Detroit's reality check

Production cuts, restructuring threaten supply chain viability

By Kathleen McLaughlin, Senior Associate Editor

Detroit had one heck of a wake up call in 2006.

The days of rampant excess capacity are over as General Motors, Ford, and DaimlerChrysler's Chrysler Group are desperately trying to slim down bloated cost structures as quickly as possible.

The result?

GM is on track, Ford needs more work, and Chrysler is striving to reduce excess inventory. All three need more time to work on getting down to a leaner fighting weight. The Big Three lost a total $11.3 billion in the first three quarters of 2006, and their combined market share fell to 55.1 percent in the U.S., down from 72.7 percent two decades ago.

In various stages of restructuring, the Big Three are struggling to become smaller and profitable, while Japanese and Korean automakers plot their growth paths.

Restructuring Detroit

CSM Worldwide is projecting total output in 2007 of 15.4 million units, 0.7 percent down from 2006's estimated 15.3 million, itself a 3 percent decline from 2005 (see **Figure 1**). Zero percent financing and massive rebates over the past four years pulled demand forward, and the market is now correcting, said Joel Langley, market analyst, CSM Worldwide.

Japanese and Korean companies are expected to gain 1.9 points to garner nearly 40 percent of the market. Toyota, the second-largest automaker, will once again beat its competitors by augmenting its share by a full point and capturing 16.3 percent of the U.S. market. As Toyota quietly ascends to the top, it is forecast to produce about 9.42 million vehicles in 2007, which would outstrip the 9.18 million vehicles that GM will likely produce this year (see **Figure 2**).

No longer clinging to market share at the expense of profit, GM and Ford announced restructuring plans with deep production cuts to bring supply in line with demand. Ford had shuttered 10 assembly plants across North America by the end of 2006 and cut its fourth-quarter production by 21 percent. GM is in the process of closing nine factories by 2008 to reduce capacity by 1 million units.

"As a result of large production cuts, going into 2007 and 2008 Detroit will be able to reduce incentive activity, which will improve profitability and start to prop up vehicle resale values," said Langley.

GM's pursuit of realistic volume is projected to result in a 1.2-point sales share decline, to 23.5 percent in 2007. Despite incremental new product, Ford is forecast to drop 1.3 points, to 18.2 percent of the market, because of weaker fleet demand and stiffer competition in segments core to the company. Chrysler stands to grow 0.5 point, to 14.7 percent, from nine new-model introductions slated for 2007.

"The market share drops aren't all bad," said Langley. "I'd rather see GM at 21 percent or 22 percent market share and making money instead of striving for 28 percent to 30 percent market share and overproducing vehicles and forcing them on the marketplace with heavy incentives."

According to Ford's latest restructuring plan, the automaker doesn't expect to return to profitability until 2009, said Craig Fitzgerald, partner in the strategy and global services group Plante & Moran. "GM is earning a modest profit and is moving in the right direction. It also is ahead of Ford in structural changes needed to restore profitability," he said.

As the Big Three try to return to profitability, a major portion of their suppliers, many with a negative cash flow, are starting to crack under the pressure.

Declining OEM unit volume and mix issues, pricing pressures, and sustained high raw material costs continue to constrain cash flows and limit balance sheet improvements that, in some cases, suffered significant deterioration between 2004 and 2006.

"Many suppliers have highly leveraged balance sheets," said Fitzgerald. "The average Tier 2 and Tier 3 suppliers have a debt-to-equity ratio of about 3.25-to-1. Because the average supplier already has a fair amount of debt, it's difficult for those suppliers to obtain capital from traditional sources."

Top Suppliers in Bankruptcy

Since 1999 approximately 35 suppliers have filed for Chapter 11 bankruptcy, seven of which filed in 2006. Filing for bankruptcy is becoming a standard practice in the North American supply chain (see **Figure 3**).

According to a Standard & Poor's report, bankruptcy allows automotive suppliers to effectively reduce labor costs, as well as restore a more balanced pricing relationship with automakers.

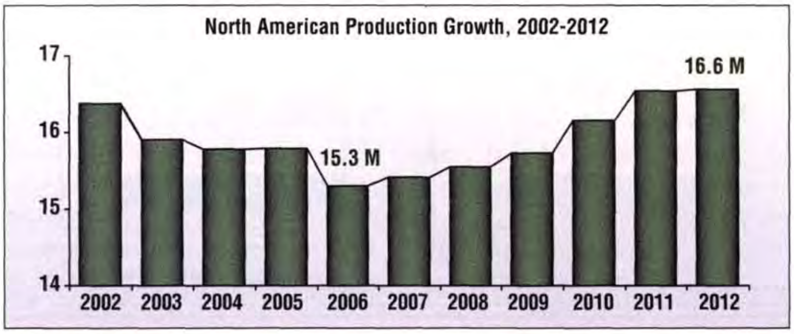

Figure 1

Source: CSM Worldwide.

In the short term, a well-planned bankruptcy helps ensure parts move without interruption. In the long term, it can harm the industry's credibility on Wall Street and cripple smaller, Tier 2 suppliers, who are left holding bad debts. To keep the supply of parts flowing, automakers will bail out Tier 2 suppliers if they provide parts that nobody else makes.

"If a supplier two tiers up goes bankrupt, it creates a domino effect down the supply chain and increases the risk of unintended bankruptcies," said David Andrea, vice president of business development, Original Equipment Suppliers Association (OESA). "It's not the most efficient way of running a supply chain."

The latest wave of supplier bankruptcies may move Detroit closer to its day of reckoning. Last summer GM temporarily shut down its Lordstown, Ohio, assembly plant, the first time in four years, because of parts shortages. The automaker also has been challenged by several suppliers over pricing issues.

Within the past year, Ford and financially troubled Collins & Aikman had a showdown that briefly closed Ford's Hermosillo, Mexico, assembly plant because of a long-standing pricing dispute. And Lear Corp. threatened to stop shipping parts to several Chrysler group factories because its own suppliers needed to raise prices to cover increased raw material costs (see **Figure 4**).

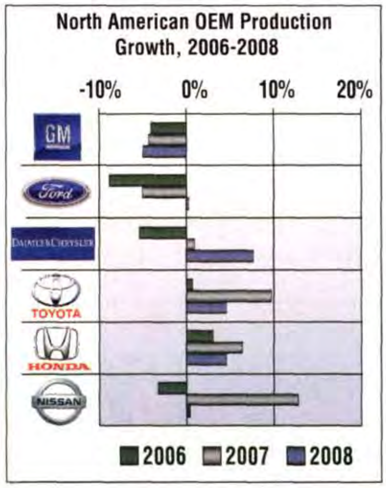

Figure 2

Source: CSM Worldwide.

Tier 1 suppliers are getting squeezed by the OEMs and financially troubled Tier 2 and Tier 3 suppliers that provide small yet critical parts to their operations, said Paul Bishop, president, ICE Industries. "It's easier for these smaller suppliers to say we're not going to take the hit on steel. I'm passing it to you or take it down the street. Tier 1 suppliers can't use these same tactics on OEMs," he said.

The Big Three's restrained production outlook should help restore profitability, but it also sets off a negative chain reaction that cascades down their supply chain, Langley commented. "A cut of 5,000 or 10,000 units affects a supplier deeply. I think we'll see more

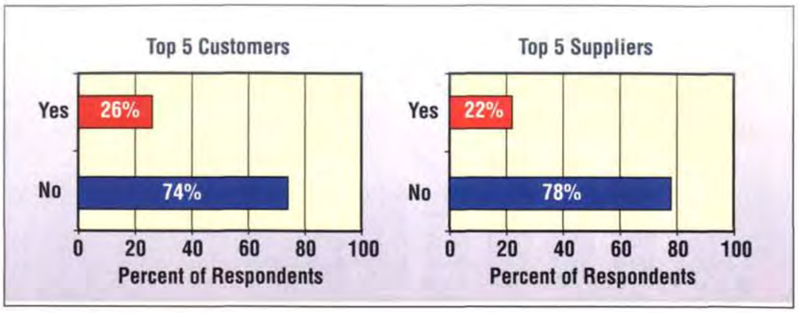

Figure 3

Approximately 26 percent of respondents to an OESA Automotive Supplier Barometer survey said that at least one of their top five customers is or will be in Chapter 11 in 2007. Source: OESA Automotive Supplier Barometer, December 2006.

financial issues and bankruptcies in 2007 and 2008 followed by a wave of consolidations," he said.

The North American automotive supply chain's long-term financial viability is not just a Big Three concern. Detroit's production cuts are having an impact on all OEMs and the health of major first-tier suppliers, as well as their own supply chains. "All vehicle manufacturers are worried about the financial heath of the North American supply base," Andrea said.

The Fallout

"We expect a 50 percent reduction in North American automotive suppliers, including stampers, over the next five years," Fitzgerald said. "The 50 percent that remain will on average be twice as big. If you're one of the survivors, you'll be growing nicely.

"Approximately one-third of those suppliers that are consolidated will be sold, and two-thirds will end up closing down the business," Fitzgerald added. "We expect a five-year period of relative turbulence for lower-tier suppliers. The suppliers that have great management teams, strong balance sheets, and participate in niche markets will thrive. It will be extremely challenging for undifferentiated commodity suppliers with high levels of debt."

Although some of the names will go

Material Cost Recovery

Rate of Overall Recovery	Customer (by revenue size) 1	2	3
0%	28%	35%	36%
1-25%	28%	28%	26%
26-50%	21%	14%	17%
51-75%	7%	7%	7%
76-99%	14%	14%	7%
100%	2%	2%	7%

Note: Customer 1 and 2, n = 44; customer 3, n = 43.

Figure 4

Approximately 45 percent of suppliers report carrying the majority of material cost increases, and 20 percent of suppliers said material cost increases are shouldered by their major customers.
Source: OESA Ferrous/Non-Ferrous Market Survey, August 2006.

away as assets are sold, Tier 2 megasuppliers will be created.

•Tier 2 Megasuppliers. The number of major systems integrators, such as Lear, Delphi, and Johnson Controls, will remain substantially the same over the next five years as it is today, Fitzgerald said. "These will be companies from $500 million to several billion dollars," Fitzgerald said. "They will be international in scope, have manufacturing locations in major regions of the globe, and offer engineering capabilities."

Tier 2 megasuppliers will specialize in large transfer stampings, extrusion technologies, or be product-focused, Fitzgerald commented. A few of these suppliers exist today, and there will be many more developing in the near term.

"Approximately 10 to 15 Tier 2 megasuppliers will emerge in the stamping and roll forming arenas," Fitzgerald said. "They'll provide critical componentry for Tier 1 system integrators."

The supplier base is going through a major restructuring, not a normal business cycle.

•Rational Supply Base. "The industry has never had 15 percent of the top 20 suppliers in bankruptcy," Andrea said. "As in the past, an upswing in the economy isn't going to lift the industry; structural changes need to be made."

For example, Ford currently has 2,500 suppliers but is working to pare that number down to 800 Tier 1 direct suppliers. "If you divide a car into 25 major systems by 800 suppliers, some sectors like stamped components will have 10 or 12 suppliers but not hundreds as they currently do," Andrea said.

Vehicle overcapacity at the manufacturer level has been 20 percent to 25 percent over the last 25 years, Andrea said. It differs sector by sector, but overall the automotive parts industry has been operating at about 80 percent capacity utilization.

"In a more rational world, you would take that capacity out and operate your assets closer to 90 percent utilization, which will create a profitable business model for the industry," he said.

•Delphi, Visteon Restructuring. Delphi is reducing its level of recurring losses and selling off businesses that aren't core to its long-term goals. "Delphi is aggressively moving to exit the business it doesn't want to be in and will continue to invest in five or six core areas it has identified," Fitzgerald said.

Visteon is trying to follow Delphi's lead, but has found it difficult to exit some of its noncore business as it works out the terms with potential buyers. Both suppliers are exiting businesses that don't use the best technology or are considered more of a commodity.

"When the restructurings are complete, I see both suppliers smaller and profitable, in fewer market segments, and more global with a high percentage of their production in low-cost countries," Fitzgerald said.

•Top-performing Suppliers, Lowest-performing Suppliers. A pronounced divergence is taking place between top-performing OEMs and suppliers and those in the lowest-performing quartile, according to an AlixPartners study.

In 2005 the bottom 25 percent of suppliers worldwide experienced a significant deterioration in financial performance, with earnings before interest and taxes (EBIT) falling 4.4 percentage points, to a negative 0.1 percent—whereas EBIT for suppliers in the top-performing quartile actually increased by 0.8 percentage point, to 9.2 percent.

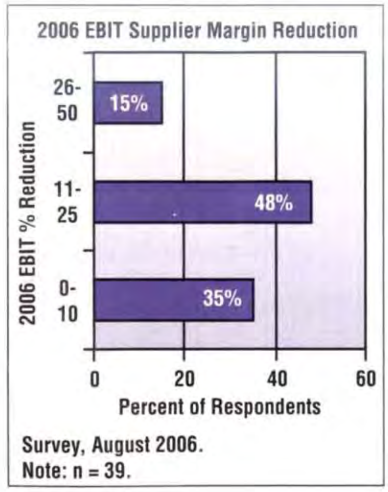

Figure 5

Material budgets are the main cause for downward pressure on most suppliers' financials.
Source: OESA Ferrous/Non-Ferrous Market Survey, August 2006.

This trend mirrors the divergent performance of automotive OEMs globally: The top-quartile performers improved EBIT by 0.2 percentage point, to 9 percent overall, and the bottom-quartile performers suffered the loss of 4.9 percentage points, to a negative 3.6 percent EBIT percentage overall (see **Figure 5**).

In the stamping industry, top-quartile stampers are seeing double-digit EBITs of 10 percent to 12 percent. The lower quartile is at break even or a modest profit, Fitzgerald said.

"The bottom quartile is fighting for their lives and they'll do what they have to to preserve family wealth," Fitzgerald said. "When a customer asks them to do something that doesn't make good sense relative to preserving wealth, they'll exit the business by liquidation or sale."

•Choosing the Right Programs. To be successful in this marketplace, an OEM needs a top-three-selling vehicle in a particular segment. The same is true for a supplier.

Bishop has watched ICE Industries grow from a $3 million business in 1999 to more than a $100 million business through strategic acquisitions, a diversified customer base, and a selective quoting process.

"We want to make sure we're in that most profitable supplier quartile by being selective of what work we take on," Bishop said. "We look at volumes, historical sales numbers, and when new platforms are introduced to make a judgment on the consumers' tastes relative to those vehicles."

In the quoting process, it pays to be selective. You can't foresee everything, but savvy suppliers research what they can before investing engineering, development, sales, and quoting time on projects. Fitzgerald suggested suppliers ask the following:

Are the production volumes accurate? When an OEM provides potential production volumes, be skeptical. Compare them with publicly available forecasts that track project volumes at platform levels.

"If a supplier researched the Ford Mustang® three years ago, he would probably decide it's going to be pretty successful," Fitzgerald said. "It looks like a solid platform and a nicely done vehicle. If the product doesn't look like a vehicle that will excite people, you don't want the business."

Will the platform be produced? GM recently announced it was canceling its minivan platform. "If you look back a year ago and note the platform's declining volumes and considered the new crossover vehicles, the announcement is not a surprise," Fitzgerald said.

However, not all potholes can be anticipated. For example, an OEM might cancel a program because it decides global volumes won't work. "You can't predict everything, but a lot of it has to do with common sense," Fitzgerald said.

•Global Supplier Invasion. Suppliers not only have to be competitive with the shop down the street, but literally with suppliers halfway around the world.

U.S. tool- and diemakers have been decimated by low-cost countries, because building dies is labor-intensive. Stamping is not labor-intensive, which reduces the competitive disadvantage because many U.S. stampers use automated equipment.

"We're occasionally desourced because a customer can save 9 cents on an engine bracket," said Bishop. "If you make 500,000 brackets a year you could save $45,000. However, if they shut the line down because of a late delivery, the cost savings has been wiped out. The best-cost country approach should include U.S. suppliers, because in many instances we can be just as competitive with the right automation and geographic location."

The Big Three and many Tier 1 suppliers are mandating part sourcing from China, but not all parts can be made overseas. "If a part ships well in bulk, doesn't have a significant amount of air, nests well, has high labor content, and doesn't require significant engineering, it's in danger of going overseas," Bishop said.

"Because platforms are becoming global, a supplier that wants to win a pedal brake contract used in North America, western Europe, and Japan will be asked to be in all three locations," Fitzgerald said. "To win that business, a supplier will need to have some presence in each of the three major regions."

As the New Domestics open new production facilities, their foreign suppliers are opening U.S. operations to grow with them. The same is true for GM and Ford, which are growing rapidly outside of North America. "Detroit suppliers like Delphi and Visteon are setting up shop in Asia and Europe to support Ford's and GM's growth in China," Andrea said.

"Stampings are going to continue to be principally North American-sourced products," Fitzgerald said. "[But] there will be some loss in business. For example, a typical stamper possibly might lose 5 percent to 15 percent of its volume over a five-year period. It's a piece of business it doesn't want to lose, but it's not enough [lost] business to bankrupt most suppliers."

Risk, Opportunities Ahead

A broad economic shift is taking place from the north to the south as Detroit falters and surging Asian automakers increase demand for manufacturing capabilities in the Southern states. Regional suppliers like ICE Industries with operations in the north and south have bright futures.

However, 2007 isn't shaping up to be an easy year for automotive stampers. One of the major trends stampers will continue to undergo in 2007 is consolidation.

According to 1998 and 2004 U.S. Census data, there was only one fewer automotive stamper in 2004 than in 1998 (789 versus 788).

"The perception that a significant consolidation is already behind us is incorrect," Fitzgerald said.

"The industry will see the acceleration of companies sold and liquidated, and more jobs being transferred to surviving companies," he said. "Over the mid and longer term, stampers' average profitability will improve, and 15 percent to 20 percent of the remaining stampers will do really well."

The U.S. automotive industry will continue to be volatile and unpredictable. Suppliers with the highest flexibility and lean inventory management skills will weather this year better than shops without those capabilities.

Senior Associate Editor Kathleen McLaughlin can be reached at katm@thefabricator.com.

STAMPING Journal® *acknowledges the following sources used in preparing this article:*

AlixPartners, www.alixpartners.com

CSM Worldwide, www.csmauto.com

ICE Industries, www.iceindustries.com

Original Equipment Suppliers Association, www.oesa.org

Plante & Moran PLLC, www.plantemoran.com

Standard & Poor's, www.standardandpoors.com

U.S. Census Bureau, www.census.gov

Want more information?

- Visit www.thefabricator.com; enter the article number (digits only) in the home page search box:
- "The big squeeze" –1265
- Also visit www.csmauto.com/autoproduction-barometer.