

Will M&A be the saviour of profits?

Chemical companies worldwide are well positioned financially and seeking investments in growth segments that display the least possible cyclical behaviour

THORSTEN BUG GERMANY TRADE & INVEST

After several years of excellent business, chemical companies are aggressively seeking non-cyclical growth segments. Mergers and acquisitions (M&A) activity, primarily in the small-volume specialty chemicals sector, has slowly altered the habitus of the production landscape in the highly industrialised regions.

In 2013, China became the first country to cross the €1 trillion in sales mark in the chemical industry. With around one-third of global sales, the Chinese chemical market is almost the same size as the European and North American markets combined – each hold nearly 17% of the world market. This is due to the incredible growth in sales in China, which averaged about 25%/year over the decade from 2003 to 2013.

The enormous size of the Chinese market is one of the key factors that has influenced the regional distribution of investment in manufacturing facilities in recent years. To meet the needs of the Chinese market, chemical companies from all of the highly industrialised regions have exported production technologies to China, generated sales and profits there, and returned at least part of these profits back to their home countries.

Second, over the past 10 years, new plants have moved increasingly closer to the raw materials – in the case of oil, to the Arabian Peninsula and for shale gas, primarily to the US.

The result is a small number of high-volume organic chemical production facilities on the Arabian Peninsula, where oil can be extracted for under \$10/bbl.

The developments in shale gas in the US have been much more dynamic. This trig-



Some companies have sharpened their portfolios through M&A

gered a series of investments in production facilities until the oil price crash in the summer of 2014. Irrespective of the cost of the various hydrocarbon sources, there are concerns about the environmental sustainability of shale gas extraction.

Questions have been raised about the obligation to future generations – similar to those surrounding the handling of waste from nuclear power generation.

FRACKING: GAS NOW, PAY LATER?

The German federal government made clear statements about fracking in its December 2013 coalition agreement, entitled “Growth, innovation, and prosperity”. Based on its experiences with energy generation from nu-

clear power and coal, it said: “Drinking water and health have absolute priority for us. We reject... the use of environmentally toxic substances in the application of fracking technology.”

In the US, the use of chemicals in particular appears to be occupying the Obama administration as well since the US Department of the Interior has now accumulated around 1.5m submissions from concerned citizens.

As a result, regulations will enter into force in the US in June 2015 that require the disclosure of the chemicals used in every case. This includes in particular the use of chemicals that carry the CHIP (Chemicals Hazard Information and Packaging for Supply) symbols T for toxic or N for environmental hazard.

Among others, glutaraldehyde or quaternary ammonium chlorides are used as biocides, formic acid as a corrosion inhibitor, polyacrylamide for friction reduction, and naphthalene as a surfactant.

If it turns out that these or similar chemicals already listed publicly by state organisation FracFocus are being used, the public interest in shale natural gas development in the US is likely to spill over from economics to ecology.

WHAT TO DO WITH THE PROFIT?

Despite the market shifts eastward and the commodity issues, European chemical companies have developed well in the years since the US housing bubble burst in 2008-2009. The European share of global turnover almost halved from 2003 to 2013, but increased in absolute terms by about €170bn in the same period.

Since the drop in sales in 2009, German chemical companies have continually improved their financial results within Europe. The key business indicators of the market-dominating German chemical companies show, with very few exceptions, a very positive trend.

The relative economic indicators are likewise positive. Almost all of the companies listed here have both a double-digit earnings before interest and tax (EBIT) margin – an in-

GERMANY-BASED CHEMICAL COMPANIES – 2014 VS 2013 RESULTS (€M)				
Company	Sales	EBITDA	EBIT	Net income
BASF	74,326 (+353)	11,043 (+611)	7,626 (+466)	5,155 (+363)
Bayer	42,239 (+2082)	8,442 (+612)	5,506 (+572)	3,426 (+237)
Henkel	16,428 (+73)	-	2,244 (-41)	1,662 (+37)
Evonik	12,917 (+209)	1,867 (-128)	1,238 (-166)	568 (-1,486)
Merck KGaA	11,501 (+406)	3,123 (+54)	1,762 (+151)	1,165 (-44)
LANXESS	8,006 (-294)	644 (+20)	218 (+311)	47 (+206)
Wacker	4,826 (+347)	1,042 (+363)	443 (+329)	195 (+189)
Altana	1,952 (+187)	397 (+62)	268 (+39)	179 (+28)

SOURCE: Germany Trade & Invest

indicator of healthy business activities – as well as consistently positive net margins.

The positive financial situation in recent years coupled with the availability of favourable outside resourcing have been used by a number of companies to sharpen their portfolios through, for example, M&A transactions and equity investments.

A number of chemical companies have dropped products and business units whose margins have declined in recent years. These were often large-volume products such as styrene (BASF divesting Styrolution JV to INEOS) or titanium dioxide (Rockwood selling to Huntsman). When it comes to basic chemicals, however, the question is fundamentally whether small margins on large sales volumes today are less attractive than

potentially large margins on products that do not currently have a market.

The purchasing activities carried out by chemical companies are likely to be in the range of the sums they divested. One reason for this is that the industry does not expect any disruptive innovations or the discovery of new molecules with groundbreaking material properties.

STAYING OFF OF THE CYCLE

Today's dazzling availability of capital has led chemical companies worldwide to aggressively seek growth segments that display the least possible cyclical behaviour.

As such, the last decade saw several multi-billion dollar deals in the pharmaceutical sector. Germany-based Merck KGaA is in the

SELECT M&A ACTIVITY INVOLVING GERMAN CHEMICAL COMPANIES

Date	Target company	Country (target)	Buyer	Country (buyer)	Transaction value	Category
mid-2016	Bayer MaterialScience, planned IPO or spin-off from Bayer	Germany	NA	NA	€7.8 bn (estimate)	Basic chemicals, specialty chemicals, plastics
mid-2015	Sigma-Aldrich	US	Merck KGaA	Germany	\$17bn	Life science
Nov 2014	Styrolution (50% owned by BASF)	Germany	INEOS (already holds 50%)	Switzerland	€1.1bn	Basic chemicals, plastics
Oct 2014	OTC drugs from Merck & Co	US	Bayer	Germany	\$14.2bn	Pharmaceuticals
Oct 2014	TiO ₂ (Sachtleben) and additive business from Rockwood	Germany	Huntsman	US	\$1bn	Basic chemicals, specialty chemicals
Sep 2014	Bergquist (adhesives)	US	Henkel	Germany	NA	Specialty chemicals
Jun 2014	Spotless Group (detergents, stain removers, textile dyes)	France	Henkel	Germany	€940m	Consumer goods
May 2014	AZ Electronic Materials	Luxembourg	Merck	Germany	€1.9bn	Specialty chemicals
Feb 2014	Silbond (silicic acid esters)	US	Evonik	Germany	€m, mid-double digits	Specialty chemicals
Dec 2013	Oxea (oxo products)	Germany	Oman Oil Company (OOC)	Oman	€1.8bn	Specialty chemicals
Jan 2013	Pronova BioPharma (omega-3 fatty acids)	Norway	BASF	Germany	Norway krone 4.8 bn (€664m)	Life science
May 2011	Elastomers (EPDM) from DSM	Netherlands	LANXESS	Germany	€310m	Specialty chemicals
Apr 2011	Süd-Chemie	Germany	Clariant	Switzerland	Swiss francs (Swfr) 2.5bn	Specialty chemicals
Dec 2010	Cognis (food ingredients)	Germany	BASF	Germany	€3.1bn	Specialty chemicals
Apr 2009	Ciba	Switzerland	BASF	Germany	Swfr 6.1bn	Specialty chemicals
Mar 2008	National Starch (adhesives), previously part of ICI (UK)	US	Henkel	Germany	£3.7 bn GBP	Specialty chemicals
Jul 2006	Construction chemicals division from Degussa	Germany	BASF	Germany	€2.7bn	Specialty chemicals
Jun 2006	Engelhard (catalysts)	US	BASF	Germany	\$5.2bn	Specialty chemicals
Jun 2006	Schering	Germany	Bayer	Germany	€17bn	Pharmaceuticals

SOURCE: Germany Trade & Invest

» process of acquiring US-based research chemicals firm Sigma-Aldrich for \$17bn. Germany's Bayer has stood out, especially for pharmaceutical acquisitions, in the past 10 years. The company took over Germany-based Schering in 2006 for €17bn and integrated US-based Merck & Co's over-the-counter (OTC) business for \$14bn in 2014.

Beyond the pharmaceutical segment, specialty chemicals are playing a major role. Germany's BASF in particular has made a number of major investments. In the past 10 years these were: US-based Engelhard, well-known for its expertise in catalysts, for over \$5.2bn in 2006, the construction chemicals business of Degussa (now Evonik) for €2.7bn also in 2006, Ciba Specialty Chemicals for over Swiss francs (Swfr) 6.1bn in 2009, and Cognis for €3.1bn in 2010.

CROSS-CUTTING TECHNOLOGIES

In addition to M&A activities, German chemical companies are also active in fields that show promise for the future. The sums invested are modest compared to M&A as the markets for these products are still small.

Cross-cutting technologies, such as industrial biotechnology, plant biotechnology, and

GERMANY-BASED CHEMICAL COMPANIES – 2014 MARGINS

Company	EBITDA margin	EBIT margin	Net margin
BASF	15%	10%	7%
Bayer	20%	13%	8%
Henkel	NA	14%	10%
Evonik	14%	10%	4%
Merck KGaA	28%	16%	10%
LANXESS	8%	3%	1%
Wacker	22%	9%	4%
Altana	20%	14%	9%

SOURCE: Germany Trade & Invest

innovative energy technologies, are of particular interest considering the need for raw material change, energy, and mobility.

A number of activities have taken place in the field of new raw materials. In particular, the production of chemicals from sugar and starch, and the use of lignocellulosic biomass as a raw material, are the focus of investment and acquisitions.

BASF has made two such investments in the US. It purchased Verenium for over \$62m, a company with broad expertise in enzymes, in 2013. A development cooperation with Renmatix for the production of indus-

trial sugars from biomass followed an investment of \$30m in 2012. Germany's LANXESS bought a \$10m stake in Bioamber, the world's leading manufacturer of bi-based succinic acid in the same year. 2014 saw Evonik take a stake in US-based Biosynthetic Technologies, which specialises in bio-based lubricants – so-called estolides.

In summary, the global chemical industry, and German companies in particular, are both well positioned and well prepared to meet future challenges. The shifts in the global market have long since altered the public's image of the chemical industry in the industrialised regions away from large and complex production facilities. The ongoing M&A activity and smaller investments suggest that this trend is likely to continue. ■



Dr Thorsten Bug has been the senior manager for chemicals at Germany Trade & Invest since 2008. The state-owned investment promotion agency is linked to the German Federal Ministry for Economic Affairs and Energy. Bug previously spent five years as a freelance strategic investment advisor. His expertise in chemicals is based on a laboratory apprenticeship (1992), the study of chemistry in Regensburg (1999) and a PhD (2003) under Herbert Mayr at LMU Munich. thorsten.bug@gtai.com.



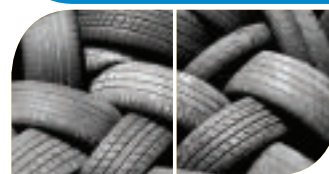
Sponsor



SAVE €250*

The 4th ICIS European Butadiene & Derivatives Conference

15-16 September 2015, Sofitel Berlin Kurfürstendamm, Berlin, Germany



Attend to:

- Benefit from vital market information on crude oil trends and its impact on butadiene market dynamics
- Get your most pressing questions answered with our interactive panel discussion on the global butadiene industry
- Take-away essential market analyses on Europe, Russia and Asia
- Gain a producer's perspective on the bio-butadiene market outlook
- Hear crucial downstream industry insights into the synthetic rubber, latex and nylon 66 markets
- Learn about the automotive industry trends and how they will affect your business
- Meet and network with key industry players

90
INDUSTRY
PROFESSIONALS



FIND OUT MORE AND REGISTER

www.icisconference.com/butadiene +44 (0) 20 8652 3887

*Register by 26 June using promo code **WYA93175** when registering to save €250 off the standard registration fee.