

SLOW RECOVERY FOR GLOBAL COATINGS, ADHESIVES AND SEALANTS

Richard B. Jones
Vice President

The ChemQuest Group, Inc.
Cincinnati, Ohio

Coatings Comet –

June, 2009

It is certainly not new news that the adverse global economic conditions over the past year have had an equally adverse impact on the manufacturers of coatings adhesives and sealants (CAS), as well as on the producers of the constituent chemical raw materials. This, of course, is a direct result of the global crisis within the financial and credit markets, which in turn negatively affected the underlying global markets that are major consumers of CAS products, those being **Construction, Product Assembly, Packaging and Transportation**. In order to spur their individual economies, some countries have implemented stimulus packages – with the inevitable political debates about whether or not enough was done and whether or not such efforts will achieve the intended results. We'll look at each of these end-use markets and assess where they are and what the future might bring for manufacturers of coatings, adhesives and sealants.

According to ChemQuest estimates, the total value for global CAS products is US\$142 billion, with coatings at US\$95 billion, adhesives at US\$42 billion and sealants at US\$5 billion (see chart below). Overall growth rates in the years leading up to 2008 averaged 4.2%, as industry growth typically exceeded global GDP – with developing economies, of course, seeing higher growth rates than those of mature economies. However, the extent of the economic recession in 2008 caused an overall 10% decline in these industries, with ChemQuest forecasting additional declines of 10-15% in 2009, but followed by some degree of recovery in 2010.

2009 Global Sales (US\$ Bn) – Coatings, Adhesives & Sealants

	Construction	Product Assembly	Packaging	Transportation	Other	Total
Coatings	54.2 <i>57.0%</i>	25.7 <i>27.0%</i>	2.4 <i>2.5%</i>	11.4 <i>12.0%</i>	1.4 <i>1.5%</i>	95.0
Adhesives	10.5 <i>25.0%</i>	7.6 <i>18.0%</i>	16.0 <i>38.0%</i>	5.0 <i>12.0%</i>	2.9 <i>7.0%</i>	42.0
Sealants	2.7 <i>53.0%</i>	0.7 <i>13.0%</i>	0.0 <i>0.0%</i>	1.7 <i>34.0%</i>	0.0 <i>0.0%</i>	5.0
Totals	67.3 <i>47.4%</i>	33.9 <i>23.8%</i>	18.3 <i>12.9%</i>	18.1 <i>12.8%</i>	4.4 <i>3.1%</i>	142.0

Construction, by far, is the largest consumer of CAS. When all products are combined, a total of US\$67 billion – or 47% of the total CAS market – is spent globally each year in building, protecting and maintaining residential structures, commercial facilities and civil



infrastructure. With access to credit (or lack thereof) having such a huge influence on Construction, it is not hard to see why this particular segment has been “hammered” by the recent downturn – along with an associated decline in demand for CAS products. Because Construction provides so many jobs, it is also not surprising that building-related projects are cornerstones of both the U.S. and Chinese stimulus packages. Both target significant spending over the next 2-4 years on infrastructure projects to build, improve and/or refurbish roads, bridges, schools, water/wastewater facilities, airports, etc. In the U.S alone, this is estimated to result in US\$600-700 million of CAS usage. Many of these projects may have already been “on-the-books”, though, so this many not necessarily represent “new” business. Yet, local and state governments are struggling to deal with unresolved budget deficits that will certainly cause many of these projects to be postponed. The U.S. “stimulus dollars” are being targeted at filling that void. In Europe, though, the lack of a coordinated pan-EU “stimulus” spending package is seen as hampering Europe’s ability to realize any near-term recovery in this sector. Thus, in general, China and India will consume CAS products for Construction projects at a slightly reduced level than recent years. In the U.S., Construction will continue to struggle for the remainder of 2009, but begin to show some life early next year. Construction spending in Europe, though, will remain soft well into 2010. Additionally, there also has not been any positive signs from residential DIY consumption, as overall consumer spending has also been down, as evidenced by the weak earnings posted by the home improvement “big box” stores. Overall, CAS consumption in 2009 for Construction will be down another 12-13% from 2008, but possibly show a slight year-over-year increase for 2010.

While it remains to be seen whether these massive government spending plans will actually achieve the intended economic recovery, there is certainly hope that it will stabilize – if not increase – employment levels. That would be good news for **Product Assembly** – the next biggest user of CAS at an annual rate of nearly US\$34 billion. This heterogeneous category encompasses the manufacturing and assembly of an endless array of items that surround us and support our daily lives - electronics, appliances, furniture, toys, etc. As we know, there has been an ongoing migration of Product Assembly from the U.S. and Western Europe to lower-cost regions like Eastern Europe, China and India. As a result, these new manufacturing bases have been more oriented toward export markets than toward internal domestic consumption. To address this, a part of the Chinese stimulus package increases subsidies for such things as appliances to spur domestic demand to offset the recent decline in exports. In that this segment is strongly driven by consumer spending, it is not hard to



understand the significantly slowdown over the past year due to wage cuts, job losses and lack of available credit. Not until consumers feel more confident that their personal situation has stabilized will this segment rebound. As a result, the value of CAS products used in Product Assembly is estimated to be down 13-14% in 2009 versus last year. If the global recession begins to abate, the decline in 2010 might be only half of that amount.

The third largest user of CAS products is **Packaging** at US\$18 billion – of which the predominant amount is adhesives (US\$16 billion). Unlike the other segments, though, this one has seen the least decline and is projected to slightly increase in coming years. As the economy has faltered, people are eating at home more frequently than in the past. As a result, packaging for prepared foods is notably up. Packaging for specialty areas like medical supplies are also positive drivers. At the same time, there is growing concerns about the recyclability and sustainability of packaging – which has spawned research and investment into new materials and methodologies. This, in turn, often requires new and innovative adhesives and coatings. As a result, it is estimated that the value of CAS products used for Packaging in 2009 will be flat versus 2008, but will show a slight increase in 2010.

Finally, **Transportation**, at US\$18 billion, is the fourth largest user of CAS products. While this could be considered a sub-set of Product Assembly, Transportation is definitely large enough to warrant separate mention. Like Product Assembly, this segment is also strongly influenced by consumer confidence and access to credit (people rarely buy cars with cash, cities seldom buy trains and buses without issuing bonds and airlines very frequently only lease their planes). The precipitous drop-off in demand over the past year sent a seismic shockwave throughout this industry and highlighted its vulnerabilities associated with its high-costs and over-capacity. The result has been the closing of numerous auto plants across the globe and the recent bankruptcies of GM and Chrysler. No car company has escaped, with even the most financially-sound auto manufacturers posting financial losses. With business and personal travel down due to a combination of the recession and the paranoia resulting from the H1N1 virus scare, the global aviation industry has also taken a “hit”. In response, they have stretched-out repaint schedules, parked planes and/or delayed delivery of new aircraft in order to “right-size” their capacity, reduce their costs and preserve cash. As a result, both Boeing and Airbus have seen a significant decline in net orders so far this year, as well as requests for delivery deferrals. All of this has caused this segment to experience declines in CAS usage similar to those seen in Product Assembly. For example, 2009 automotive



production is expected to be down at least 8-9% versus 2008. Recovery will be just as stilted, although the 5% annual vehicle scrap rate will eventually create a pent-up demand for vehicles that will likely be reflected in increased production levels for 2011. One bright spot today may be public transportation. Ridership has increased in response to higher gasoline prices, and governments are spending stimulus dollars on hybrid buses and high-speed rail systems. This will result in near-term orders for buses and trains that otherwise might not get built and painted because of the previously mentioned budget deficits.

As noted, the global economic difficulties over the past year have had a significantly adverse impact on the key industries that use coatings, adhesives and sealants. The resultant adverse impact on sales of CAS products that began in mid-2008 was equally significant and will certainly carry through this year. While it isn't yet clear whether the injection of massive amounts of money from governmental stimulus packages will have the desired impact, the hope is that such actions will, at minimum, stabilize employment and begin the restoration of consumer confidence – and their spending! It must be realized, though, that the fall into the economic “abyss” was seemingly quick versus the long, slow climb that will be needed to get back to economic “high ground”. When the industry does again return to those levels over the next 2-5 years, it will likely find a new and different landscape. In **Construction**, the emphasis on energy efficiency and environmental sustainability will require new CAS products that help meet increasingly stringent “green” standards. In **Product Assembly**, traditional substrates will be replaced by new materials that lower cost and weight – but which require new CAS products that protect and bond them and/or that aid in higher productive manufacturing. In **Packaging**, as already noted, concerns about recyclability and sustainability of packaging materials will certainly necessitate new CAS products to meet more demanding applications. Finally, as the price of oil goes up, so does the need for the **Transportation** industry to develop more fuel-efficient vehicles – being it hybrid cars, high-speed trains or composite aircraft. In all of these cases, the need for new CAS products to coating, adhere and seal these new, innovative materials in an environmentally- responsible manner will be an undeniably strong growth driver for the CAS industry.



About the Author



Richard B. Jones
Vice President
The ChemQuest Group, Inc.

www.chemquest.com

an international strategic management consulting firm specializing in the adhesives, sealants and coatings industries, headquartered in Cincinnati, Ohio.
Call them at (513) 469-7555.

Rick Jones joined The ChemQuest Group, Inc. as Vice President in 2006. He spent the previous twenty-nine years in the coatings and adhesives industry working for PPG Industries, Valspar Corporation, Lord Corporation and Sovereign Specialty Chemicals/Henkel Corporation. His entire career has focused on business management, marketing and technical sales within automotive, aerospace, industrial and wood markets. Rick has extensive knowledge and experience in creating successful business strategies, and successfully launching profitable sales and marketing programs for technical products into domestic and international OEM markets. Rick is a member of the Adhesives and Sealants Council, National Paint and Coatings Association, Society of Protective Coatings and RadTech. He holds a B.S. degree from Allegheny College (Meadville, PA).

The ChemQuest Group, Inc. is a strategic management consulting firm that has been a respected source of information pertaining to the coatings, adhesives and sealants markets since 1980. It has continually monitored the changes in market size, technology developments, raw material trends and the emergence of growth opportunities in these complex, fragmented industries. The firm is “top-line” focused, offering such services as strategy development, market analysis and mergers & acquisitions. ChemQuest is headquartered in Cincinnati, OH and has offices in Raleigh, NC; Columbus, OH; Boston, MA; London, England; Düsseldorf and Hamburg, Germany; Guangzhou, China; Buenos Aires, Argentina; and Cairo, Egypt.

Questions or request for additional copies of this paper may be directed to the author at:

The ChemQuest Group, Inc.
8150 Corporate Park Drive
Suite 250
Cincinnati, OH 45242

(513) 469-7555
(513) 469-7779 – FAX

www.chemquest.com

