Semiconductors Enter the Volatile Flatlands

Counter-Seasonal Cycle Softens, But Shares Rally Anyway

The bad news is that the semiconductor industry has recently entered a counter-seasonal cyclical slowdown of unknown depth and duration, although I expect a shallow depth for the next two to three quarters. The good news is that the sector appears to be leading an asset allocation rotation back into equities following QE2, U.S. elections and expected tax relief extensions. The frustration is that we may see a tug-of-war of fits and starts in share price movement between fundamental uncertainty and favorable asset allocation over the next several weeks.

October Flat-Lines: Semiconductor industry statistics for October were released last week, and the month was sequentially flat as strength in Europe was offset by incremental weakness in Asia-Pacific. Worldwide flatness during the month reflected fairly significant relative weakness when compared to average growth over the last 20 years of +2.8% with a high of +6.8% and a low of -2.0%, which was also the only time October declined. Europe rocketed forward with growth of +3.3% and Japan eked out a gain of +0.3%, while The Americas were flat and European and Japanese gains were offset by a decline of -0.9% across the much larger Asia-Pacific region.

I expect November statistics next month also to reflect weakness amid the current business slowdown. November is usually a bit slower than October with average growth of +2.1%, a high of +6.3%, a low of -7.2%, and negative growth only twice in the last 20 years. Flat is probably the best that could be expected in the current environment, although an incremental contraction could be very possible.

Tepid 4Q Outlook: Company guidance for 4Q based on 3Q earnings announcements is calling for a plateau in business this quarter. The weighted industry revenue guidance from over 100 companies in the Tokeneke Universe centers on growth of +1.0% with a range from -1.5% to +3.5%, which does not compare favorably with the average growth over the last 20 years of 2.4% with a high of 16.0%, a low of -24.2%, and declining sales in six of those years. Four mid-quarter updates as of this writing (ALTR, LSCC, MCHP and TXN) have either reiterated guidance or narrowed their ranges.

We are also seeing some interesting cross-currents as this quarter unfolds. Interim reports out of Taiwan have indicated weakness during both October and November, but then a pick-up in orders for December ahead of the Chinese New Year holiday which occurs on February 3, 2011 next year. 4Q has typically been a front-end loaded quarter for the chip industry as many businesses slow or close during the Christmas holiday at the end of December, but the growing influence of Asian consumers may now begin to modify such established norms.

Another metric that concerns me is the difference between weighted-average company guidance for 4Q, and average company guidance. If I just calculate the average expected change in revenues this quarter on a percentage basis, the companies in the Tokeneke Universe are expecting a decline of -1.5% with a range of -4% to +1%. And this is noticeably more bear-ish than the weighted expectation of +1.0% with a range of -1.5% to +3.5%. This spread is explained by more positive relative outlooks by nine companies in the billion-dollar revenue club: ALTR, ATML, BRCM, INTC, LSI, QCOM, SNDK, STM and SWKS.

Why is this? Are the rich getting richer, or are they just oblivious? I think they are oblivious. Most companies are being conservative amid limited order visibility, so I don't think the industry will perform as poorly as the average company is guiding on a percentage growth basis. However, at the same time I fear these larger companies as a group may be banking on macro trends of existing backlog and seasonality that could very well prove to be at least somewhat optimistic in the current business environment.

When it's all said and done I think 4Q will play-out much like 3Q did as a triumph of tempered expectations. It's going to be a pretty flat quarter and that will be a relief if you are expecting a dip—and a disappointment if you are expecting anything close to what has been traditional seasonal strength.

A Slow 2011: While 2010 is shaping up to be a strong recovery year with worldwide sales expected to grow by 33% after the disastrous 2009, 2011 is shaping up to be a year of very modest single-digit growth as a result of two strong headwinds: the mathematical curse coming off a year of strength; and a slow and uncertain beginning to the

Copyright © 2010 Tokeneke Research LLC

period. The adjacent table identifies revenue growth rates from a number of market research organizations that are clearly centered on mid-single digit growth for the year.

Industry Sales Growth Forecasts

Source	2011
SIA	6.0%
WSTS	4.5%
Gartner	4.6%
iSupply	5.1%
VLSI	4.4%
Semico	9.5%

Chip Sector Rally: Share prices across the semiconductor sector have been outperforming the broader equity markets in a meaningful way. During November the Philadelphia Semiconductor Index Option (SOX) gained 4.7% while the S&P500 and NASDAQ were flat-ish at -0.2% and -0.4%, respectively, and the DOW retreated by -1.0%. All this after a decidedly mixed 3Q earnings announcement season while business conditions have slowed into a period of traditional seasonal strength. So what gives?

Broader macroeconomic issues have been driving share prices for much of this year rather than industry fundamentals, in my opinion, and they continue to do so. I think the chip sector is at the front-end of a financial market rotation away from fixed income, commodities and foreign exchange and back into equities following QE2, the November elections in the US, and recent indications of tax-credit extensions by the current administration.

November			
Winners *(67/104)*		Losers	
IPHI	32.5%	NLST	-25.7%
VSH	26.2%	SIMO	-25.7%
CEVA	25.3%	SMOD	-24.5%
SIMG	24.7%	VIMC	-16.8%
FCS	24.7%	MSPD	-15.6%
average stock +3.0%		*SOX +4.7%*	

QTD *(4Q)*			
Winners *(78/104)*		Losers	
CEVA	62.2%	INFN	-29.9%
SIMG	60.5%	SIMO	-26.2%
FCS	49.5%	NLST	-22.5%
VSH	47.3%	TXCC	-22.4%
DIOD	44.5%	MSPD	-19.8%
average stock +10.4%		*SOX +11.7%*	

YTD			
Winners *(63/104)*		Losers	
MIPS	211.0%	NLST	-55.5%
SPRD	199.5%	SPWR	-50.8%
SIMG	197.3%	CNXT	-41.8%
ENTR	191.2%	IKAN	-41.7%
QUIK	183.4%	ZRAN	-37.7%
average stock +24.1%		*SOX +8.4%*	

Indices	*Nov*	*QTD*	*YTD*
SOX	4.7%	11.7%	8.4%
SMH	5.3%	12.1%	11.2%
NAS	-0.4%	5.5%	10.1%
S&P500	-0.2%	3.4%	5.9%
DOW	-1.0%	2.0%	5.5%

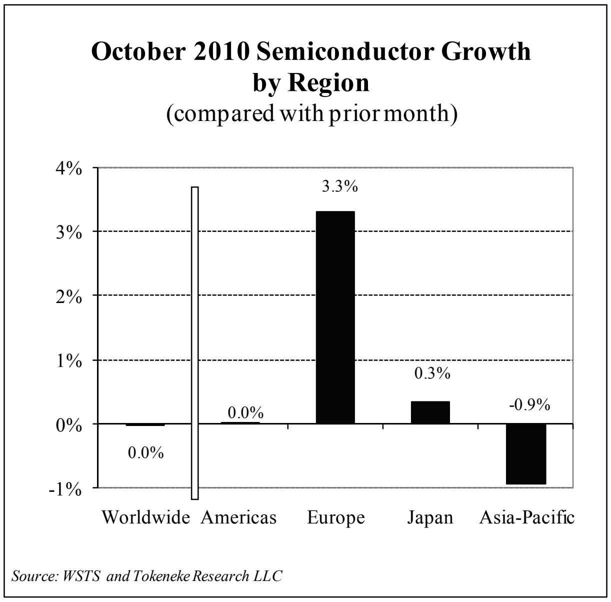
Opportunity to Buy and Trade: I continue to believe that the depth of the current slowdown in the industry will be fairly shallow due to extremely tight channel sensitivity to inventory, and will feel more like a plateau than a dip before any meaningful uptick occurs with 2H11 seasonal strength. Nevertheless, the truth is that company order visibility is very opaque and neither the depth nor the duration of current weakness is foreseeable at the current time.

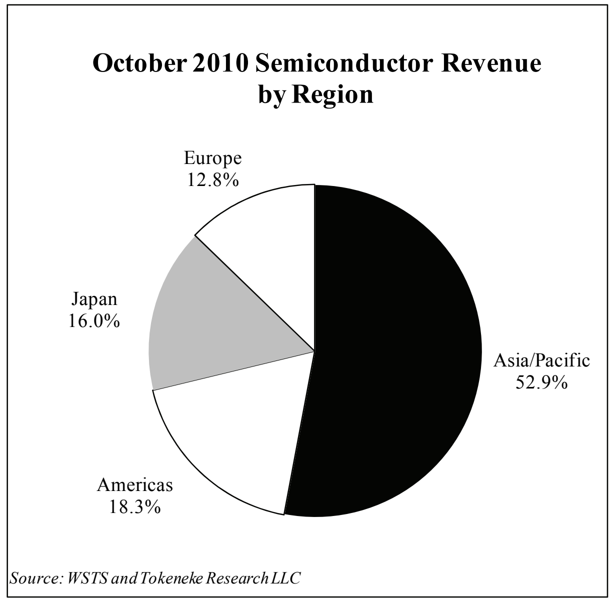
For investors with longer time horizons, say 2 years or more, chip sector equities remain extremely attractive at current valuation levels. Unfortunately, near-term business uncertainty does not bode well for the faint of heart or those investors with shorter time horizons over the next few months. Nevertheless, recently renewed investor enthusiasm for equity vehicles appear to have trumped such fundamental concerns, setting up a situation favorable for both longer-term investors and short-term traders if we experience a period of fits and starts triggered by fundamentals and equity allocations, respectively, as I believe we might.

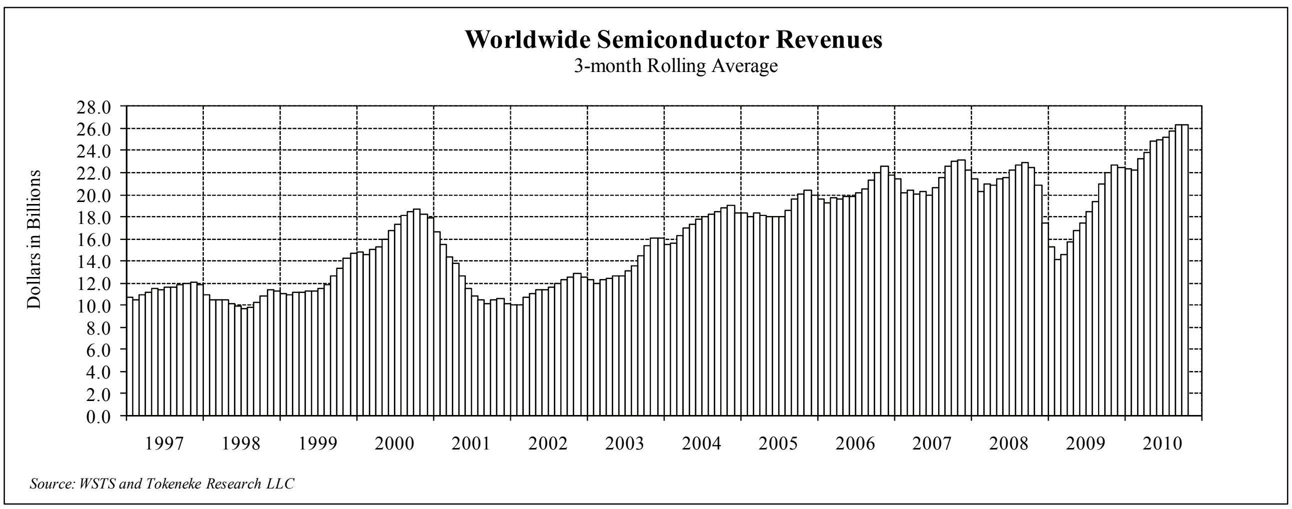
It's a good time to buy, and may well prove to be a good time to trade. But it may also prove to be a frustrating time to hold. Opportunities exist—at least for investors with longer term time horizons and greater-than-normal appetites for risk and volatility.

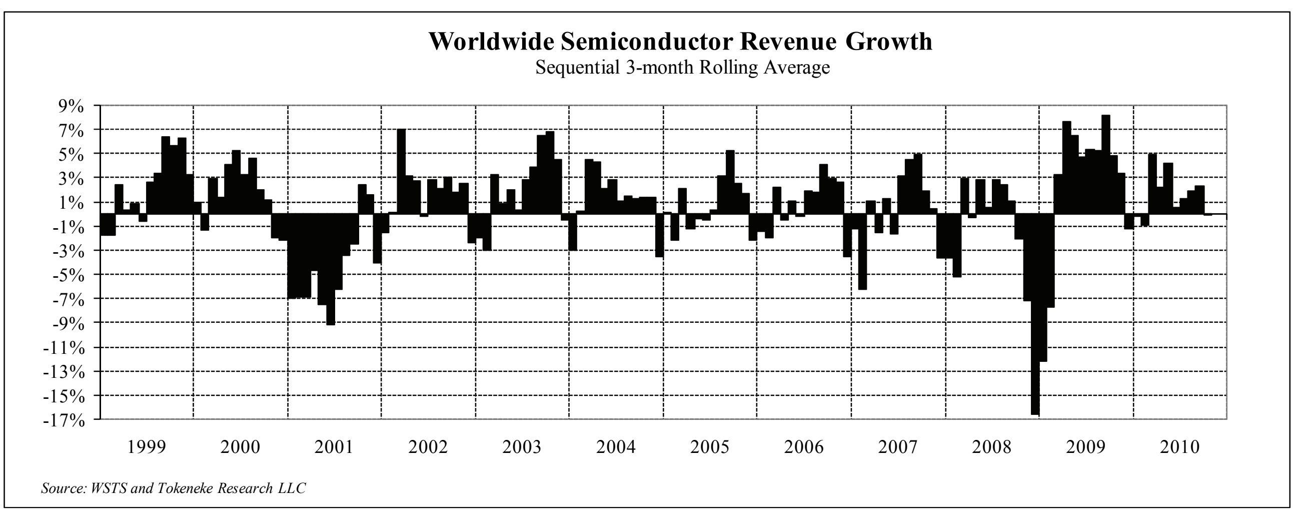
—Dan K. Scovel
Semiconductor Analyst

Copyright © 2010 Tokeneke Research LLC









Copyright © 2010 Tokeneke Research LLC

Weekly Philadelphia Semiconductor Index Option (SOX) vs. S&P 500

Sources: Tokeneke Research LLC

**S&P 500 normalized to the SOX*

Copyright © 2010 Tokeneke Research LLC

The Company

Tokeneke Research is an independent research firm specializing in semiconductor industry business issues, providing fundamental research focused on US equities across all market capitalizations within the sector to investors. The company was founded in 2005 and is based in Connecticut.

The Offering

- *Monthly Newsletter:* A summarized review of noteworthy industry business developments, sales statistics, and sector equity market performance, as well as a near-term and annual outlook for sector business fundamentals and share prices. This report typically includes two pages of text and a handful of recurring charts and tables. It is intended for relatively broad-based distribution.
- *Industry Reports:* A semi-annual publication offering insight and perspective to industry-wide, multi-year forecast updates; periodic sub-sector product type and/or end-market reviews; fundamental and valuation perspectives on sector equity relationships; and an industry introduction and overview. These are more detailed reports with varying shelf-lives, and are intended for narrow distribution to interested clients.
- *Company Reports:* Fundamental equity research including earnings estimates and customized valuation analysis.
- *Consulting:* Special projects of limited or extended duration, as well as periodic access of varying frequency.

Publications are distributed via email in .pdf format, unless otherwise requested. Client confidentiality and customized research exclusivity accommodated. Rates vary with the nature, duration, and terms of offerings.

My Background

I have an electrical engineering background, nearly 12 years of semiconductor industry experience, and was on Wall Street for nearly eight years where I was selected as the Best On The Street semiconductor analyst for 2002 by The Wall Street Journal, and third-rated Best of the Best across all sectors.

I obtained my undergraduate BS degree in electrical engineering from the University of Washington, and my MBA from Santa Clara University. My industry experience consists of nearly 12 years in various technical sales and marketing roles at four different semiconductor firms located in Silicon Valley beginning with Advanced Micro Devices in 1984, followed by two small start-up companies, and ending at Cirrus Logic where I supported the firm's Japanese market development. I joined Fahnestock & Co. as a senior semiconductor analyst in 1996 and was recruited by Needham & Co. in April 2000.

My formal coverage list as a sell-side analyst included the following equities: AMD, ALSC, ALTR, ARTI, ATML, CUBE, CY, ESST, GNSS, INTC, ISSI, LSI, MOSY, MU, OIIM, OVTI, RMTR, SIII, SMSC, STEC, SVTG, TDFX, TSRA, TXN, and ZRAN.

—Dan K. Scovel
Semiconductor Analyst

Tokeneke Research LLC
Rowayton, CT 06853
203-554-4621
dscovel@tokenekeresearch.com
www.tokenekeresearch.com

Copyright © 2010 Tokeneke Research LLC. All rights reserved. This report is for information purposes only and does not constitute a solicitation or an offer to buy or sell any security or to participate in any investment or trading strategy. Opinions expressed in this report reflect the judgment of Tokeneke Research LLC on the topics addressed as of the date of the report, and are subject to change without notice. Tokeneke Research LLC makes every effort to use reliable and comprehensive information but makes no representation that the information in this report is accurate or complete, nor dies it undertake to update or revise this report at any time of for any reason. This report contains forward-looking statements that involve risks and uncertainties, both known and unknown, as well as assumptions that, if they do not fully materialize or prove incorrect, could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Actual results and trends may differ materially from historical results or those projected in any such forward-looking statements depending on a variety of factors. This report does not provide individually tailored investment advice and has been prepared without regard to the specific individual financial situation, objectives and needs of those who receive it. Securities discussed in this report may not be suitable for the reader. Tokeneke Research LLC and/or Dan Scovel may have a long or short position in the securities of a company or companies mentioned in this report and, at any time, may change that position. Tokeneke Research LLC accepts no liability whatsoever for any loss or damage of any kind arising out of the use of any part, or all, of this report. All company and product names mentioned in this report may be trademarks or registered trademarks of their respective holders and are used for identification purposes only. Reproduction or distribution of this report, even for internal distribution, is strictly prohibited unless specifically authorized by Tokeneke Research LLC.