proceeds

Not applicable.

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, and that such factors may adversely affect our business and financial status and therefore the value of your investment:

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Risks Relating to Our Business

Any global systemic political, economic and financial crisis or catastrophe caused or induced by natural disasters could negatively affect our business, results of operations, and financial condition.

The 2008-2009 systemic economic and financial crisis that had affected global business, banking and financial sectors had also affected the semiconductor market. The 2008 turmoil in global markets resulted in sharp declines in electronic products sales from which we generate our income through our goods and services. There were and could be in the future a number of knock-on effects from such turmoil on our business, including significant decreases in orders from our customers; insolvency of key suppliers resulting in product delays; inability of customers to obtain credit to finance purchases of our products and/or customer insolvencies; and counterparty failures negatively impacting our treasury operations. For example, ongoing social unrest in certain oil producing countries could constrain the supply of oil that could have an adverse effect on the global economy and decline in demand for electronic products. The effects of the recent earthquake which hit Japan may disrupt global demand for electronic products and services. Any systemic political, economic or financial crisis or natural disasters induced catastrophe could cause revenues for the semiconductor industry as a whole to decline dramatically, which industry is subject to unexpected change in response to fluctuating global market conditions. Also, if economic conditions or the financial condition of our customers were to deteriorate, additional accounting related allowances may be required in the future and such additional allowances would increase our operating expenses and therefore reduce our operating income and net income. Any global economic crisis or catastrophes induced by natural disasters could materially and adversely affect our results of operations.

Since we are dependent on the highly cyclical semiconductor and microelectronics industries, which have experienced significant and sometimes prolonged periods of downturns and overcapacity, our revenues, earnings and margins may fluctuate significantly.

The semiconductor market and microelectronics industries have historically been cyclical and subject to significant and often rapid increases and decreases in product demand. Our semiconductor foundry business is affected by market conditions in such highly cyclical semiconductor and microelectronics industries. Most of our customers operate in these industries. Variations in order levels from our customers result in volatility in our revenues and earnings. From time to time, the semiconductor and microelectronics industries have experienced significant, and sometimes prolonged periods of downturns and overcapacity. Any systemic economic, political, or financial crisis, such as the one that occurred in 2008-2009, could create significant volatility and uncertainty within the semiconductor and microelectronics industries which may disrupt traditional notions of cyclicality within such industries. As such, the nature, extent and scope of such periods of downturns and overcapacity may vary drastically in accordance with the degree of volatility of market demand. Because we are, and will continue to be, dependent on the requirements of semiconductor and microelectronics companies for our services, periods of downturns and overcapacity in the general semiconductor and microelectronics industries lead to reduced demand for overall semiconductor foundry services, including our services. If we cannot take appropriate actions such as reducing our costs to sufficiently offset declines in demand, our revenues, margin and earnings will suffer during periods of downturns and overcapacity.

Decreases in demand and average selling prices for products that contain semiconductors may adversely affect demand for our products and may result in a decrease in our revenues and earnings.

A vast majority of our sales revenue is derived from customers who use our services in communication devices, personal computers and consumer electronics products. Any decrease in the demand for the products may decrease the demand for overall global semiconductor foundry services, including our services and may adversely affect our revenues. Further, a significant portion of our operating costs are fixed because we own most of our manufacturing capacities. In general, these costs do not decline when customer demand or our capacity utilization rates drop, and thus declines in customer demand, among other factors, may significantly decrease our margins. Conversely, as product demand rises and factory utilization increases, the fixed costs are spread over increased output, which can improve our margins. In addition, the historical and current trend of declining average selling prices (or ASP) of end use applications places downward pressure on the prices of the components that go into such applications. If the ASP of end use applications continues decreasing, the pricing pressure on components produced by us may lead to a

reduction of our revenues, margin and earnings.

If we are unable to compete effectively in the highly competitive foundry segment of the semiconductor industry, we may lose customers and our profit margin and earnings may decrease.

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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 may have access to more advanced technologies and greater financial and other resources than us, (such as the possibility of receiving direct or indirect government bailout/economic stimulus funds or other incentives that may be unavailable to us). Our competition may, from time to time, also decide to undertake aggressive pricing initiatives in one or more technology nodes. Competitive activities may decrease our customer base, or our ASP, or both.

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

The semiconductor industry and its technologies are constantly changing. We compete by developing process technologies using increasingly advanced nodes and on manufacturing products with more functions. We also compete by developing new derivative technologies. If we do not anticipate these changes in technologies and rapidly develop new and innovative technologies, or our competitors unforeseeably gain sudden access to additional technologies, we may not be able to provide foundry services on competitive terms. Although we have concentrated on maintaining a competitive edge in research and development, if we fail to achieve advances in technologies or processes, or to obtain access to advanced technologies or processes developed by others, we may become less competitive.

If we are unable to manage our capacity and the streamlining of our production facilities effectively, our competitiveness may be weakened.

We perform periodic long term market demand forecasts to estimate market and general economic conditions for our products and services. Based upon these estimates, we manage our overall capacity which may increase or decrease in accordance with market demand. Because market conditions may vary significantly and unexpectedly, our market demand forecast may change significantly at any time. Further, since certain manufacturing lines or tools in some of our manufacturing facilities may be placed in warm mode or suspended temporarily during periods of decreased demand, we may not be able to ramp up in a timely manner during periods of increased demand. During periods of continued decline in demand, our operating facilities may not be able to absorb and complete in a timely manner outstanding orders re-directed from shuttered facilities. Based on demand forecasts, we have been adding capacity to our 300mm wafer fabs in the Hsinchu Science Park and Tainan Science Park, respectively. Total monthly capacity for 300mm wafer fabs was increased from 154,300 wafers as of December 31, 2008 to 171,400 wafers as of December 31, 2009 and to 244,600 wafers as of December 31, 2010. Expansion and modification of our production facilities will, among other factors, increase our costs. For example, we will need to purchase additional equipment, train personnel to operate the new equipment or hire additional personnel. If we do not increase our net sales accordingly, in order to offset these higher costs, our financial performance may be adversely affected. See Item 4. Information on the Company Capacity Management and Technology Upgrade Plans for a further discussion.

We may not be able to implement our planned growth or development if we are unable to obtain sufficient financial resources to meet our future capital requirements.

Capital requirements are difficult to plan in the highly dynamic, cyclical and rapidly changing semiconductor industry. From time to time, we will continue to need significant capital to fund our operations and manage our capacity in accordance with market demand. Our continued ability to obtain sufficient external financing is subject to a variety of uncertainties, including:

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

Sufficient external financing may not be available to us on a timely basis, on reasonable market terms, or at all. As a result, we may be forced to curtail our expansion and modification plans or delay the deployment of new or expanded services until we obtain such financing.

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We may not be able to implement our planned growth, development or maintain our leading position if we are unable to recruit and retain qualified executives, managers and skilled technical and service personnel or suffer production disruptions caused by labor disputes.

We depend on the continued services and contributions of our executive officers and skilled technical and other personnel. Our business could suffer if we lose, for whatever reasons, the services and contributions of some of these personnel and we cannot adequately replace them, or if we suffer disruptions to our production operations arising from labor or industrial disputes. We may be required to increase or reduce the number of employees in connection with any business expansion or contraction, in accordance with market demand for our products and services. Since there is intense competition for the recruitment of these personnel, we cannot ensure that we will be able to fulfill our personnel requirements, or rehire such reduced personnel on comparable terms in a timely manner during an economic upturn.

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

Our operations and ongoing expansion plans depend on our ability to obtain an appropriate amount of equipment and related services from a limited number of suppliers in a market that is characterized by limited supply and long delivery cycles. During such times, supplier-specific or industry-wide lead times for delivery can be as long as six months or more. Also, the effects of the recent earthquake which hit Japan may make such supply even more limited and may further lengthen delivery cycles. To better manage our supply chain, we have implemented various business models and risk management contingencies with suppliers to shorten the procurement lead time. We also provide our projected demand for various items to many of our equipment suppliers to help them plan their production in advance. We have purchased used tools and continue to seek opportunities in acquiring relevant used tools. If we are unable to obtain equipment in a timely manner to fulfill our customers orders, or at a reasonable cost, our financial condition and results of operations could be negatively impacted.

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, gases, chemicals, and photoresist, on a timely basis. Shortages in the supply of some materials experienced by specific vendors or by the semiconductor industry generally have in the past resulted in occasional industry-wide price adjustments and delivery delays. Also, since we procure some of our raw materials from sole-source suppliers, there is a risk that our need for such raw materials may not be met when needed or that back-up supplies may not be readily obtainable. Many of our raw materials are sourced from Japan. The effects of the recent earthquake that hit Japan may undercut our ability to procure on a timely basis sufficient raw materials to produce our products and render our services. Our revenue and earnings could decline if we are unable to obtain adequate supplies of the necessary raw materials in a timely manner or if there are significant increases in the costs of raw materials that we cannot pass on to our customers.

If the Ministry of Economic Affairs uses a substantial portion of our production capacity, we will not be able to service our other customers.

According to our agreement with the Industrial Technology Research Institute of Taiwan, or ITRI, the Ministry of Economic Affairs of the R.O.C., or an entity designated by the Ministry of Economic Affairs, has an option to purchase up to 35% of certain of our capacity, if our outstanding commitments to our customers are not prejudiced. Although the Ministry of Economic Affairs has never exercised this option, if this option is exercised to any significant degree during tight market conditions, we may not be able to provide services to all of our other customers unless we are able to increase our capacity accordingly or outsource such increased demand and in a timely manner.

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

Our ability to compete successfully and to achieve future growth will depend in part on the continued strength of our intellectual property portfolio. While we actively enforce and protect our intellectual property rights, there can be no assurance that our efforts will be adequate to prevent the misappropriation or improper use of our proprietary technologies, trade secrets, software or know-how. Also, we cannot assure you that, as our business or business

models expand into new areas, or otherwise, we will be able to develop independently the technologies, trade secrets, software or know-how necessary to conduct our business or that we can do so without unknowingly infringing the intellectual property rights of others. As a result, we may have to rely increasingly on licensed technologies and patent licenses from others. To the extent that we rely on licenses from others, there can be no assurance that we will be able to obtain any or all of the necessary licenses in the future on terms we consider reasonable or at all. The lack of necessary licenses could expose us to claims for damages and/or injunctions from third parties, as well as claims for indemnification by our customers in instances where we have contractually agreed to indemnify our customers against damages resulting from infringement claims.

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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 may infringe their patents or other intellectual property rights. And, because of the nature of the industry, we may continue to receive such communications in the future. In some instances, these disputes have resulted in litigation. Recently, there has been a notable increase in the number of claims or lawsuits initiated by certain litigious, non-practicing entities that have not only increased, but the non-practicing entities are also becoming more aggressive in their monetary demands and requests for court-issued injunctions. Such lawsuits or claims may increase our cost of doing business and may potentially be extremely disruptive if the plaintiffs succeed in blocking the trade of our products and services. If we fail to obtain or maintain certain government, technologies or intellectual property licenses and, if litigation relating to alleged intellectual property matters occurs, it could prevent us from manufacturing or selling particular products or applying particular technologies, which could reduce our opportunities to generate revenues. See Item 8. Financial Information Legal Proceedings for a further discussion.

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

We and many of our suppliers use highly combustible and toxic materials in our manufacturing processes and are therefore subject to the risk of loss arising from explosion, fire, or environmental influences which cannot be completely eliminated. Although we maintain many overlapping risk prevention and protection systems, as well as comprehensive fire and casualty insurance, including insurance for loss of property and loss of profit resulting from business interruption, our risk management and insurance coverage may not be sufficient to cover all of our potential losses. If any of our fabs were to be damaged, or cease operations as a result of an explosion, fire, or environmental influences, it could reduce our manufacturing capacity and may cause us to lose important customers, thereby having a potentially adverse and material impact on our financial performance.

Any impairment charges may have a material adverse effect on our net income.

Under R.O.C. GAAP and U.S. GAAP, we are required to evaluate our long-lived assets and intangible assets for impairment whenever triggering events or changes in circumstances indicate that the asset may be impaired and carrying value may not be recoverable. If certain criteria are met, we are required to record an impairment charge. We are also required under R.O.C. GAAP and U.S. GAAP to evaluate goodwill for impairment at least on an annual basis or more frequently whenever triggering events or changes in circumstances indicate that goodwill may be impaired and the carrying value may not be recoverable.

We currently are not able to estimate the extent or timing of any impairment charge for future years. Any impairment charge required may have a material adverse effect on our net income.

The determination of an impairment charge at any given time is based significantly on our expected results of operations 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. See Item 5. Operating and Financial Review and Prospects Critical Accounting Policies for a discussion of how we assess if an impairment charge is required and, if so, how the amount is determined.

The loss of or significant curtailment of purchases by any of our largest customers could adversely affect our results of operations.

While we generate revenue from hundreds of customers worldwide, our ten largest customers accounted for approximately 53%, 53% and 54% of our net sales in 2008, 2009 and 2010, respectively. Our largest customer accounted for 14%, 10% and 9% of our net sales in 2008, 2009 and 2010, respectively. The loss of, or significant curtailment of purchases by, one or more of our top customers, including curtailments due to increased competitive pressures, a change in the design, or manufacturing sourcing policies or practices of these customers, or the timing of customer or distributor inventory adjustments, may adversely affect our results of operations and financial condition.

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Any failure to achieve and maintain effective internal controls could have a material adverse effect on our business and results of operations.

Effective internal controls are necessary for us to provide reasonable assurance with respect to our financial reports and to effectively prevent fraud. If we cannot provide reasonable assurance with respect to our financial reports and effectively prevent fraud and corruption, our reputation and results of operations could be harmed.

We are required to comply with various R.O.C. and U.S. laws and regulations on internal controls. For example, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, beginning with the Annual Report on Form 20-F for the fiscal year ended December 31, 2006, we are required to furnish a report by management on our internal control over financial reporting, including management s assessment of the effectiveness of our internal control over financial reporting. Moreover, R.O.C. law requires us to establish internal control systems that would reasonably ensure the effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations. We are also required under R.O.C. law to file an internal control declaration within four months of the end of each fiscal year.

Internal controls may not prevent or detect misstatements because of their inherent limitations, including the possibility of human error, the circumvention or overriding of controls, fraud or corruption. Therefore, even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. In addition, projections of any evaluation of effectiveness of internal controls to future periods are subject to the risk that the internal controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. If we fail to maintain the adequacy of our internal controls, including any failure to implement required new or improved controls, or if we experience difficulties in their implementation, our business and operating results could be harmed, we could fail to meet our reporting obligations, and there could be a material adverse effect on the market price of our common shares and ADSs.

Our global manufacturing, design and sales activities subject us to risks associated with legal, political, economic or other conditions or developments in various jurisdictions, including in particular the R.O.C., which could negatively affect our business and financial status and therefore the market value of your investment.

Our principal executive officers and our principal production facilities are located in the R.O.C., and a substantial majority of our net revenues are derived from our operations in the R.O.C. In addition, we have operations worldwide and a significant percentage of our revenue comes from sales to locations outside the R.O.C. Operating in the R.O.C. and overseas exposes us to changes in policies and laws, as well as the general political and economic conditions, security risks, health conditions and possible disruptions in transportation networks, in the various countries in which we operate, which could result in an adverse effect on our business operations in such countries and our results of operations as well as the market price and the liquidity of our ADSs and common shares.

For example, even though the R.O.C. and the PRC have co-existed for the past 61 years and significant economic and cultural relations have been established during that time, the financial markets have viewed certain past developments in relations between the two sides as occasions to depress general market prices of the securities of Taiwanese companies, including our own. In addition, the R.O.C. government has not lifted some trade and investment restrictions imposed on Taiwanese companies on the amount and types of certain investments that can be made in Mainland China.

Our operational results could also be materially and adversely affected by natural disasters or interruptions in the supply of utilities (such as water or electricity), in the locations in which we, our customers, or our suppliers operate.

The apparent frequency and severity of natural disasters has increased recently due to environmental and climate-related changes. We have manufacturing and other operations in locations subject to natural disasters, such as severe weather, tsunamis and other flooding, and earthquakes, as well as interruptions or shortages in the supply of utilities, such as water and electricity, which could disrupt operations. We have operations in earthquake-prone locations and any major natural disaster occurring in any such locations may cause severe disruptions to our business operations and financial performance. In addition, our suppliers and customers also have operations in such locations. For example, most of our production facilities, as well as those of many of our suppliers and customers and upstream

providers of complementary semiconductor manufacturing services, are located in Taiwan and Japan, which are susceptible to earthquakes, tsunamis, flooding, typhoons, and droughts from time to time. In addition, we have sometimes suffered power outages in Taiwan caused through difficulties encountered by our electricity supplier, the Taiwan Power Company, or other power consumers on the same power grid, which have resulted in interruptions to our production schedule. No guarantee can be given, however, that insurance will fully cover any losses and our emergency response plans will be effective in preventing or minimizing losses in the future. One or more natural disasters or interruptions to the supply of utilities that results in a prolonged disruption to our operations, or the operations of our customers or suppliers, may adversely affect the result of our operations and financial conditions.

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Our failure to comply with applicable environmental and climate related laws and regulations, as well as international accords to which we are subject, could also harm our business and operational results.

The manufacturing, assembling and testing of our products require the use of chemicals and materials that are subject to environmental, climate-related, and health and safety laws and regulations issued worldwide. Although we may be eligible for various exemptions and/or extensions of time for compliance, our failure to comply with any of these applicable laws or regulations could result in:

- significant penalties and legal liabilities, such as the denial of import permits;
- the temporary or permanent suspension of production of the affected products;
- unfavorable alterations in our manufacturing, fabrication and assembly and test processes; and
- restrictions on our operations or sales.

Existing and future environmental and climate related laws and regulations as well as applicable international accords to which we are subject, could also require us, among other things, to do the following: (a) purchase, use or install expensive pollution control, reduction or remediation equipment; (b) implement climate change mitigation programs and abatement or reduction of greenhouse gas emissions programs, or carbon credit trading programs; (c) modify our product designs and manufacturing processes, or incur other significant expenses associated with such laws and regulations, such as obtaining substitute raw materials or chemicals that may cost more or be less available for our operations. It is still unclear whether such necessary actions would affect the reliability or efficiency of our products and services.

Any of the above contingencies resulting from the actual and potential impact of local or international laws and regulations, as well as international accords on environmental or climate change, could harm our business and operational results by increasing our expenses or requiring us to alter our manufacturing and assembly and test processes. For further details, please see our compliance record with Taiwan and international environmental and climate related laws and regulations in Item 4. Information on the Company Environmental Regulations .

Climate change, other environmental concerns and green initiatives also present other commercial challenges, economic risks and physical risks that could harm our operational results or affect the manner in which we conduct our business.

Increasing climate change and environmental concerns could affect the results of our operations if any of our customers request that we exceed any standard(s) set for environmentally compliant products and services. For example, we have been working with our suppliers, customers, and several industry consortia to develop and provide products that are compliant with the EU RoHS (European Union Restriction of Hazardous Substances) Directive. Even though we are entitled to rely on various exemptions under RoHS, some of our customers might request that we provide products that exceed the legal standard set by RoHS without using any of the exemptions still permitted under RoHS. If we are unable to offer such products or offer products that are compliant, but are not as reliable due to the lack of reasonably available alternative technologies or materials, we may lose market share to our competitors.

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Further, energy costs in general could increase significantly due to climate change regulations. Therefore, our energy costs may increase significantly if utility or power companies pass on their costs, either fully or partially, such as those associated with carbon taxes, emission cap and carbon credit trading programs. For further details, please see details of our business continuity management of climate change policy in Item 4. Information on the Company Environmental Regulation .

In order to mitigate risks resulting from climate change, we continue to actively carry out energy conservation measures, implement voluntary perfluorinated compounds (PFCs) emission reduction projects and conduct greenhouse gas inventories and verification every year. Since 2005, we have publicly disclosed climate change information every year through participation in the annual survey conducted by the nonprofit carbon disclosure project, which includes greenhouse gas emission and reduction information for all of our fabs.

Adverse fluctuations in exchange rates could decrease our operating margin.

Over one-half of our capital expenditures and manufacturing costs are denominated in currencies other than NT dollars, primarily in U.S. dollars, Japanese yen and Euros. More than 90% of our sales are denominated in U.S. dollars and currencies other than NT dollars. Therefore, any significant fluctuation to our disadvantage in such exchange rates would have an adverse effect on our financial condition. For example, during the period from September 1, 2010 to December 30, 2010, the U.S. dollar depreciated 8.97% against the NT dollar, which had a negative impact on our results of operations. Specifically, every 1% depreciation of the U.S. dollar against the NT dollar exchange rate results in approximately 0.4 percentage point decrease in TSMC s operating margin. In addition, fluctuations in the exchange rate between the U.S. dollar and the NT dollar may 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. Please see Item 11. Quantitative and Qualitative Disclosures about Market Risk for a further discussion on the possible impact of other market factors on our results of operations.

Fluctuations in inflationary and deflationary market expectations could negatively affect costs of and demand for our products and services, which may harm our financial results.

The world economy is becoming more vulnerable to sudden unexpected fluctuations in inflationary and deflationary market expectations and conditions. Certain structural changes that resulted from the 2008-2009 global financial crisis may cause variations in the expectation of inflation or deflation. Both high inflation and deflation adversely affect an economy, at both the macro and micro levels, by reducing economic efficiency, disrupting saving and investment decisions and reducing the efficiency of the market prices as a mechanism to allocate resources. Such fluctuations are likely to negatively affect the costs of our operations and the business operations of our customers who may be forced to plan their purchases of our goods and services within an uncertain macro and micro economy. Therefore, the demand for our products and services could unexpectedly fluctuate severely in accordance with market and consumer expectations of inflation or deflation. Please see Item 5. Operating and Financial Review and Prospects Inflation & Deflation for a further discussion.

Risks Relating to Ownership of ADSs

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

Holders of American Depositary Receipts (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 R.O.C. 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. Election of directors 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.

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We may, from time to time, distribute rights to our shareholders, including rights to acquire securities. Under our ADS deposit agreement, the depositary 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 United States Securities Act of 1933, as amended, (the Securities Act), 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 assurance 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 the Republic of China (Taiwan) 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 R.O.C. and Item 10. Additional Information Exchange Controls in the R.O.C. . 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 or ADSs by us or our shareholders.

One or more of our existing shareholders may, from time to time, dispose of significant numbers of our common shares or ADSs. For example, the National Development Fund of Taiwan, R.O.C. which owned 6.4% of TSMC s outstanding shares as of February 28, 2011, has sold our shares in the form of ADSs in several transactions during the period between 1997 and 2005.

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.

The market value of our shares may fluctuate due to the volatility of, and government intervention in, the R.O.C. securities market.

Because the Taiwan Stock Exchange experiences from time to time substantial fluctuations in the prices and volumes of sales of listed securities, there are currently limits on the range of daily price movements on the Taiwan Stock Exchange. In response to past declines and volatility in the securities markets in Taiwan, and in line with similar activities by other countries in Asia, the government of the R.O.C. formed the Stabilization Fund, which has purchased and may from time to time purchase shares of Taiwan companies to support these markets. In addition, other funds associated with the R.O.C. 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 fluctuations in the market prices of our ADSs and common shares.

ITEM 4. INFORMATION ON THE COMPANY

Our History and Structure

We believe we are currently the world s largest dedicated foundry in the semiconductor industry. We were founded in 1987 as a joint venture among the R.O.C. government, Philips and other private investors and were incorporated in the R.O.C. 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.

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Our Principal Office

Our principal executive office is located at No. 8, Li-Hsin Road 6, Hsinchu Science Park, Hsinchu, Taiwan, Republic of China. Our telephone number at that office is (886-3) 563-6688. Our web site is www.tsmc.com. Information contained on our website does not constitute part of this annual report.

Business Overview of the Company

As a foundry, we manufacture semiconductors using our advanced or mainstream manufacturing 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, embedded memory, BiCMOS mixed-signal and other semiconductors. We estimate that our revenue market segment share among dedicated foundries worldwide was 51% in 2010. We also offer design, mask making, probing, testing and assembly services.

We believe that our large capacity, particularly for advanced technologies, is a major competitive advantage. Please see Manufacturing Capacity and Technology and Capacity Management and Technology Upgrade Plans for a further discussion of our capacity.

We count among our customers many of the world s leading semiconductor companies, ranging from fabless semiconductor and systems companies such as Advanced Micro Devices, Inc., Altera Corporation, Broadcom Corporation, Marvell Semiconductor Inc., MediaTek Inc., nVidia Corporation and Qualcomm Incorporated, to integrated device manufacturers such as LSI Corporation, STMicroelectronics and Texas Instruments Inc. Fabless semiconductor and system companies accounted for approximately 79%, and integrated device manufacturers accounted for approximately 21% of our net sales in 2010.

New Businesses

In May 6, 2009, we established the New Businesses organization to explore non-foundry related business opportunities. During 2010 and early 2011, the New Businesses organization consists of two business divisions responsible for: (1) solid state lighting business activities, such as developing efficient Light Emitting Diode (LED) technologies that can be used in various lighting applications; and (2) solar business activities, such as producing and marketing photovoltaic modules.

In March 2010, construction began on phase one of our new LED production facility in the Hsinchu Science Park, which was made ready for tool move-in by September 2010. A pilot line had been installed at the end of 2010, to be initially used for development activities and subsequently extended to full production set-up in the future.

In June 2010, TSMC through its investment fund invested US$50 million to acquire a 21% stake in Stion Corporation, a manufacturer of thin-film photovoltaic modules in the U.S. In addition, TSMC entered into several agreements with Stion Corporation on CIGSS technology licensing, supply and joint development. In the second half of 2010, a team of our engineers worked with Stion Corporation to prepare the transfer of CIGSS technology to us in 2011. In September 2010, construction began on phase one of our solar business production site in the Taichung s Central Taiwan Science Park, with tool move-in expected to start in the second quarter of 2011. In February 2010, we also acquired a 20% equity interest in Motech, a Taiwan solar cell manufacturer.

Our Semiconductor Facilities

We currently operate one 150mm wafer fab, six 200mm wafer fabs and two 300mm wafer fabs. Our corporate headquarters and five of our fabs are located in the Hsinchu Science Park, two fabs are located in the Tainan Science Park, one fab is located in the United States, and one fab is located in Shanghai. Our corporate headquarters and our five fabs in Hsinchu occupy approximately 500,900 square meters of land. We lease all of this land from the Hsinchu Science Park Administration in Hsinchu under agreements that will be up for renewal between May 2013 and December 2029. We have leased from the Southern Taiwan Science Park Development Office 416,900 square meters of land for our fabs in the Tainan Science Park under agreements that will be up for renewal between July 2017 and November 2029. 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. TSMC China owns 420,000 square meters of land in Shanghai, where Fab 10 and related offices are located. Other than certain equipment under leases located at testing areas, we own all of the buildings and equipment for our fabs. We are expanding our 300mm fabrication capacity and research and development through Fab 12 in the Hsinchu Science Park and Fab 14 in the Tainan Science Park. Total

monthly capacity for 300mm wafer fabs was increased from 154,300 wafers as of December 31, 2008 to 171,400 wafers as of December 31, 2009 and to 244,600 wafers as of December 31, 2010. We will continuously evaluate our capacity in light of prevailing market conditions.

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As part of our expansion plan, we held a ground breaking ceremony on July 16, 2010 in Taichung s Central Taiwan Science Park for Fab 15, which will be our third Gigafab™, or fab with capacity of more than 100,000 12-inch wafers per month when fully ramp up.

Fab 15 will be our next green fab following Fab 12 and Fab 14, incorporating green concepts in energy conservation and pollution control in its design, including a process water conservation rate of 85%, reclamation of rainwater, recirculation and reuse of general exhaust heat, and development of solar power generation and LED lighting applications.

Semiconductor Manufacturing Capacity and Technology

We manufacture semiconductors on silicon wafers based on proprietary circuitry 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 technologies. 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 65-nanometer and below, and are one of the leaders in the semiconductor manufacturing industry generally. We are the first semiconductor foundry with proven low-k interconnect technology in commercial production from the 0.13 micron node down to 40-nanometer node. Following our commercial production based on 65-nanometer Nexsys® process technology in 2006, we also unveiled 55-nanometer Nexsys® process technology in 2007. Our 65-nanometer and 55-nanometer Nexsys® technologies are the third-generation proprietary processes that employ low-k dielectrics. In 2008, we also qualified our 45-nanometer and 40-nanometer process technologies with ultra low-k dielectrics and advanced immersion lithography. We have commenced high volume production for 40-nanometer products in 2010.

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

		Current most advanced technology for volume	Monthly capacity[3][4]				
Fab[1]	**Year of commencement**	**production[2]**	**2006**	**2007**	**2008**	**2009**	**2010**
2	1990	0.45	50,506	51,685	51,609	53,649	48,244
3	1995	0.15	89,900	90,500	92,400	95,377	100,957
5	1997	0.15	51,500	55,800	54,200	48,600	47,500
6	2000	0.11	83,400	94,000	95,100	96,800	94,997
8	1998	0.11	83,500	89,400	91,600	85,750	85,753
10	2004	0.15	32,000	31,000	43,000	45,500	49,600
11	1998	0.15	35,500	35,500	35,500	36,565	36,300
12	2001	0.04	131,175	160,755	167,910	199,283	238,927
14	2004	0.04	79,650	133,279	179,258	186,443	311,447
SSMC[5]	2000	0.15	17,700	20,700	24,600	22,010	23,146
Total			654,831	762,619	835,177	869,977	1,036,871

(1) Fab 2 produces 150mm wafers. Fabs 3, 5, 6, 8, 10, Fab 11 (WaferTech) and SSMC produce 200mm wafers. Fab 12 and Fab 14 produce 300mm wafers. Fabs 2, 3, 5, 8 and 12 are located in Hsinchu Science Park. Fab 6 and Fab 14 are located in the Tainan Science Park. WaferTech is located in the United States, SSMC is located in Singapore and Fab 10 is located in Shanghai.

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

(3) Estimated capacity in 200mm equivalent wafers as of year-end for the total technology range available for production.

(4) Under an agreement with Vanguard, TSMC is required to use its best commercial efforts to maintain utilization of a fixed amount of reserved capacity and will not increase or decrease the stipulated quantity by more than 5,000 wafers per month. Please see Item 7. Major Shareholders and Related Party Transactions Related Party Transactions Vanguard International Semiconductor Corporation for a discussion of certain of the Vanguard contract terms. The amounts to be used at Vanguard are not included in our monthly capacity figures.

(5) Represents that portion of the total capacity that we had the option to utilize as of December 31, 2006, December 31, 2007, December 31, 2008, December 31, 2009 and December 31, 2010. This fab commenced production in September 2000.

As of December 31, 2010, our monthly capacity (in 200mm equivalent wafers) was 1,036,871 wafers, compared to 869,977 wafers at the end of 2009. This increase was primarily due to the expansion of our 40/65-nanometer advanced technologies. Our semiconductor manufacturing facilities require substantial investment to construct and are largely fixed-cost assets once they are in operation. Because we own most of our manufacturing capacity, a significant portion of our operating costs is fixed. In general, these costs do not decline when customer demand or our capacity utilization rates drop, and thus declines in customer demand, among other factors, may significantly decrease our margins. Conversely, as product demand rises and factory utilization increases, the fixed costs are spread over increased output, which can improve our margins.

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Capacity Management and Technology Upgrade Plans

We periodically perform long term market demand forecasts to estimate market and general economic conditions for our products and services. Based upon these estimates, we manage our overall capacity which may increase or decrease in accordance with market demand. Because market conditions may vary significantly and unexpectedly, our market demand forecast may change significantly at any time. Based on current demand forecasts, we intend to maintain our strategy of expanding manufacturing capacity and improving manufacturing process technologies to meet both the fabrication and the technological needs of our customers.

Our capital expenditures in 2008, 2009 and 2010 were NT$59,223 million, NT$87,785 million and NT$186,944 million (US$5,936 million)[(1)], respectively. Our capital expenditures in 2011 are expected to be approximately US$7,800 million, which may fluctuate depending on market conditions. For the past few years, our capital expenditures were funded by our operating cash flow. The capital expenditures for 2011 are also expected to be funded by our operating cash flow. In 2011, we anticipate our capital expenditures to focus primarily on the following:

- adding capacity to our 300mm and 200mm wafer fabs;
- development of process technologies in 28nm, 20nm, and 14nm nodes and other research and development projects;
- Fab 12, Fab 14, and Fab 15 buildings/facilities;
- backend capacity;
- new technologies development for mask operations; and
- solar and LED businesses.

These investment plans are still preliminary and may change per market conditions.

(1) Translated from weighted average exchange rate of NT$31.491 to US$1.00.

Markets and Customers

The primary customers of our foundry services are fabless semiconductor companies/systems companies and integrated device manufacturers. The following table presents the breakdown of net sales by type of customers during the last three years:

	Year ended December 31					
	2008		2009		2010	
Customer Type	Net Sales	Percentage	Net Sales	Percentage	Net Sales	Percentage
	(in millions, except percentages)					
Fabless semiconductor companies/systems companies	NT$239,981	72.0%	NT$237,572	80.3%	NT$331,264	78.9%
Integrated device manufacturers	93,136	28.0%	58,108	19.7%	88,054	21.0%
Others	41	0.0%	62	0.0%	220	0.1%
Total	NT$333,158	100.0%	NT$295,742	100.0%	NT$419,538	100.0%

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We categorize our net sales based on the country in which the customer is headquartered, which may be different from the net sales for the countries to which we actually sell or ship our products. Under this approach, the following table presents a regional geographic breakdown of our net sales during the last three years:

	Year ended December 31					
	2008		2009		2010	
Region	Net Sales	Percentage	Net Sales	Percentage	Net Sales	Percentage
			(in millions, except percentages)			
North America	NT$245,268	73.6%	NT$203,870	69.0%	NT$282,498	67.3%
Asia Pacific	37,762	11.3%	41,554	14.0%	60,796	14.5%
Europe	33,946	10.2%	30,407	10.3%	44,360	10.6%
Japan	10,475	3.2%	10,124	3.4%	18,539	4.4%
China	5,707	1.7%	9,787	3.3%	13,345	3.2%
Total	NT$333,158	100.0%	NT$295,742	100.0%	NT$419,538	100.0%

A significant portion of our net sales are attributable to a relatively small number of customers. In 2008, 2009 and 2010, our ten largest customers accounted for approximately 53%, 53% and 54% of our net sales, respectively. Our largest customer accounted for 14%, 10% and 9% of our net sales in 2008, 2009 and 2010, respectively.

Over the years, we have attempted to strategically manage our exposure to commodity memory semiconductor manufacturing services. This policy has successfully shielded us from significant adverse effects resulting from the previous precipitous price drops in the commodity memory semiconductor market.

We provide worldwide customer support. Our office in Hsinchu and wholly-owned subsidiaries in the United States, Japan, Mainland China, the Netherlands, South Korea and India are dedicated to serving our customers worldwide. Foundry services, which are both technologically and logistically intensive, involve frequent and in-depth interaction with customers. We believe that the most effective means of providing foundry services is by developing direct and close relationships with our customers. Our customer service managers work closely with the sales force to offer integrated services to customers. To facilitate customer interaction and information access on a real-time basis, a suite of web-based applications have also been offered to provide more active interactions with customers in design, engineering and logistics, collectively branded as eFoundry® service.

Commitments by Customers. 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 regarding their expected manufacturing requirements in advance of the placement of purchase orders.

Several 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 deposit agreements. In a deposit agreement, the customer makes an advance cash deposit for an option on a specified capacity at our fabs. Deposits are generally refunded as shipments are made. As of December 31, 2010, our customers had on deposit an aggregate of approximately US$23 million to reserve future capacity.

The Semiconductor Fabrication Process

In general, the semiconductor manufacturing process begins with a thin silicon wafer on which an array of semiconductor devices is fabricated. The wafer is then tested, cut into dice, and assembled into packages that are then individually retested. Our focus is on wafer fabrication although we also provide all other services either directly or through outsourcing arrangements.

Our Foundry Services

Range of Services. Because of our ability to provide a full array of services, we are able to accommodate customers with a variety of needs at every stage of the overall foundry process. 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, for example.

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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. 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 (SRAM), flash memory, mixed-signal/radio frequency (RF) semiconductors, which combine analog and digital circuitry in a single semiconductor, micro-electro-mechanical-system (MEMS), which combines micrometer featured mechanical parts, 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 We Manufacture. We manufacture different types of semiconductors with different specific functions by changing the number 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 hundreds of different products in various stages of fabrication at our fabs. We believe that the keys to maintaining high production quality and utilization rates are our effective management and control of the manufacturing process technologies which comes from our extensive experience as the longest existing dedicated foundry and our dedication to quality control and process improvements.

The following is a general, non-exhaustive description of the key types of semiconductors that we currently manufacture. Depending on future market conditions, we may provide other services or manufacture other types of products that may differ significantly from the following:

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, digital signal processors (DSP), graphic chips and chip sets.

Mixed-Signal/RF Semiconductors. Analog/digital semiconductors combine analog and digital devices on a single semiconductor to process both analog and digital data. We make mixed-signal/RF semiconductors using both the CMOS and BiCMOS processes. We currently offer CMOS mixed-signal process down to the 40-nanometer Nexsys® technology for manufacturing mixed-signal/RF semiconductors. The primary uses of mixed-signal/RF 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/RF market.

Memory Semiconductors. Memory semiconductors, which are used in electronic systems to store data and program instructions, are generally classified as either volatile memories (which lose their data content when power supplies are switched off) or nonvolatile memories (which retain their data content without the need for a constant power supply). We currently offer CMOS process for the manufacture of SRAM, embedded DRAM as volatile memories, and for the manufacture of flash memory and embedded flash as nonvolatile memories.

CMOS Image Sensor Semiconductors. Image sensors are primarily used in camera phones. We are currently the leading foundry for the production of CMOS image sensors, characterized by technology features including low dark current, high sensitivity, small pixel size and high dynamic range achieved through integration with mixed mode processes.

High Voltage Semiconductors. We currently offer a range of high-voltage processes including high voltage CMOS (HVCMOS), bipolar-CMOS-DMOS (BCD) and ultra-high voltage technology (UHV), ranging from 5V to 700V, which are suitable for various panel-size display driver and power IC applications.

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

	Year ended December 31					
	2008		2009		2010	
Semiconductor Type	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**	**Net Sales**	**Percentage**
			(in millions, except percentages)			
CMOS						
Logic	NT$245,489	73.7%	NT$213,160	72.1%	NT$300,753	71.7%

Memory	2,784	0.8%	2,068	0.7%	1,949	0.5%
Mixed-Signal[1]	82,018	24.6%	77,427	26.2%	112,715	26.9%
BiCMOS[2]	2,374	0.7%	2,912	1.0%	3,548	0.8%
Others	493	0.2%	175	0.0%	573	0.1%
Total	NT$333,158	100.0%	NT$295,742	100.0%	NT$419,538	100.0%

(1) Mixed-signal semiconductors made with the CMOS process.

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

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Design and Technology Platforms.

Modern IC designers need sophisticated design infrastructure to optimize productivity and cycle time. Such infrastructures include design flow for electronic design automation (EDA), silicon proven building blocks such as libraries and IPs, simulation and verification design kits such as process design kit (PDK) and tech files. All of these infrastructures are built on top of the technology foundation, and each technology needs its own design infrastructure to be usable for designers. This is the concept of our technology platforms.

For years, TSMC and its alliance partners spent considerable effort, time and resources to build our technology platforms. We unveiled our Open Innovation Platform® (OIP) initiative in 2008 to further enhance our technologies offerings. More OIP deliverables were introduced in 2010. In the design methodology area, in addition to the introduction of the 11th release of Reference Flow, we also announced the foundry segment s first Analog/Mixed Signal (AMS) Reference Flow, and the second revision of the Radio Frequency Reference Design Kit (RF RDK). In the IP area we unveiled an extension to our IP Alliance program to include Soft IP partners.

Multi-project Wafers Program (CyberShuttle). To help our customers reduce costs, we offer a dedicated multi-project wafer processing service that allows us to provide multiple customers with circuits produced with the same mask. This program reduces mask costs by a very significant amount, resulting in accelerated time-to-market for our customers. We have extended this program to all of our customers and library and intellectual property (IP) partners using our broad selection of process technologies, ranging from the latest 28-, 40-, 45-, 55- and 65-nanometer processes to 0.18-, 0.25- and 0.35-micron. This extension offers a routinely scheduled multi-project wafer run to customers on a shared-cost basis for prototyping and verification.

We developed our multi-project wafer program in response to the current system-on-chip development methodologies, which often require the independent development, prototyping and validation of several IPs before they can be integrated onto a single device. By sharing mask costs among our customers to the extent permissible, 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 devotion to customer service has been an indispensable factor in attracting new customers, helping to ensure the satisfaction of existing customers, and building a mutually beneficial partnership with our customers. The key elements are our:

- customer-oriented culture through multi-level interaction with customers;
- ability to deliver wafers of consistent quality, competitive ramp-up speed and efficient yield improvement;
- responsiveness to customer s issues and requirements, such as engineering change orders and special wafer handling;
- flexibility in manufacturing processes, supported by our competitive technical capability and efficient production planning;
- dedication to help reduce customer costs through collaboration and services, such as our multi-project wafer program, which combines multiple designs on a single mask set for increased cost-saving; and
- availability of eFoundry®, the online service which provides in real-time necessary information in design, engineering, and logistics to ensure seamless services to our customers throughout product life cycle.

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We also conduct an annual customer satisfaction survey to assess customer satisfaction and to ensure that their needs and wants are adequately understood and addressed. Continual improvement plans based upon customer feedback are an integral part of this business process. We use data derived from the survey as a key indicator of our corporate performance as well as a leading indicator of future performance. We believe that satisfaction leads to customer loyalty, which would result in higher levels of opportunities.

Research and Development

The semiconductor industry is characterized by rapid changes in technology, frequently resulting in the introduction of new technologies to meet customers demands and in the obsolescence of recently introduced technology and products. We believe that, in order to stay technologically ahead of our competitors and to maintain our market position in the foundry segment of the semiconductor industry, we need to maintain our position as a technology leader not only in the foundry segment but in the semiconductor industry in general. We spent NT$21,481 million, NT$21,593 million and NT$29,707 million (US$1,020 million) in 2008, 2009 and 2010, respectively, on research and development, which represented 6.5%, 7.3% and 7.1% of our net sales for these periods. We plan to continue to invest significant amounts on research and development in 2011, 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 technologies, such as 90-nanometer, 80-nanometer, 65-nanometer, 55-nanometer, 45-nanometer and 40-nanometer Nexsys® technology for volume production, prior to the implementation of those advanced process technologies by many integrated device manufacturers and our competitors. In addition, we expect to advance our process technologies further down to 28/20/14-nanometer and below in the coming years to maintain our technology leadership. We will also continue to invest in research and development for our mainstream technologies offerings to provide function-rich process capabilities to our customers.

Our research and development efforts 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 new Logic, system-on-chip (SOC), derivatives and package/system-in-package (SIP) technologies. Fab related research and development activities mostly focus on upgrading the manufacturing process technologies.

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, equipment vendors and R&D consortia.

We also continuously create in-house inventions and know-how. Since our inception, every year we apply for and are issued a substantial number of United States and other patents, the majority of which are semiconductor-related.

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 technologies. Advances in process technologies 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 certain equipment under leases located at testing areas, we own all of the equipment used at our fabs.

In implementing our capacity management 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.

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Raw Materials

Our manufacturing processes use many raw materials, primarily silicon wafers, chemicals, gases and various types of precious metals. Raw materials costs constituted 10.9% of our net sales in 2009 and 13.0% of our net sales in 2010. Although most of our raw materials are available from multiple suppliers, some materials are purchased through sole-sourced vendors. 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 quarterly and quantity allocations are adjusted for subsequent periods based on the evaluation.

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 SUMCO Corporation of Japan, MEMC Electronic Materials, Inc. of the United States and Siltronic AG of Germany. Together they supplied approximately 93.6% and 88.5% of our total wafer needs in 2009 and 2010, respectively. We have in the past obtained, and believe we will continue to be able to obtain, a sufficient supply of 150mm, 200mm and 300mm wafers. Please see risk factor related to raw materials in Item 3. Key Information Risk Factors Risks Relating to Our Business . The price of silicon wafers decreased during 2008 and 2009 due to the severe economic downturn. However, the continued market recovery after 2009 through 2010 has increased demand, resulting in a tight supply and price increase for silicon wafers in 2010.

In order to try to secure a reliable and flexible supply of high quality wafers, we have entered into long-term agreements and intend to continue to develop strategic relationships with major wafer vendors to cover our anticipated wafer needs for the next three to five years. Also, we have established a special cross-function taskforce comprised of individuals from our fab operations, materials management, risk management and quality system management divisions to reduce our supply chain risks. This taskforce works with our primary suppliers to develop their business continuity plans, qualify their dual-plant materials, prepare safety inventories, improve the quality of their products and manage the supply chain risk of their suppliers.

Competition

We compete internationally and domestically with dedicated foundry service providers, as well as with integrated device manufacturers that devote a significant portion of their manufacturing capacity to foundry operations. We compete primarily on the basis of process technologies, manufacturing excellence and customer service. The level of competition differs according to the process technologies involved. For example, in more mature technologies, the competition tends to be more intense. Some companies compete with us in selected geographic regions or application end markets. In recent years, substantial investments have been made by others to establish new dedicated foundry companies worldwide.

Environmental Regulations

The semiconductor production process generates gaseous chemical wastes, liquid wastes, wastewater and other industrial wastes in various stages of the manufacturing process. We have installed in our fabs various types of pollution control equipment for the treatment of gaseous chemical wastes and wastewater and equipment for the recycling of treated water. Operations at our fabs are subject to regulation and periodic monitoring by the R.O.C. Environmental Protection Administration, the U.S. Environmental Protection Agency or the State Environmental Protection Administration of mainland China, and local environmental protection authorities, including the various Science Park Administrations, the Washington State Department of Ecology or the Shanghai Environmental Protection Bureau.

We have adopted pollution control measures that are expected to result in the effective maintenance of environmental protection standards consistent with the practice of the semiconductor industry in Taiwan, the U.S. and mainland China. 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.

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We received ISO14001 certification in August 1996 and in July 2006 were certified with QC 080000 IECQ HSPM, a certification for having a hazardous substance process management system that meets the European environmental regulations RoHS (Restriction of Hazardous Substances) Directive. We have continued to implement improvement programs in connection with these certifications. For example, all of our manufacturing sites in Taiwan were ISO14001 certified in 2005 and QC 080000 certified in 2007. Fab 10, our manufacturing site in mainland China, also received ISO14001certification in 2005 and QC 080000 certification in 2007. In addition, WaferTech obtained ISO14001certification in 2001 and QC 080000 certification in 2006. In 2010, we were selected as an index component of the Dow Jones Sustainability World Index for the 10th consecutive year, and was also the semiconductor sector leader; we also received The Annual Enterprises Environmental Protection Award from the Environmental Protection Administration, Executive Yuan, R.O.C.; the Water Saving Award from the Ministry of Economic Affairs, R.O.C.; the Low Carbon Enterprise Award from the Hsinchu Science Park Administration; Energy Conservation Award from the Ministry of Economic Affairs, R.O.C..

In 2010, we fulfilled our voluntary commitment to reduce total PFCs emissions to 10% below the average emission value of 1997 and 1999, based on the standard set forth in a Memorandum of Understanding by the Taiwan Semiconductor Industrial Association. We achieved this at the same time as reaching the highest level of wafer production in our history in 2010 through evaluation and implementation of PFC emission reduction projects including process optimization, chemical replacement and abatement systems.

Electricity and Water

We use electricity supplied by the Taiwan Power Company in our manufacturing process. Businesses in the Hsinchu Science Park, Tainan Science Park and Central Taiwan Science Park, such as ours, enjoy preferential electricity supply. We have sometimes suffered power outages caused through difficulties encountered by our electricity supplier, the Taiwan Power Company, which have led to interruptions in our production schedule. The semiconductor manufacturing process also uses extensive amounts of fresh water. Due to the growth of the semiconductor manufacturers in the Hsinchu Science Park, Tainan Science Park and Central Taiwan Science Park, and the droughts that Taiwan experiences from time to time, there is concern regarding future availability of sufficient fresh water and the potential impact that insufficient water supplies may have on our semiconductor production.

Risk Management

We employ an enterprise risk management system to integrate the prevention and control of risk that TSMC or our subsidiaries may face. We have also prepared emergency plans to respond to natural disasters and other disruptive events that could interrupt the operation of our business. These emergency plans have been developed in order to prevent or minimize the loss of personnel or damage to our facilities, equipment and machinery caused by natural disasters and other disruptive events. We also 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, typhoons, earthquakes and other risks generally up to the respective policy limits for their replacement values and lost profits due to business interruption. In addition, we have insurance policies covering losses in respect to the construction of all our fabs. Equipment and inventories in transit are also insured. No guarantee can be given, however, that insurance will fully cover any losses and our emergency response plans will be effective in preventing or minimizing losses in the future.

For further information, please see the detailed risk factors related to the impact of climate change regulations and international accords, and business trends on our operations in Item 3. Key Information Risk Factors Risks Relating to Our Business .

Our Subsidiaries and Affiliates

Vanguard International Semiconductor Corporation (VIS). In 1994, we, the R.O.C. Ministry of Economic Affairs and other investors established Vanguard, then an integrated dynamic random access memory (DRAM) manufacturer. Vanguard commenced volume commercial production in 1995 and listed its shares on the GreTai Securities Market in March 1998. In 2004, Vanguard completely terminated its DRAM production and became a pure foundry company. As of February 28, 2011, we owned approximately 38.1% of the equity interest in Vanguard. Please see Item 7. Major Shareholders and Related Party Transactions for a further discussion.

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WaferTech in the United States. In 1996, we entered into a joint venture called WaferTech (of which the manufacturing entity is Fab 11) with several U.S.-based investors to construct and operate a US$1.2 billion foundry in the United States. Today, TSMC owns 100% of the equity interest in WaferTech. Initial trial production at WaferTech commenced in July 1998 and commerc