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Table of Contents

Manufacturing Growth Expected in 2014:

Enhancing Your Supply Chain to Feed Growth

By Paul Shik Lee Jr.

At the end of 2013, optimism was high for U.S. manufacturing, supported by the headline from the Institute for Supply Management® (ISM®) *December 2013 Semiannual Economic Forecast* announcing, "Economic Growth Continues in 2014." Among the trends responsible for this optimism was the expectation that manufacturing industries would continue to grow, due in part to increased imports of manufacturing inputs and exports of raw materials and finished and semifinished goods. A few months into 2014, the optimism appears justified.

However, as U.S. manufacturers diversify and globalize their operations in search of new markets and competitive costs, are they considering the capabilities and limitations of their supply chains? When it comes to exporting goods to new foreign markets, are manufacturers' supply chains capable of adapting to capitalize on new demand and increased market share? Similarly, as U.S. manufacturers diversify and globalize their sourcing strategies, are they considering their ability to reach and manage overseas suppliers?

The data also support strong growth for U.S. manufacturing in 2014. But supply chain experts would argue that the ability of supply chains to anticipate, flex and compete to meet clients' demands will determine manufacturers' ultimate success.

"There are several factors that will influence growth in 2014, and logistics is certainly a factor," explains Brian Littlefield, UPS director of marketing for the industrial manufacturing and distribution segment. "A large portion of manufacturers based in the U.S. have some excess capacity available that they have kept idle since the economic challenges in 2009. As a result, there are many manufacturers that are capable of flexing as demand changes in the marketplace. However, the midsize and larger manufacturers are better positioned to respond with this excess capacity.”

Overall Positive Outlook for 2014

Optimism for U.S. manufacturing in 2014 is strong. Notwithstanding short-term fluctuations, 41 percent of manufacturing respondents expect the first half of 2014 to be better than 2013, and 44 percent expect their business will remain the same. Supply chain executives are even more hopeful for the second half of 2014, with 43 percent of respondents expecting better business and 49 percent expecting no change.

Of course, it can only be said that business is good if revenue and profit are up. The supply chain executives back their assessment of improving conditions with bullish estimates for financial performance. A very strong 69 percent of respondents expect higher revenue in 2014, with those expecting higher revenue forecasting an increase of 8.3 percent on average. Supply chain executives qualitatively weighed in regarding profit margins, with 83 percent believing margins will be better (41 percent) or the same (42 percent).

However, Chris Perkins, UPS vice president of enterprise accounts, points out that anticipated revenue and profit levels will not be the only factors affecting business growth for manufacturers in 2014. “Even with this positive outlook, the manufacturers who are going to come out on top are the ones that can meet demand while best managing their inventory levels,” he says.

Respondents remained optimistic when addressing questions related to this very issue, anticipating growth in their 2014 production capacity and manufacturing inventories. Ninety-two percent of purchasing managers surveyed believed that production capacity would stay the same (46 percent) or increase (46 percent) at an average expected growth of 6.3 percent. With regard to inventories, 84 percent of supply chain executives believed that purchased inventory would increase (22 percent) or stay the same (62 percent), but they expected inventory on hand to increase a modest 1 percent in support of planned sales.

Perkins goes on to explain why manufacturers may want to keep these inventories low, even when the overall outlook is positive: “The major problem with increasing inventories are the associated costs with carrying more product than needed. Savvy manufacturers are shipping direct to the end customer whenever possible to reduce inventory carrying costs while increasing customer satisfaction. Logistics partners are critical to the process, and their ability to perform analyses on a customer’s inventory will help them manage inventory levels in the most efficient manner.”

Manufacturers See 2014 Developing Into a Good Year

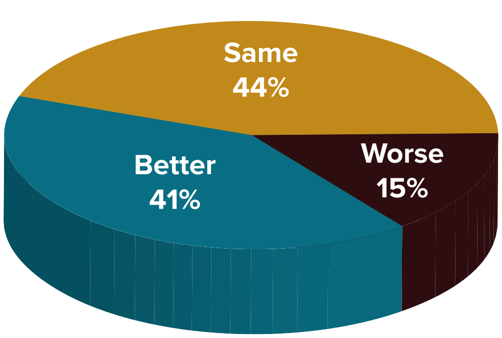
Industries reporting a particularly positive outlook for 2014 include those involved in the manufacturing of chemical products, fabricated metal products, computer and electronic products, and transportation equipment. The overall opinion that 2014 will be a good year is further bolstered by the decreasing “worse” category when comparing the assessment of the second half of 2014 to the first half. A smaller proportion of respondents held a negative view, while the ranks of “same” and “better” gained (see Figure 1 below).

Import Growth and Sourcing Strategies

The world at large is growing ever more interconnected. This fact is readily demonstrated by the increasingly global

Figure 1: Positive Outlook for Manufacturing

How Does Business in the First Half of 2014 Look Compared to the Last Half of 2013?



How Does Business in the Second Half of 2014 Look Compared to the First Half of 2014?

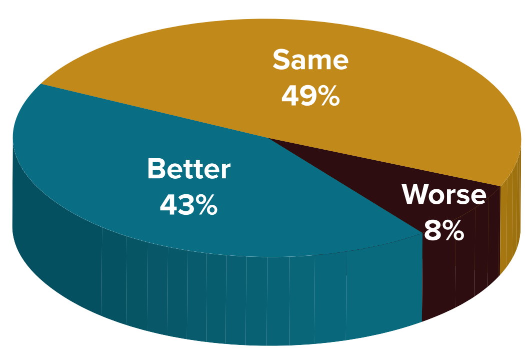
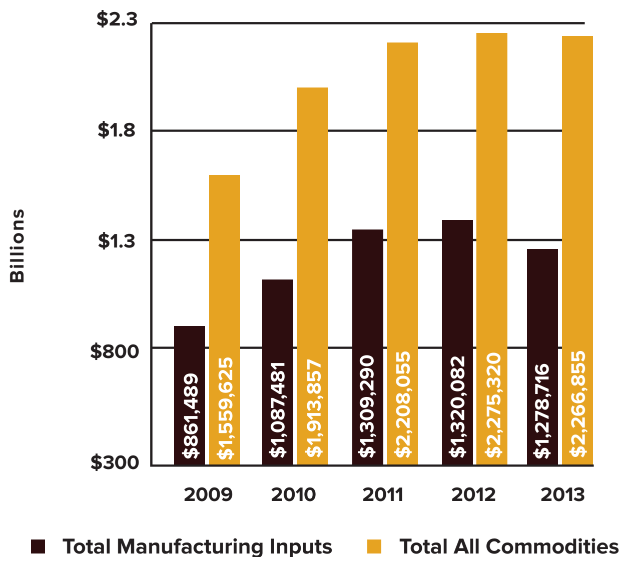


Figure 2: U.S. Imports of Manufacturing Inputs

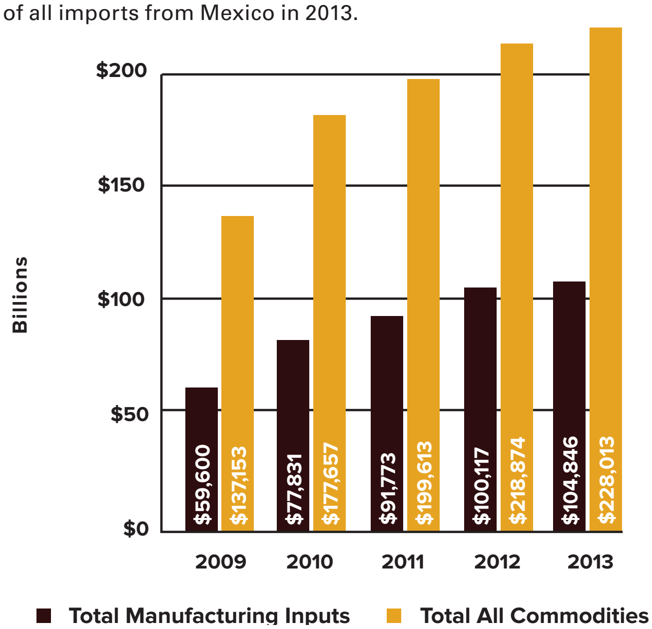
Imports of manufacturing inputs rose dramatically between 2009 and 2013.



Source: USA Trade® Online

Figure 3: U.S. Imports of Inputs From Mexico via Mexico-Facing Ports

Imports of manufacturing inputs from Mexico were almost one-half of all imports from Mexico in 2013.



Source: USA Trade® Online

nature of sourcing manufacturing inputs, which account for more than half of all imported U.S. goods. The import of raw materials, semifinished goods and finished goods for use in manufacturing has generally been on the rise for several years now, increasing from more than US$861 billion in 2009 to more than $1.2 trillion in 2013 (see Figure 2 on page 3).

One supply chain expert hypothesizes that the slight decrease in manufacturing inputs between 2012 and 2013 could be related to the adoption of nearshoring strategies by some U.S. manufacturers.

The phenomenon of nearshoring, or the act of moving manufacturing activities closer to one's region, has particularly affected the flow of manufacturing inputs from Mexico to the U.S. In 2009, raw materials and other inputs accounted for almost $60 billion (or 43 percent) of U.S. imports from Mexico through ports facing the Mexican border. By 2013, such imports were valued at more than $104 billion. Additionally, the mix of imports via Mexico-facing ports has shifted slightly toward manufacturing inputs, as the proportion of such goods increased from 43 percent in 2009 to 46 percent in 2013 (see Figure 3 on page 3).

"Some U.S. manufacturers are considering the possible benefits of nearshoring," says Littlefield. "There is the potential for shorter time in transit if suppliers nearshore back to Mexico and South America. If labor costs in markets like China continue to rise, there is potential for labor savings, as well."

Purchasing and procurement executives expect some growth of input imports in 2014. In the December 2013 forecast, among manufacturers that import manufacturing inputs, 41 percent of respondents expected an increase in volume, with 32 percent expecting a moderate increase and 9 percent expecting a substantial increase.

Regardless of whether suppliers are located overseas or in neighboring countries, the management of international suppliers can be complex.

"U.S. manufacturers are becoming more familiar with sourcing in a fast-paced global marketplace," says Littlefield. "As a result, they are pushing logistics providers to deliver more timely and customized visibility solutions to help manage the distance and complexity with sourcing from non-U.S.-based suppliers."

Along these lines, many procurement organizations are developing or revisiting departmental strategies and investigating, adapting, and rolling out programs that include:

- Strategic sourcing/supply base rationalization
- Process and information systems improvements

- Supplier relationship management
- Inventory management and control
- Improved cross-functional planning and scheduling
- Collaborative sales and operations planning.

"If they are not already, companies looking to improve their inbound supply chain need to assess their priorities in terms of inventory on hand, demand for their product and how much risk they are willing to assume," says Littlefield. "As companies grow, managing their inbound supply chain the same way they did as a small company will become more difficult. They need to constantly benchmark the services they are getting from brokers and logistics providers to take advantage of new technologies and time savings."

Export Growth and Expansion to International Markets

Even as American manufacturers' appetites are whetted for imported inputs, so are foreign manufacturers increasingly calling for U.S.-sourced raw materials, semifinished goods and finished goods for use in their manufacturing sectors.

As a heavyweight in the world of international trade and exports, over the past five years, U.S. export volume has increased 50 percent, from $1.06 trillion to $1.58 trillion. During the same period, U.S. exports of raw materials, semifinished goods and finished goods for use in manufacturing grew from $590 billion to $922 billion, an increase of more than 56 percent (see Figure 5 on page 5).

Continued growth of manufacturing input exports is the overall opinion of responding executives. When polled for the December 2013 forecast, among manufacturers that export manufacturing inputs, 50 percent of respondents expected an increase in the volume of exports and 43 percent expected no change. This results in a notably high index at 71.7 percent. While not unheard of, an index in the 70 percent range generally indicates strong, positive expectations. Over the period from January 2012 through February 2014, the index for manufacturing exports stayed on the positive growth side (greater than 50 percent, with the notable exception of the second half of 2012) and the forecast is that growth will continue during at least the first half of 2014 (see Figure 6 on page 5).

Littlefield has noticed this increase in export volume and the attendant challenges. "More U.S. manufacturers are embracing the sale of their products in overseas markets, but there is still a lack of expertise in-house to handle changes or problems that occur with documentation or logistics," he says.

Perkins adds, "Unfortunately, the supply chain is a secondary thought for many companies who decide to export and enter new markets. In an ideal world, supply chain capabilities would be an initial consideration when identifying these opportunities."

Of course, the perennial challenge faced by manufacturers' planning departments is getting their arms around the drivers of both domestic and international sales growth and leveraging their position to capture

Raw Imports Help Feed the Manufacturing Engine

From the perspective of the ISM® *Report On Business*®, over the period from January 2012 through February 2014, the index for manufacturing imports has generally stayed on the positive growth side (greater than 50 percent) and the forecast is that growth will continue during at least the first half of 2014 (see Figure 4 at right).

Figure 4: Imports Index (Since 2012)

Consistent readings at or above 50 percent for the index of manufacturing inputs since 2013 indicate that manufacturers' need for raw materials is strong.

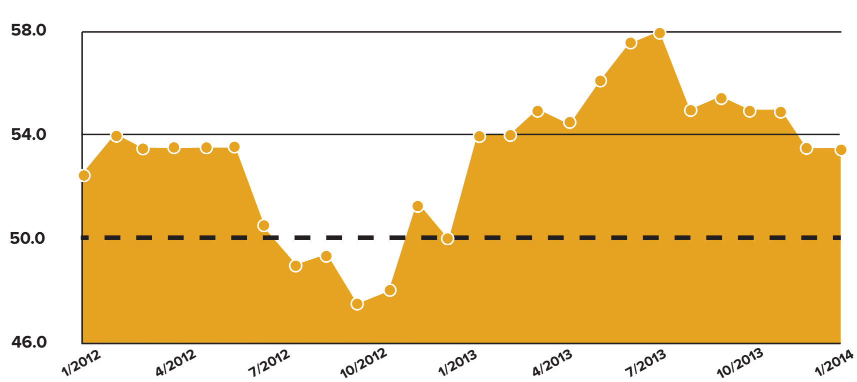
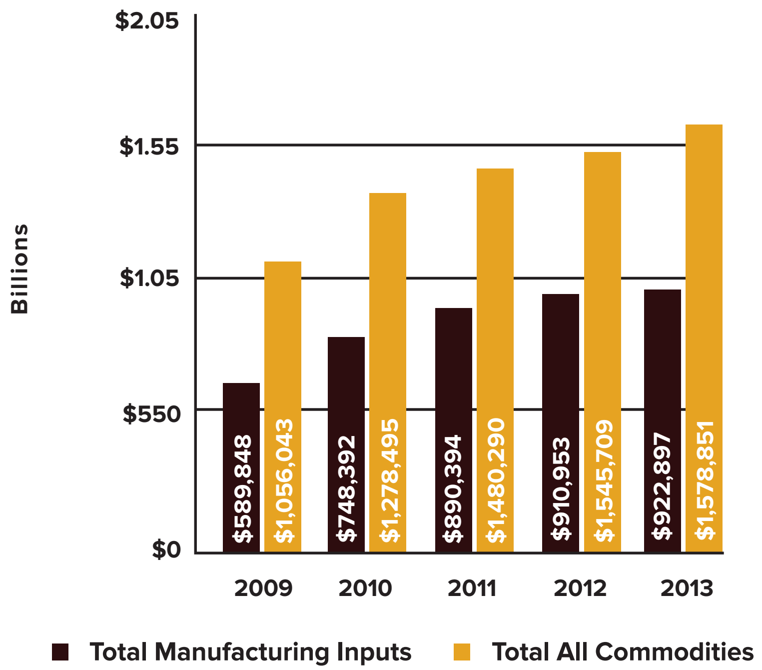


Figure 5: U.S. Exports of Manufacturing Inputs

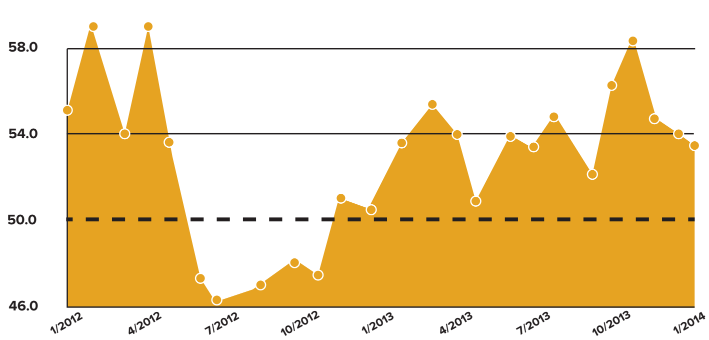
From 2009 through 2013, the growth of exports of manufacturing inputs grew faster than exports in general.



Source: USA Trade® Online

Figure 6: Exports Index

Since the beginning of 2013, the index has documented continued growth in exports.



Source: ISM® *Report On Business®*

opportunities as they present themselves. Supply chain's role in helping address these issues stems from procurement's charge to provide the enterprise with high-quality, reliably delivered inputs.

Jim Barnes, director of consulting for ISM® Services, emphasizes, "Demand planning and forecasting needs to be a cross-functional exercise within an agreed-upon framework. Increasing competence in sales and operations planning is a key to managing both domestic and international sales growth and maximizing profitability at the same time."

According to Perkins, "Most U.S. manufacturers are exploring ways to become more efficient in their global supply chains. The problem is that many organizations lack the experience and expertise to navigate the ever-changing global landscape." He continues by offering that many midsize businesses "in their current state are not capable of capitalizing on new demand and the opportunity to increase market share overseas. This is where an experienced logistics partner can add value because of its expertise and global network to meet the needs of its customers."

Perkins and Littlefield also postulate that some manufacturers may be holding back when it comes to exporting. "Many companies are still not embracing export opportunities because of the perception that international shipping is too complex," says Perkins. "But, veteran logistics providers can provide tools that enable customers to quickly access country-specific documentation requirements, as well as provide the total landed costs so there are no surprises."

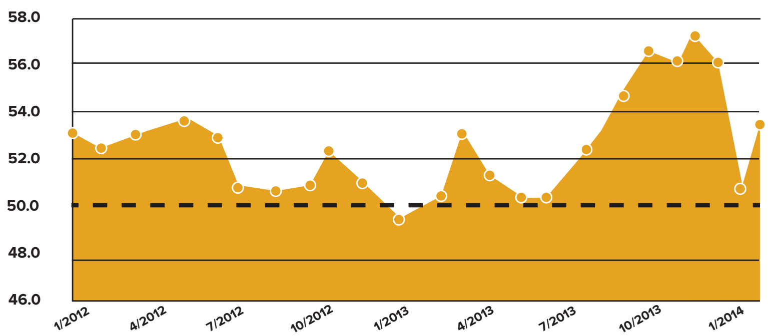
Manufacturing Expectations Looking Up for Second Half of 2014

While there are challenges that will need to be faced and overcome, manufacturers' expectations for 2014 are positive. A look at ISM's PMI® since January 2012 shows that, for the most part, that index has been on the positive, growth side of 50 percent (with a PMI® greater than 50 percent). As expressed by respondents in the December 2013 semiannual forecast, the index for manufacturing activity in the first half of 2014 was a strong 63 percent. The supply chain manager respondents were even more optimistic about the second half of 2014, with an estimated overall index for that period of 67.5 percent (see Figure 7 on page 36).

Two important components of the manufacturing economy that bear watching are supplier deliveries and the strength of the U.S. dollar. Tightening supply and the expectation that lead time may increase is often reflected in the supplier deliveries index tracked by ISM. For this index, a value greater than 50 percent indicates slower expected deliveries. Since June 2013, the supplier deliveries index has consistently

Figure 7: PMI® (Since 2012)

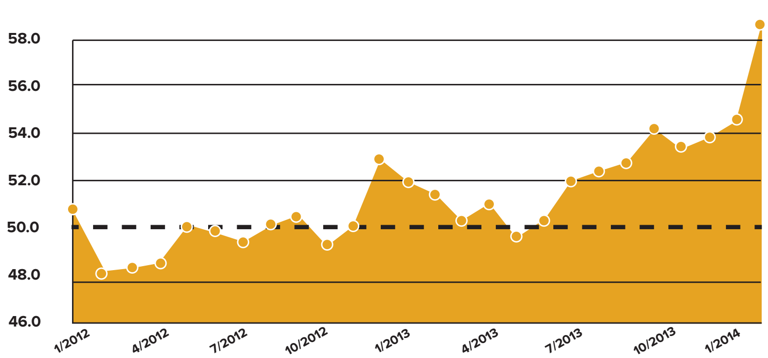
Since 2012, ISM®'s PMI® has nearly always indicated a growing manufacturing sector.



Source: ISM® *Report On Business®*

Figure 8: Supplier Deliveries Index (Since 2012)

Supplier deliveries have slowed over the past year as upstream manufacturing suppliers work to meet their commitments.



Source: ISM® *Report On Business®*

registered above 50 percent, telling us that purchasing managers are concerned about slower delivery times (see Figure 6 on page 6).

Finally, the strengthening or weakening of the U.S. dollar relative to the currencies of major trading partners also plays an important role in the outlook of manufacturers that have developed import or export business overseas. Respondents to the December 2013 semiannual forecast believe that there will be strengthening of the dollar in 2014. Combining all of the individual forecasts for each currency examined, an overall index of 52.1 percent emerges.

Expectations are strongest with regard to the strengthening of the dollar relative to the Mexican peso, with more than half of surveyed executives expecting the dollar to strengthen, giving this currency an index of 69 percent. In comparison, the indexes for the euro, Canadian dollar, Japanese yen and Taiwanese dollar are all in the 50 percent range, indicating a moderate expectation of strengthening. On the other hand, the U.S. dollar is expected to weaken somewhat in comparison to the Korean won and British pound (indexes of 46.1 percent and 41.1 percent, respectively).

Conclusions

The situation remains that in 2014, savvy manufacturers will find opportunities for growth in foreign markets. On both the import and export sides, organizations that shore up their supply and procurement practices and ally themselves with experienced partners are well-positioned and stand to gain the most from the new economic environment.

This report contains forward-looking statements, including, without limitation, statements relating to future macroeconomic conditions at the sector, industry and other aggregation levels, and possible economic growth or decline at the sector, industry and other aggregation levels. These forward-looking statements are opinions that reflect current expectations and are based on assumptions believed to be reasonable at the time they are made. These statements are not guarantees of future performance or future status and involve certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual outcomes and results could differ materially from what is expected or forecast. ISM

Paul Shik Lee Jr. is director of research for ISM. For more information, send an email to **author@ism.ws.**