Semiconductor Stock Price Triggers

Industry Fundamentals Likely to Move Sector Market Prices

I believe the semiconductor sector is poised to outperform—from both a fundamental business perspective as well as market prices—when the ultimate recovery finally begins. Unfortunately, until we can see the bottom and profile the recovery with any degree of certainty, we will continue to enjoy the current bear market with its irregular (but not infrequent) rallies. Following is a timeline of significant and likely triggers of a fundamental nature that I expect will move share prices both up and down over the next couple of months.

+/-	Current	+/-	Feb/Mar	+/-	March 1	+/-	March	+/-	April 1	+/-	April
-	Q1 Bad	-	Forecast Declines for '09 (and up '10)	-	Jan Revenue Bad	+	Rumors of Good Feb	+	Feb Revenue Good	+	Q1 Above Expectations
										+	Q2 Guidance Flat-ish

Q1 Sucks: We are now mopping up the remnants of the 4Q08 earnings season with only a minority of companies left to report, and we know two things with a high degree of certainty: 4Q was awful, and 1Q will be nearly as bad.

4Q08 SIA/WSTS (Semiconductor Industry Association) chip industry revenues declined an unprecedented -24.2% on a sequential quarterly basis. Never mind the statistics since 1990 reflecting an average gain of 2.2% with a high of 16.0% and a low of –3.0%: we have now exceeded the worst-ever performing quarters during the first half of 2001 when industry sales cratered -19.4% and -19.9%, carving out one-third of the total industry in 180 days.

1Q guidance from the nearly 90 chip companies reporting so far (that account for some 60% of total industry sales last quarter) call for another industry contraction this quarter of -24% to -17% (*see my latest 4Q Earnings Summary*). This is a weighted average sales calculation from the Tokeneke Universe, and let's eye-ball it at minus 20%. On a company-by-company basis you can count 1Q revenue guidance above expectations on one hand: the vast majority of reporting companies expect to miss previously published expectations for the period. About the only good news is that the magnitude of the miss is not always below the low-end of the range, or at least as often as it was going into the prior quarter. And this has lead to an interesting phenomenon in share price action: extremely bad news is already reflected in current share price valuations, so only the truly abysmal reports are being penalized; but the not-so-bad guidance that is a least within the range of published expectations actually gets rewarded. Investors know the environment is awful, so the shares are trading on the answer to the question, "How bad is it?"

In general, it appears to me that the bad news was reflected in sector share prices earlier-on in the earnings season, and we have since seen a rally due to the anticipation of the chip sector leading a recovery. However, this rally then abruptly corrected after the Treasury Secretary's remarks on Tuesday of this week.

Negative Forecast Revisions: The next fundamental trigger for the sector will be negative, and will be very significant downward revisions of annual chip industry revenue forecasts. Specifically, the numbers will need to reflect a year that contracts by -25-30%, down from current published expectations for declines of -2-16%. I expect these updates to be released during late-February and possibly into early-March—basically as soon as the market research firm can crunch their numbers.

Chip Industry Revenue Growth Forecasts

Source	2009	Prior Fcst
Tokeneke	-25-30%	
SIA/WSTS	-5.6%	-2.2%
iSuppli	-9.4%	+6.8%
IC Insights	-10% or worse	
Gartner	-16.3%	-2.2%
VLSI	-6.9%	+3.6%
Future Horizons	-2%	

2009 has to be this bad, primarily due to the quantitative realities associated with 1Q declining by 20%. I calculate an annual decline of -30% with the following sequential quarterly growth profile: -20%, -5%, +10%, +10%. And I can approach a decline closer to -20% with -15%, 0%, +20%, +20%. As you can see, this profile already assumes a fairly robust 2H09—at least on a growth rate basis. And this leads to two issues: First, the year could easily be worse than -30% if the bathtub profile of this downturn is extended; and second, any number much better than -25% seems pretty unlikey, in my opinion.

I agree two back-to-back quarters of +10% growth during the second half of the year would seem to indicate a pretty pronounced recovery—especially more pronounced than I believe macroeconomics can support. Nevertheless, I also don't think it would be out of the question. First, run-rate business levels would be at very depressed levels after 40% of industry sales evaporated during 4Q08 and 1Q09. Second, fairly lean channel inventories going into this downturn would necessitate at least some amount of refilling. And third, manufacturing capabilities could easily—and would be highly motivated—to enhance what would be highly depressed utilization rates by that time. While it might be too much for actual consumption to digest, it would not significantly exceed seasonal norms of holiday bullishness.

The only silver lining to such forecast updates will be a numerically easy 2010 that can easily deliver growth of +20+30%—even if sequential quarterly growth rates revert to single-digit percentage averages. The low-end of that range reflects a more favorable 2009 number around -25%, while the high-end of the 2010 range reflects a less favorable 2009 around -30%.

The magnitude of these 2009 forecast revisions are likely to be a negative shock to financial markets, in my opinion. The only hints of numbers this bad from the industry to-date that I have seen include a warning by Bill McLean with IC Insights that 2009 decline is likely to be worse than -10%, and a DigiTimes report of a TSMC executive opining an industry decline of -30% this year during some presentation in Taiwan.

Weak January Revenues: Chip industry statistics for the month of January will be released by the SIA around March 1, and I expect these numbers to reflect a significant decline compared to the prior month. First, January is usually pretty weak anyway. Second, the Chinese/Lunar New Year adversely impacts business levels, and that holiday fell squarely in January this year. And third, anecdotal evidence suggested at least a few company managements noticed a bottoming in weekly sales and/or bookings during the first half of the month.

I expect the release of these actual numbers for January to be somewhat of a negative shock to financial markets, since by this time news of an industry bottom will start to be taken for granted—especially after a mini-pop in business levels in February following Chinese New Year (well, make that a micro-burst).

Improving February Sales: Rumors of better February business levels will start leaking out by the end of February and into March. This would be primarily due to Chinese New Year. Since Chinese New Year fell in January this year, then statistics from recent years indicate that January will be weaker than February, and February will be stronger than January. Also, I believe the bottom was achieved during January (at least on a weekly basis), but that this bottom was then adversely interrupted by the New Year break.

The last time in recent memory that Chinese New Year fell unambiguously in January was 2004, and January declined that year but February eked out a gain.

	Chinese	3-mo rolling avg		Annual Rev	
Year	New Year	JAN	FEB	% APAC	Correlate?
1991	15-Feb	-3.19%	-0.62%	15.0%	no
1992	4-Feb	-0.56%	-1.28%	17.7%	yes
1993	23-Jan	-2.42%	0.60%	18.3%	yes
1994	10-Feb	-0.03%	0.35%	18.8%	no
1995	31-Jan	-0.17%	1.91%	20.5%	not really
1996	19-Feb	-2.91%	-3.75%	20.9%	yes
1997	7-Feb	-2.96%	-2.17%	22.0%	not really
1998	28-Jan	-7.30%	-3.93%	24.9%	sort of
1999	16-Feb	-1.81%	-1.79%	24.9%	not really
2000	5-Feb	0.91%	-1.31%	21.7%	yes
2001	24-Jan	-7.02%	-6.90%	28.7%	sort of
2002	12-Feb	-1.58%	0.10%	36.4%	no
2003	1-Feb	-1.97%	-2.98%	37.8%	yes
2004	22-Jan	-2.98%	0.23%	41.7%	yes
2005	9-Feb	0.07%	-2.13%	45.4%	yes
2006	29-Jan	-1.49%	-2.22%	47.0%	yes
2007	18-Feb	-1.22%	-6.23%	48.3%	yes
2008	7-Feb	-3.64%	-5.24%	49.9%	yes
2009	26-Jan				
	Average:	-2.24%	-2.07%		

February Strength Confirmed: The SIA will then publish monthly statistics for February on or about April 1, which should then confirm and quantify expected strength for the month. This good news should not be a surprise to the financial markets, but will clearly feed the bulls and starve the bears depending on where we are amid the bear market rally cycle at the time.

1Q Earnings Exceed Expectations: I then expect the 1Q earnings season beginning in mid-April to largely exceed expectations. Additional good news is likely to include fairly flat-ish guidance for 2Q that would clearly indicate a 1Q bottom. PC and cell phone markets fell early and hard, and I expect them to bottom and recover early-on as well. On the other hand, I expect networking and telecommunication markets to bottom and recover one-to-two quarters later. All this bullish news will be tempered by a couple of bearish realities. First, the better-than-expected 1Q revenues will still have likely declined sequentially by at least 10-15%. And second, I am not sure any kind of recovery profile will necessarily be apparent once the bottom has been found.

—Dan K. Scovel
Semiconductor Analyst

This page intentionally left blank

Tokeneke Research LLC
dscovel@tokenekeresearch.com
203-604-0183 *phone*
203-554-4621 *cell*

CONFIDENTIAL