

Company Flash

23 February 2009 | 13 pages

TSMC (2330.TW)

 Estimate change

Buy: Likely to Beat Over-cut Guidance; We See Earlier Breakeven

- Dips enhance buying opportunity** — As we believe the foundry-cycle trough will pass soon and TSMC seems to have over-cut its trough-quarter guidance, we reiterate our Buy (1L) rating and target of NT\$55. TSMC, along with MediaTek, SEC and SPIL, are top picks in our Asia Pac Semi and TFT-LCD portfolio.
- Rush orders benefiting 1Q09 and should fast-forward breakeven** — Benefiting from comm and LCD IC customers' rush orders, coupled with a more favorable FX rate, TSMC may beat its over-cut trough-cycle guidance by posting a 40-45% qoq sales decline (vs. guidance of a 46-50% qoq decline) and op margin of -10% to -15% (vs. guidance of -15% to -19% and gross margin of 5-9%, vs. earlier guidance of 1-5%). This might help TSMC return to breakeven 1-2 months earlier than previously expected by us as well as consensus.
- Only 2.5% chance of 40% utilization** — Recall that trough utilization of 30-40% was seen only twice in the past 80 quarters, or 2.5% probability, but >95% utilization was reported in 45 of the 80 quarters, a 56% chance. This suggests that the long-term downside risk in investing in TSMC appears low at current levels.
- Raising EPS after a series of cuts** — Factoring in better 1H09E sales, utilization, FX and margins after over-cutting estimates, we are raising our 2009E EPS by 11% to NT\$0.39. Although our forecasts are still below the average consensus estimate, we believe some consensus forecasts are far too pessimistic.

Buy/Low Risk	1L
Price (20 Feb 09)	NT\$43.90
Target price	NT\$55.00
Expected share price return	25.3%
Expected dividend yield	6.8%
Expected total return	32.1%
Market Cap	NT\$1,124,966M
	US\$32,528M

Price Performance (RIC: 2330.TW, BB: 2330 TT)



Figure 1. TSMC – Statistical Abstract

Year to 31-Dec	Net profit (NT\$ mn)	EPS (NT\$)	EPS YoY	P/E (x)	Bonus adj EPS (NT\$)	Adj EPS YoY	Bonus adj P/E (x)	P/BV (x)	ROE (%)	BImg	% diff
2006A	127,195	4.87	34%	9	3.55	28%	13	2.3	26.6%		
2007A	109,932	4.14	-15%	11	3.37	-5%	13	2.4	22.0%		
2008E*	99,934	3.90	-6%	12	3.90	16%	12	2.7	21.8%		
2009E*	9,854	0.39	-90%	113	0.39	-90%	113	2.7	2.4%	0.66	-41%
2010E*	62,417	2.46	533%	18	2.46	533%	18	2.3	14.1%	2.20	12%

Source: Company Reports and Citi Investment Research estimates *Bonus-adjusted EPS

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See Appendix A-1 for Analyst Certification and important disclosures.

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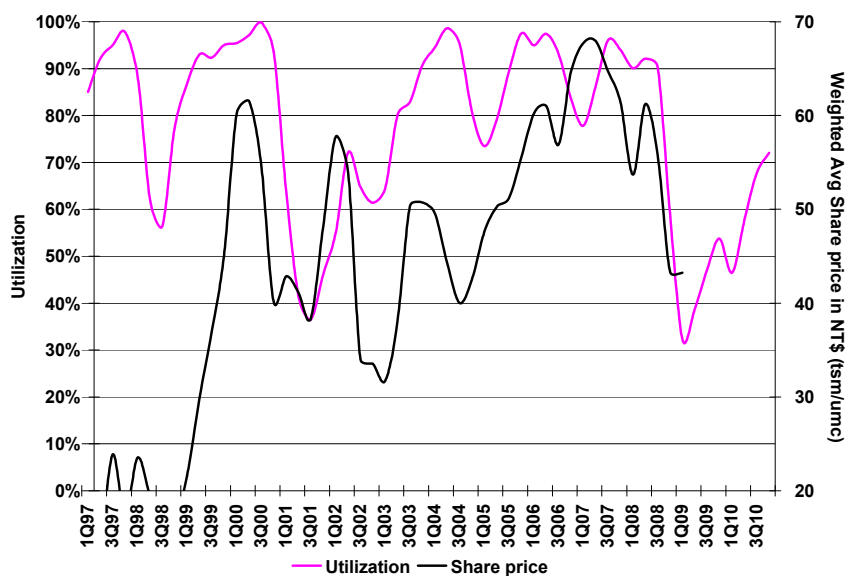
¹Citigroup Global Markets Taiwan Securities Co. Limited

Fiscal year end 31-Dec	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	9.0	10.6	11.3	112.8	17.8
EV/EBITDA adjusted (x)	4.5	4.7	4.9	9.9	5.5
P/BV (x)	2.2	2.4	2.7	2.7	2.3
Dividend yield (%)	6.7	7.3	6.8	4.6	4.5
Per Share Data (NT\$)					
EPS adjusted	4.88	4.14	3.90	0.39	2.46
EPS reported	4.88	4.14	3.90	0.39	2.46
BVPS	19.52	18.48	16.56	16.29	18.74
DPS	2.93	3.20	3.00	2.00	1.97
Profit & Loss (NT\$M)					
Net sales	317,407	322,631	333,158	186,976	284,372
Operating expenses	-190,143	-210,908	-228,723	-181,449	-217,504
EBIT	127,265	111,722	104,436	5,527	66,868
Net interest expense	3,652	4,809	4,917	5,299	5,642
Non-operating/exceptionals	2,446	5,111	2,120	500	921
Pre-tax profit	133,362	121,642	111,473	11,326	73,431
Tax	-7,774	-11,710	-11,539	-1,472	-11,015
Extraord./Min.Int./Pref.div.	1,607	0	0	0	0
Reported net income	127,195	109,933	99,934	9,854	62,417
Adjusted earnings	127,195	109,933	99,934	9,854	62,417
Adjusted EBITDA	200,980	191,728	185,948	90,877	153,811
Growth Rates (%)					
Sales	20.0	1.6	3.3	-43.9	52.1
EBIT adjusted	36.8	-12.2	-6.5	-94.7	nm
EBITDA adjusted	24.8	-4.6	-3.0	-51.1	69.3
EPS adjusted	34.2	-15.1	-5.8	-90.0	533.4
Cash Flow (NT\$M)					
Operating cash flow	206,371	186,867	206,966	78,603	142,460
Depreciation/amortization	73,715	80,005	81,512	85,350	86,943
Net working capital	7,808	-563	26,469	-16,101	-5,978
Investing cash flow	-88,559	-71,372	-50,768	-40,956	-48,679
Capital expenditure	-113,664	-86,163	-49,855	-41,456	-45,602
Acquisitions/disposals	29,112	19,942	-2,571	500	-3,077
Financing cash flow	-55,173	-135,739	-168,130	-21,581	-353
Borrowings	7,515	-5,930	-11,843	0	0
Dividends paid	-61,743	-75,650	-84,567	0	0
Change in cash	62,640	-20,244	-11,932	16,066	93,429
Balance Sheet (NT\$M)					
Total assets	587,485	570,865	496,530	473,075	548,077
Cash & cash equivalent	195,079	174,834	162,902	178,968	272,398
Accounts receivable	31,589	42,424	18,497	23,052	35,060
Net fixed assets	254,094	260,252	228,595	184,701	143,359
Total liabilities	78,347	80,180	72,245	60,517	73,456
Accounts payable	9,802	13,328	6,043	10,218	12,561
Total Debt	30,496	24,565	12,722	12,722	12,722
Shareholders' funds	509,138	490,686	424,285	412,558	474,622
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	63.3	59.4	55.8	48.6	54.1
ROE adjusted	26.6	22.0	21.8	2.4	14.1
ROIC adjusted	45.3	35.3	36.0	1.9	30.5
Net debt to equity	-32.3	-30.6	-35.4	-40.3	-54.7
Total debt to capital	5.7	4.8	2.9	3.0	2.6

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Figure 2. TSMC — Sector Utilization and Share Price



Source: Company Reports and Citi Investment Research estimates

Figure 3. Pan-Asia Semis Operating Leverage Comparison Update for 1Q09E

Co.	Sector	Type	Sales guidance or exp.	Op% guidance or exp.	Op% ppts change qoq	Impacts per 10% sales cut	Earlier impacts est.
TSMC	Foundry	Estimates	down 40-45% qoq	-10 to -15%	31 to 32 ppts	7.3 ppts down	7.4 ppts down
UMC	Foundry	Guidance	down 45-46% qoq	-80 to -85%	75 to 80 ppts	18 ppts down	
Chartered	Foundry	Guidance	down 30-33% qoq	-55%	38 ppts	11.5 ppts down	
Vanguard	Foundry	Estimates	down 45-50% qoq	-55%	45 ppts	9.5 ppts down	10.8 ppts down
SMIC	Foundry	Guidance	down 50% qoq	-150%	100 ppts	20 ppts down	
SPIL	Packaging	Estimates	down 35-40% qoq	-7%	17 ppts	4.5 ppts down	
Powertech	OSAT	Guidance	down 25-30% qoq	10%	12 to 14 ppts	4.7 ppts down	
ASE	OSAT	Guidance	down 35-40% qoq	-19%	24 ppts	6.4 ppts down	
Ardentec	Probing	Estimates	down 40-45% qoq	-16%	33 ppts	8.2 ppts down	
Nanya PCB	Substrate	Estimates	down 50-55% qoq	-8%	20 ppts	3.8 ppts down	
Kinsus	Substrate	Estimates	down 42% qoq	-6%	20 ppts	4.8 ppts down	
Shinko Japan	Substrate	Estimates	down 50% qoq	-57%	46 ppts	9.2 ppts down	
NGK Japan	Substrate	Estimates	down 28% qoq	-23%	21 ppts	7.5 ppts down	
Ibiden Japan	Substrate	Estimates	down 21% qoq	-22%	23 ppts	11.0 ppts down	
MediaTek	Fabless	Guidance	down 8-16% qoq	20%	3 ppts	2.5 ppts down	
Realtek	Fabless	Estimates	flattish	10%	2 ppts	1 ppts down	
Novatek	Fabless	Estimates	down 20-25% qoq	5%	5 ppts	2.2 ppts down	3 ppts down

Source: Company Reports and Citi Investment Research estimates

Figure 4. TSMC — Quarterly Earnings Adjustment

	1Q09E	2Q09E	3Q09E	4Q09E	1Q10E	2Q10E	3Q10E	4Q10E
Original forecasts								
Wafer shipped utilization	32%	39%	47%	55%	50%	60%	70%	75%
TSMC revenue in NT\$bn	33.9	39.5	50.2	60.6	54.3	66.0	78.4	85.5
Gross profit	1.0	4.4	11.9	18.9	15.6	22.4	29.6	33.4
Gross margin (%)	3%	11%	24%	31%	29%	34%	38%	39%
Op profit	(6.0)	(3.2)	3.5	10.1	8.6	14.2	20.3	23.8
Op margin (%)	-18%	-8%	7%	17%	16%	21%	26%	28%
Net profit	(4.3)	(1.6)	4.5	10.3	8.7	13.5	18.6	21.6
Net margin (%)	-13%	-4%	9%	17%	16%	20%	24%	25%
Net EPS (NT\$)	(0.17)	(0.06)	0.18	0.41	0.34	0.53	0.74	0.85
Annual EPS				0.35				2.46
Bloomberg consensus EPS (NT\$)	(0.16)	(0.03)	0.21	0.37	0.40	0.61	0.79	0.88
New forecasts								
Wafer shipped utilization	34%	40%	47%	54%	50%	60%	70%	75%
TSMC revenue	36.0	41.8	50.2	59.0	54.3	66.0	78.4	85.5
Gross profit	2.4	5.7	11.9	17.8	15.6	22.4	29.6	33.4
Gross margin (%)	7%	14%	24%	30%	29%	34%	38%	39%
Op profit	(4.8)	(2.0)	3.4	8.9	8.6	14.2	20.3	23.8
Op margin (%)	-13%	-5%	7%	15%	16%	21%	26%	28%
Net profit	(3.3)	(0.5)	4.5	9.3	8.7	13.5	18.7	21.6
Net margin (%)	-9%	-1%	9%	16%	16%	20%	24%	25%
Net EPS (NT\$)	(0.13)	(0.02)	0.18	0.37	0.34	0.53	0.74	0.85
Annual EPS				0.39				2.46
Bloomberg consensus EPS (NT\$)	(0.16)	(0.03)	0.16	0.27	0.41	0.60	0.79	0.88
% revision								
Sales	6%	6%	0%	-3%	0%	0%	0%	0%
Gross profit	140%	30%	0%	-6%	0%	0%	0%	0%
Op profit	19%	39%	-2%	-12%	0%	0%	0%	0%
Net profit	23%	66%	-1%	-10%	0%	0%	0%	0%
Annual EPS				10.7%				0.0%
Gap to consensus estimates	18%	28%	14%	35%	-16%	-11%	-7%	-3%

Source: Company Reports and Citi Investment Research estimates

Figure 5. TSMC — Annual Estimate Revisions

Year to	Net Income (NT\$M)		Diluted EPS (NT\$)		
	Old	New	Old	New	% Chg
31-Dec					
2009E	8,901	9,854	0.35	0.39	10.7%
2010E	62,386	62,417	2.46	2.46	0.0%

Source: Citi Investment Research estimates

Figure 6. TSMC — Quarterly Income Statement (2007-10E, NT Dollars in Millions)

	2007A					2008A					2009E					2010E					
	FYE'06	1Q	2Q	3Q	4Q	FYE'07	1Q	2Q	3Q	4Q	FYE '08	1Q	2Q	3Q	4Q	FYE '09	1Q	2Q	3Q	4Q	FYE '10
TOTAL REVENUES	317,407	64,897	74,918	88,955	93,860	322,630	87,480	88,137	92,979	64,562	333,158	35,991	41,808	50,192	58,986	186,976	54,350	66,040	78,442	85,540	284,372
Depreciation	-73,715	-20,251	-19,616	-19,857	-20,281	-80,005	-19,831	-20,034	-20,686	-20,961	-81,512	-20,911	-21,337	-21,337	-21,764	-85,350	-20,432	-21,301	-22,171	-23,040	-86,944
Total cost of good sold	-161,597	-40,287	-42,738	-48,231	-49,024	-180,280	-49,241	-47,916	-49,885	-44,367	-191,409	-33,601	-36,094	-38,308	-41,176	-149,180	-38,751	-43,652	-48,799	-52,186	-183,389
GROSS PROFIT	155,810	24,610	32,180	40,724	44,836	142,350	38,239	40,221	43,094	20,195	141,750	2,390	5,713	11,883	17,810	37,796	15,598	22,388	29,643	33,354	100,983
R&D	-16,077	-3,942	-4,301	-4,691	-5,012	-17,946	-5,270	-5,404	-5,981	-4,826	-21,481	-4,343	-4,500	-5,000	-5,067	-18,911	-4,343	-4,950	-5,500	-5,321	-20,114
SG&A	-12,469	-2,791	-3,145	-3,680	-3,066	-12,682	-3,846	-4,444	-4,196	-3,347	-15,833	-2,878	-3,166	-3,483	-3,831	-13,359	-2,676	-3,252	-3,862	-4,211	-14,001
Operating expenses	-28,546	-6,733	-7,446	-8,371	-8,078	-30,628	-9,116	-9,848	-10,177	-8,173	-37,314	-7,222	-7,666	-8,483	-8,898	-32,269	-7,020	-8,202	-9,362	-9,532	-34,115
OPERATING INCOME	127,264	17,877	24,734	32,353	36,758	111,722	29,123	30,373	32,917	12,022	104,436	-4,832	-1,953	3,401	8,911	5,527	8,579	14,187	20,281	23,822	66,868
Int&other inc/(exp)	6,098	2,191	3,290	1,865	2,574	9,920	2,449	2,004	1,513	1,072	7,038	1,025	1,325	1,725	1,725	5,799	1,661	1,661	1,661	1,582	6,563
PRETAX INCOME	133,362	20,068	28,024	34,218	39,332	121,642	31,572	32,377	34,430	13,094	111,473	-3,807	-628	5,125	10,636	11,326	10,239	15,847	21,941	25,404	73,431
Taxes or tax credit	-6,352	-1,229	-2,540	-3,848	-4,093	-11,710	-3,428	-3,606	-3,856	-648	-11,539	495	82	-666	-1,383	-1,472	-1,536	-2,377	-3,291	-3,811	-11,015
NET INCOME	127,010	18,839	25,484	30,370	35,239	109,933	28,143	28,771	30,574	12,446	99,934	-3,312	-546	4,459	9,253	9,854	8,703	13,470	18,650	21,593	62,417
NET EPS IN NT\$	4.87	0.71	0.96	1.14	1.33	4.14	1.10	1.12	1.19	0.49	3.90	(0.13)	(0.02)	0.18	0.37	0.39	0.34	0.53	0.74	0.85	2.46
Fully diluted shares (mn)	26,089	26,559	26,559	26,559	26,559	26,559	25,625	25,625	25,625	25,625	25,625	25,325	25,325	25,325	25,325	25,325	25,325	25,325	25,325	25,325	25,325
NET EPS IN US\$	0.75	0.11	0.14	0.17	0.20	0.63	0.17	0.18	0.19	0.07	0.62	(0.02)	(0.00)	0.03	0.06	0.06	0.05	0.08	0.12	0.13	0.39
Fully diluted shares (mn)	5,218	5,312	5,312	5,312	5,312	5,312	5,125	5,125	5,125	5,125	5,125	5,065	5,065	5,065	5,065	5,065	5,065	5,065	5,065	5,065	5,065
FX: US\$: NT\$	32.5	32.8	33.1	33.0	32.4	32.8	31.6	30.4	31.2	32.9	31.5	33.8	33.0	32.0	32.0	32.7	32.0	32.0	32.0	32.0	32.0
Margin Analysis:																					
Gross margins	49%	38%	43%	45.8%	47.8%	44%	43.7%	45.6%	46%	31%	43%	7%	14%	24%	30%	20%	29%	34%	38%	39%	36%
Operating margin	40%	28%	33%	36.4%	39.2%	35%	33.3%	34.5%	35%	19%	31%	-13%	-5%	7%	15%	3%	16%	21%	26%	28%	24%
Net margin	40%	29%	34%	34%	38%	34%	32%	33%	33%	19%	30%	-9%	-1%	9%	16%	5%	16%	20%	24%	25%	22%
YoY % Change:																					
Net revenues	20%	-17%	-9%	8%	25%	2%	35%	18%	5%	-31%	3%	-59%	-53%	-46%	-9%	-44%	51%	58%	56%	45%	52%
Gross profit	35%	-35%	-24%	-1%	30%	-9%	55%	25%	6%	-55%	0%	-94%	-86%	-72%	-12%	-73%	553%	292%	149%	87%	167%
Operating income	37%	-42%	-30%	-4%	34%	-12%	63%	23%	2%	-67%	-7%	N/A	N/A	-90%	-26%	-95%	N/A	N/A	496%	167%	1110%
Net income	36%	-42%	-25%	-7%	26%	-13%	49%	13%	1%	-65%	-9%	N/A	N/A	-85%	-26%	-90%	N/A	N/A	318%	133%	533%
Fully diluted EPS	34%	-43%	-26%	-8%	24%	-15%	55%	17%	4%	-63%	-6%	N/A	N/A	-85%	-25%	-90%	N/A	N/A	318%	133%	533%
QoQ % Change:																					
Net revenues		-13%	15%	19%	5.5%		-7%	0.8%	5%	-31%		-44%	16%	20%	18%		-8%	22%	19%	9%	
Gross profit		-29%	31%	27%	10%		-15%	5%	7%	-53%		-88%	139%	108%	50%		-12%	44%	32%	13%	
Operating income		-35%	38%	31%	14%		-21%	4%	8%	-63%		N/A	N/A	N/A	162%		-4%	65%	43%	17%	
Net income		-33%	35%	19%	16%		-20%	2%	6%	-59%		N/A	N/A	N/A	108%		-6%	55%	38%	16%	
Fully diluted EPS		-34%	35%	19%	16%		-17%	2%	6%	-59%		N/A	N/A	N/A	108%		-6%	55%	38%	16%	

Source: Company and Citi Investment Research estimates

TSMC

Company description

Taiwan Semiconductor Manufacturing Company manufactures and markets integrated circuits. It provides wafer manufacturing, wafer probing, assembly and testing, mask production, and design services. TSMC's ICs are used in computer, communication, consumer electronics, automotive, and industrial equipment.

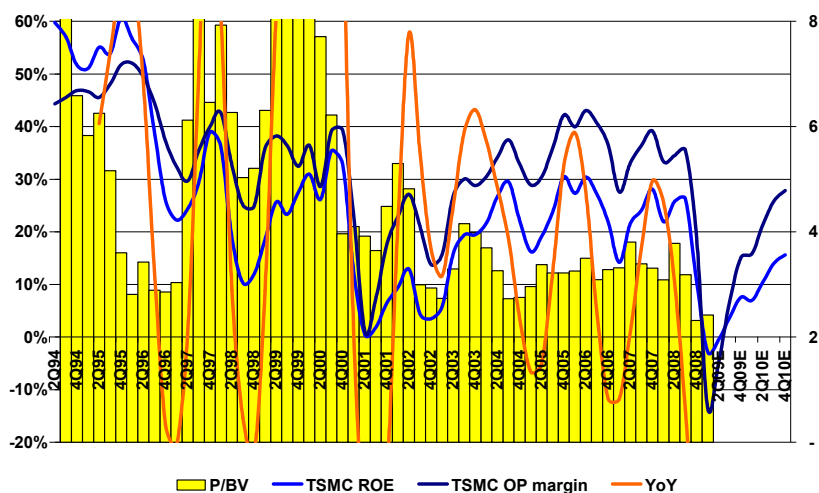
Investment strategy

We rate TSMC shares Buy/Low Risk (1L) with a NT\$55 target price. We believe the 46-50% qoq 1Q09 sales decline guidance and serious operating margin contraction to -15% to -19% are already priced in by the stock. But we think the guidance has been over-cut. The key bottom-up and top-down arguments behind our view are: 1) The waferbank ratio could fall to a trough of -10% to -20% by 1Q09E; 2) US back-end equipment bookings are below US\$200m again, a trough for bookings and the share price of TSMC over the past 15 years; 3) TSMC expects foundry to underperform its global semi sales forecast of a 30% yoy decline in 2009E (we have a 44% yoy sales decline forecast in 2009E for TSMC); 4) After our cycle-to-cycle analysis, we estimate TSMC to see at least a 15% qoq recovery in wafer shipments in both 2Q09E and 3Q09E, similar to the 17% and 20% qoq recoveries in wafer shipments in 2Q05-3Q05 and 2Q07-3Q07, respectively.

Valuation

As we believe utilization and margins should begin improving from March 2009, and TSMC will likely be one of few to deliver only small losses in 1H09E, we set our 2009E P/BV target of 3.4-3.5x slightly higher than the 3-year average of 3.2x. We use P/BV to derive our target price of NT\$55, as earnings forecasts are very volatile during downturns and upward foundry cycles. Our P/BV target equates to nearly 1.5x P/BV-to-ROE in 2009-11E, within the range of 1-1.5x throughout cycles. In our view, P/BV-to-ROE is seen as a good metric to value industry players as investors focus more on book value and ROE in evaluating the attractiveness of companies in the industry.

Figure 7. TSMC — P/BV, ROE, Op Margin, and YoY Sales Comparison



Source: Company Reports and Citi Investment Research estimates

Risks

We rate TSMC shares Low Risk based on our quantitative risk-rating system, which tracks 260-day historical share price volatility. We think the main downside risks to the shares attaining our target price include global semiconductor market weakness, larger-than-expected margin contraction due to depreciation cost hikes, a slowdown in IDM outsourcing, potential oversupply in the handset and PC IC markets, poor PC demand due to weak Windows Vista demand, delays in 28 and 40nm nanometer ramp-up, high k/metal gate and 12-inch fab development, price competition from China foundries, and technology competition from IDM foundries. TSMC is also exposed to investment risks from holding Vanguard, Wafertech and SSMC.

Other companies

MediaTek (2454.TW; NT\$283.00; 1L)

Valuation: We set our target price of NT\$305 using a P/E to growth (PEG) multiple of 0.85x, factoring in a 15-17% earnings CAGR. Our PEG ratio of 0.85x translates to 13-15x 2010E bonus-adjusted EPS. PEG takes into account both earnings and growth, while other approaches (P/BV, P/Sales, etc.) do not adequately reflect growth prospects, in our view. We use a PEG ratio for all fabless stocks to be consistent with long-term EPS growth. If we see full recovery in MediaTek and the fabless sector, we cannot rule out a return to a P/E to growth multiple of 1x as the historical long-term range.

Risks: We rate MediaTek shares Low Risk based on our quantitative risk-rating system, which tracks 260-day historical share-price volatility. Key downside risks that could prevent the stock from reaching our target price include: 1) 1H09 global handset IC demand is still uncertain; 2) the fabless sector de-rating might continue into 1H09 due to an employee bonus impact and negative YoY sales momentum; and 3) the acquisition of ADI's baseband and TD-SCDMA 3G IC design team could lower return on investment and boost

operating expenses for the next few quarters until consolidation is completed;
4) likely inventory write-off on an account rule change to SFAS 10 starting 1Q09E.

SPIL (2325.TW; NT\$28.45; 1L)

Valuation: Although we are still in trough of cycle for SPIL, however, we believe SPIL about to step out from the trough starting 2Q09E. Our target price of NT\$39 is based on a three year average P/BV target multiple of 2.2x-2.3x (previously based on a trough level of 1.4-1.5x 2009E-2010E book). SPIL has traded at a three-year average of 2.2-2.3x P/BV, in a range of 1.5x-3.1x. By using 2.2-2.3x 2009E-10E book as our target multiple, our 2010E P/BV to ROE ratio works out at 1.4x-1.5x, still within the foundry / OSAT industry average of 1x-1.5x. We use P/BV as our primary valuation tool for the OSAT sector as we believe it captures the true value of a company in a downturn and upturn.

Risks: We rate SPIL shares Low Risk based on our quantitative risk-rating system, which tracks 260-day historical volatility of shares. The main downside risks to our target price and rating for SPIL come from its high exposure to the PC/graphics and wireline communication sectors. Other downside risks to our target price include: 1) cyclical margin contraction once sales momentum slows and depreciation costs kick in; 2) downward price pressure due to oversupply; 3) prohibiting China investment suggests limited growth opportunities from customers in China; and 4) Overbuilt inventory on NAND card might slow its multichip NAND card packaging and testing business. Like foundries, the backend sector is sensitive to the growth momentum of the overall semiconductor universe. Thus, there could be some downside to our near-term earnings forecasts if the end-market recovery is slower than expected.

Samsung Electronics (005930.KS; W480,000; 1L)

Valuation: Our target price of W664,000 is derived using a sum-of-the-parts valuation. As for operating value, we apply global peers' EV/EBITDA to SEC's 2009E divisional earnings, i.e. 6.7x for Semiconductor, 6.1x for Handset, 3.7x for TFT-LCD, and 2.1x for Media & Appliance. The 6.7x target multiple for Semiconductors represents a 30% premium to Hynix's target price implied multiple, given its superior market position on 1) rising market share, 2) outstanding profitability, and 3) healthier-than-peers' financial status. As for other divisions, we apply global leader Nokia's target price implied multiple to the handset division, and respective global peer average multiples to the TFT-LCD and Digital Media divisions. On the non-operating side, we conservatively employ current book value (as of end-3Q08) to value treasury shares and investment assets.

Risks: We rate SEC shares Low Risk in accordance with our quantitative risk-rating system, which tracks 260-day historical share-price volatility. Downside risks which could prevent the shares from reaching our target price include: 1) PC sales weaken more than our forecast and NAND oversupply proves worse than our forecast; 2) Aggressive investment by competitors in the highly cyclical memory semiconductor/TFT-LCD industries could have a negative impact on prices; 3) Competition in handset market intensifies, reducing SEC's handset margin; 4) any major appreciation of the won would hit SEC's earnings.

Appendix A-1

Analyst Certification

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IMPORTANT DISCLOSURES

TSMC (2330.TW) Ratings and Target Price History Fundamental Research

Analyst: Andrew Lu

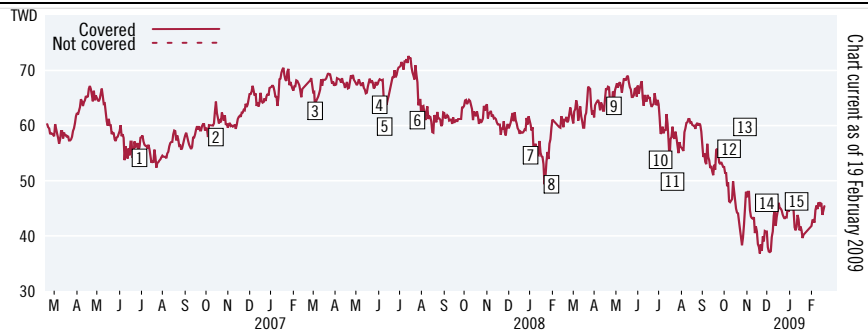


Chart current as of 19 February 2009

	Date	Rating	Target Price	Closing Price
1	29-Jun-06	1L	*79.20	56.13
2	15-Oct-06	1L	*77.22	62.57
3	4-Mar-07	1L	*81.18	66.13
4	4-Jun-07	1L	*77.22	68.41
5	11-Jun-07	1L	*77.61	65.27

	Date	Rating	Target Price	Closing Price
6	26-Jul-07	*2L	*70.64	67.86
7	2-Jan-08	2L	*65.67	60.20
8	31-Jan-08	2L	*60.69	59.60
9	29-Apr-08	2L	*67.66	64.38
10	3-Jul-08	2L	*64.67	58.51

	Date	Rating	Target Price	Closing Price
11	21-Jul-08	2L	*63.00	59.80
12	8-Oct-08	*1L	*59.00	46.25
13	30-Oct-08	1L	*57.00	44.90
14	1-Dec-08	1L	*53.00	40.80
15	11-Jan-09	1L	*55.00	41.00

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Samsung Electronics (005930.KS) Ratings and Target Price History Fundamental Research

Analyst: Henry H Kim, CFA
Covered since August 11 2008

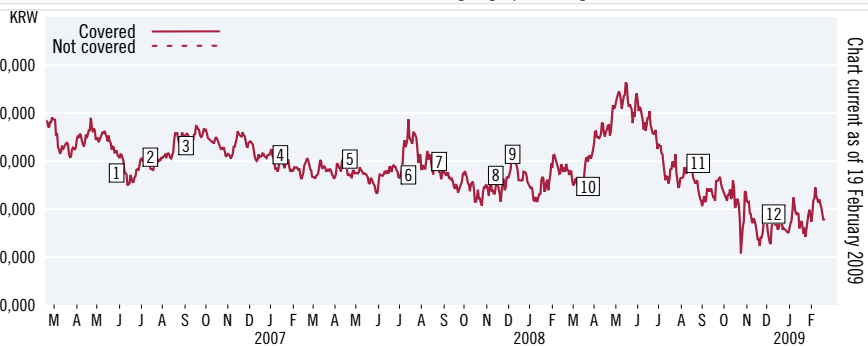


Chart current as of 19 February 2009

	Date	Rating	Target Price	Closing Price
1	29-May-06	1L	*800,000.00	622,000.00
2	14-Jul-06	1L	*770,000.00	584,000.00
3	3-Sep-06	*2L	*695,000.00	653,000.00
4	15-Jan-07	*1L	*750,000.00	612,000.00

	Date	Rating	Target Price	Closing Price
5	23-Apr-07	1L	*700,000.00	570,000.00
6	13-Jul-07	1L	*750,000.00	687,000.00
7	27-Aug-07	*2L	*620,000.00	577,000.00
8	14-Nov-07	2L	*584,000.00	547,000.00

	Date	Rating	Target Price	Closing Price
9	7-Dec-07	*1L	*790,000.00	608,000.00
10	24-Mar-08	1L	*820,000.00	599,000.00
11	26-Aug-08	1L	*700,000.00	540,000.00
12	10-Dec-08	1L	*664,000.00	481,000.00

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

SPIL (2325.TW)
Ratings and Target Price History
Fundamental Research

Analyst: Andrew Lu



Chart current as of 14 February 2009

	Date	Rating	Target Price	Closing Price
1	1-Aug-06	1L	*49.61	33.21
2	26-Nov-06	1L	*61.17	46.61
3	31-Jan-07	1L	*64.08	53.01
4	28-Mar-07	1L	*67.97	60.20
5	28-May-07	1L	*80.59	66.02

	Date	Rating	Target Price	Closing Price
6	4-Jul-07	1L	*82.53	66.51
7	2-Aug-07	1L	*82.53	61.98
8	22-Jan-08	1L	*71.29	41.14
9	5-Aug-08	1L	*66.00	37.40
10	21-Sep-08	1L	*60.00	36.85

	Date	Rating	Target Price	Closing Price
11	29-Oct-08	1L	*52.00	30.40
12	26-Nov-08	1L	*32.00	25.50
13	4-Dec-08	1L	*30.00	23.00
14	11-Feb-09	1L	*39.00	31.00

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

MediaTek (2454.TW)
Ratings and Target Price History
Fundamental Research

Analyst: Andrew Lu



Chart current as of 14 February 2009

	Date	Rating	Target Price	Closing Price
1	15-Feb-06	*2L	*300.03	294.89
2	25-Apr-06	2L	*342.89	330.89
3	20-Jun-06	*1L	342.89	245.17
4	3-Aug-06	1L	*342.89	245.17
5	11-Oct-06	*2L	*353.61	323.43
6	3-May-07	2L	*452.62	406.88

	Date	Rating	Target Price	Closing Price
7	25-Jul-07	2L	*475.25	593.07
8	2-Aug-07	*3L	*594.06	584.16
9	21-Aug-07	*1L	*584.16	482.67
10	10-Sep-07	1L	*668.32	594.06
11	22-Jan-08	1L	*554.46	302.97
12	17-Jul-08	1L	*525.00	287.50

	Date	Rating	Target Price	Closing Price
13	5-Sep-08	1L	*510.00	341.00
14	7-Oct-08	1L	*475.00	299.00
15	30-Oct-08	1L	*450.00	295.00
16	20-Nov-08	1L	*290.00	189.00
17	4-Dec-08	1L	*270.00	195.00
18	6-Feb-09	1L	*305.00	255.50

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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