

## INTRODUCTION

### Context and Objectives of the Research Program

Here in early 2010 the three North American economies are slowly recovering from the most serious reduction of national income and employment since the Great Depression of the 1930s. Economists assert this latest setback was not a conventional recession stemming from a supply/demand imbalance in the "real economy" (e.g., a boom followed by a bust in consumer and producer spending, inflation followed by deflation in the consumer and producer price indices, inventory imbalances, and so on). Rather this was a financial recession brought about by an exorcism of high-risk lending and spending by deposit banks, investment banks, hedge funds, and other financial intermediaries that ultimately destroyed physical and financial asset values. Trillions of dollars of wealth were lost, forcing consumers to reduce spending and producers to reduce headcounts and defer investing in new plant and equipment.

Ultimately everyone - consumers, producers, householders, investors - felt a measure of economic pain from this economic freefall. As the third largest manufacturing industry in the United States and a major driver of economic growth in Canada and Mexico as well, the regional plastics industry took a staggering hit. It is of little solace to know that the global plastics industry, which had enjoyed 9% average annual resin demand growth since 1950, also contracted, starting in mid-2008 and continuing through 2009.

In 2002 and again in 2005 Plastics Custom Research Services (PCRS) researched and published multi-client reports covering the North American packaging thermoforming business. We decided here in early 2010 to revisit this business and produce a new report for two reasons. First, we have been researching and publishing reports covering all the major North American plastics processing businesses since 1995, and our standard procedure has been to update these reports every 3-5 years. Secondly, as a card-carrying economist our curiosity was piqued. The term "the new normal economy" has come into vogue. Is it in fact "new", and if so what does it portend for North American packaging thermoformers?

Most observers of the U.S. economy suggest that it will have to undergo - indeed is already undergoing - a profound transformation. In the past there was too much reliance on consumption and too little on savings channeled into investment required to raise productivity and boost exports. At the microeconomic level firms, if they have not already done so, must adopt lean practices to stay competitive. Meanwhile householders will have to adopt different lifestyles in line with the new age of frugality and perhaps retrain for different jobs.

The conventional wisdom is that packaging, including flexible and rigid plastic packaging, is recession-resistant. Regardless of the fluctuations of the business cycle, people have to eat and will

occasionally eat out, require medical attention, replace non-durable household items, maintain their automobiles with replacement parts and their homes with hardware, hand tools, paint and paint sundries, and so on. We wondered whether this conventional wisdom obtains in the regional thermoformed packaging market space in the wake of the "Great Recession" of 2008-2009.

We applied our standard research methodology, conducting both primary and secondary research. The annual Plastics News survey of thermoformers provides a rich store of information with respect to the operations of companies in the regional packaging thermoforming business, and other plastics industry trade magazines offer periodic accounts of companies, materials, machinery, product designs, etc. in this market space. We have built up since 2002, therefore, an extensive database on the processors, commercial sheet extruders, forming machinery manufacturers, tool-makers, and other prominent players in this business. We communicated with senior decision-making officials at a sample of these companies to understand past, current and likely future trends of importance to existing market participants and potential new entrants.

### **The PCRS Survey of Packaging Thermoformers**

As in our previous reports covering the regional packaging thermoforming business the core data and insights gained into this business were derived from a telephone-based survey of processors conducted in February, March and April 2010. Drawing from our previous reports as well as the February 10, 2010, issue of Plastics News reporting the results of its annual survey of thermoformers, we were able to identify 102 U.S. and Canadian companies with 50% or more of their sales attributable to packaging part programs as opposed to industrial part programs. We didn't exclude Mexican companies from this search. However, few Mexican companies participate in the annual Plastics News surveys, and fewer still have senior decision-making officials able to respond to our telephone-based surveys in English.

We made several attempts to reach senior officials at these 102 companies during this 3-month period. By the middle of April we had succeeded in communicating with at least one official at 52 (just over half) of these companies. Frankly, this "capture rate" of 50% was disappointing insofar as we are accustomed in our PCRS Plastics Processing Report Series to reaching officials at 75-80% of the companies on our lists. This relatively low rate clearly reflects the destructive effects of the recession of 2008-2009. On the one hand, many packaging thermoformers were forced to reduce their headcount, so it is simply more difficult to reach the right official with time available to respond to our survey. On the other hand, it was difficult to elicit candid information and insights from officials at these companies, many of which have suffered an unprecedented setback to their sales, their profitability and their staffing due to the recession. Nonetheless, we succeeded communicating with enough

officials to gain a coherent and compelling perspective regarding their past, current and likely future operations.

In Table 1 below we list the various issues probed through our survey questionnaire.

Table 1

The PCRS Survey Questionnaire

Nature of the business

Do you have both packaging and industrial thermoforming operations? If so, what share of your regular output is packaging?

Do you have any other plastics processing capability?

What are the shares of your custom and proprietary product sales?

Growth of the business

Did you experience growth in your packaging sales in 2009? What are your expectations for sales growth in 2010?

Did you make any investment in plants, lines or employees in 2009? Any investment planned for 2010?

Competitive climate

How would you describe the competitive climate in your business here in 2010? Has there been much corporate consolidation? A trend to vertical integration?

Supply chain

What brand(s) are the forming machines in your plant(s)? Do you have a preference for forming machine supplier?

Do you extrude your own sheet? If not, from whom do you source your sheet?

Do you build your own tooling? If not, from whom do you source your tooling?

Which resins are in the sheet you form? Do you observe any evidence of resin-switching among your customers? Which resins are gaining market share at this stage and which resins are losing market share?

Markets

Which are the 1-3 major markets you serve? Which market(s) is(are) growing and which market(s) is(are) losing growth momentum?

Will you be addressing any new market in 2010?

Technological change

What do you regard as the most significant technological change in packaging thermoforming for your company and your customers?

What is your impression and your customers' impressions of biopolymers and other "green" materials?

Globalization

Do you have any export accounts inside or outside North America?

Do you confront import competition from China or any other foreign country?

In this report we distill the processors' replies to these and other questions of concern to regional packaging thermoformers.