

Is There a Sweet-Spot in the EMS Industry?

Finding the sweet-spot in EMS is a subject contemplated by many people. The answer is naturally dependant the kind of company you work for and its particular core competency. Top tier EMS firms often look to high volume products to create their sweet-spot—namely mobile phones and motherboards—assemblies that give their factories a high production utilization although often at very low margins. Lower tier EMS companies concentrate in certain industry sectors such as industrial, medical and military/aerospace, where they can achieve the highest profit margins or value-add engineering and design services.

For the last 12-months, these product areas haven't been so sweet as demand for high volume products has weakened and the so-called recession-proof industries have collapsed, causing the collective effect of an economic downturn for EMS. Perhaps more alarming is that there are few signs of these sectors achieving any substantial recovery in the near future, for a variety of exogenous reasons. The rippling effect of unemployment has negatively impacted consumer spending and this has dampened demand for products EMS companies make such as medical and consumer electronics products, service industries such as travel, while the deficit in government tax revenue has capped or reduced capital spending. Two industries—the automotive and semiconductor capital equipment—have been hit so hard that electronics assembly into these sectors will take years to recover.

So while pundits are eager to be optimistic and speak of turnarounds and growth, it's hard to see the EMS industry being vigorous and booming again any time soon like in the past. This doesn't mean there won't be successful companies (as clearly the ones with the best practices demonstrate), but it does mean there will be more failures and consolidation over the next several years while many firms struggle to maintain revenues and lower costs. The industry sweet-spots will only be sweet for a select few.

Since we have been tracking this industry for a long time (since 1993), we thought it might be useful examine some of the trends and consider the possibilities for the future. Table 1 below summarizes our macroeconomic forecasts by broad industry sector for 2008 and 2013 (it is summarized by nearly 50 individual product categories).

Table 1
The Worldwide EMS Industry by Segment (\$M), 2008 & 2013

EMS Assembly (\$M)	2008	2013	CAGR
Communications	88,484	123,950	7.0%
Computer	105,729	166,235	9.5%
Consumer	48,886	71,444	7.9%
Industrial/Medical	34,283	51,268	17.4%
Transportation	16,613	21,880	16.8%

Total	293,996	434,777	8.1%
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Source: Electronic Trend Publications

From this data, one might surmise that the EMS industry will remain fairly healthy for the next five years, yet it does not illustrate the decline in revenue for 2009 (estimated at 6.6%), nor the gradual recovery over the ensuing years. It also doesn't tell you which product segments will grow the fastest and have the most volume (this information is contained within our annual syndicated report). What this table does tell you is that approximately two-thirds of all EMS production can be found in the information technology industries (communications and computers) and that the highest growth will be in the niche industries of industrial, medical and military/aerospace.

Another story emerges when we examine where industry growth will take place geographically. Table 2 illustrates EMS assembly revenue by leading geographic region.

Table 2
The Worldwide EMS Industry by Geographic Region (\$M), 2008 & 2013

EMS by Region	2008 Rev. (\$M)	2013 Rev. (\$M)	CAGR
North America	55,094	74,817	6.3%
- Mexico	18,968	29,094	8.9%
Europe	40,117	54,095	6.2%
- Rest of Europe	2,082	3,573	11.4%
Asia	183,078	284,864	9.2%
- China	107,185	172,761	10.0%
ROW	15,707	21,000	6.0%
- Other ROW	164	272	10.6%
Total	293,996	434,777	8.1%

Source: Electronic Trend Publications

While EMS revenue growth is below average in the leading geographic regions (excepting Asia), the strongest economic growth is expected to occur in the low-cost countries embedded within each region. Each year we examine over 40 individual countries for direct wage changes and economic growth, as well as account for the manufacturing footprint and capacity within. The countries expected to achieve the highest economic growth include Mexico, Eastern Europe (Poland, Bulgaria, Romania, Slovakia Russia and Ukraine), China and Vietnam, and Other Rest of the World which includes India, Australia and South Africa. The new sweet-spot for EMS will be in these low-cost countries.

In the past, the leading driver in economic growth in these areas has been direct labor rates. While this is still important to EMS companies establishing facilities in these countries, it is increasingly needed to exploit domestic markets. The trend to off-shore for economic reasons has been abrogated by executives increased understanding of the total cost of manufacturing which takes into direct costs such as logistics, tariffs and transit time, as well as indirect costs such as operations management, fire-fighting and the cost of money.

We continue to be very sanguine about the future of EMS but as many in the industry well know, the low-hanging fruit has been gone a long time ago with many of the product sweet-spots. Over the next several years, the successful EMS companies will be those who employ the best practices (see our article in the October issue) and can achieve strong loyalty among their customers. Growth seems to be assured for the EMS industry over the next five years, but success is not.