

The Changing Structure of the Global Chemical Industry

Deals, Ownership and M&A - Lessons for the Future?

This report combines a unique blend of insight and analysis making it the definitive study of the changing structure of the chemical industry and the ownership patterns within it...

...and the most comprehensive analysis available of mergers and acquisitions in the industry.



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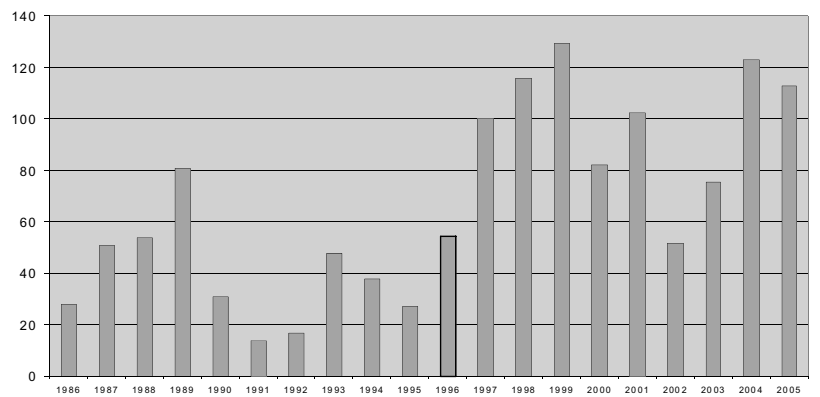
“The changes to the structure of the chemical industry that took place in the 1990s and early years of the 2000s were exceptional...

...there remains plenty of scope for further refinement of corporate portfolios, and the pressures for change simply will not go away...

...another major round of corporate restructuring is entirely possible...

...in particular, competitive pressures from new producers in developing countries will continue to escalate and there will be unremitting pressures from shareholders.”

Chart 1.1 Merger Activity Index (1997=100)



2005 Index annualised 10-months data
Source: David Ingles Consulting

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This report shines light on the complexity, volatility and dynamics of one of the most important global industries ...an industry with annual revenues of \$1,450 billion (excluding pharmaceuticals), and with aggregate deal values between \$25 and \$47 billion per year over the last decade

Who should read this report

This report is for everyone who needs to understand M&A in the chemical industry:

- Senior industry executives
- External investors and financiers
- Advisors and others supporting, investigating or executing deals
- Academics and students

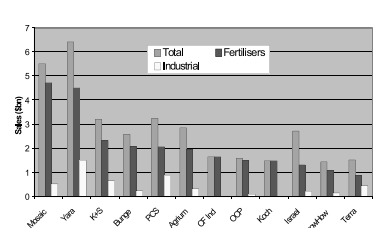
Written by a leading chemical 'industry watcher', this highly readable 300-page report is crammed with perceptive insights: at a macro level, into why structural change accelerated so sharply, and at a micro level, into what drove many of the individual transactions and their outcomes.

This analysis is supported by over 60 tables packed with quantitative analysis and over 30 charts. Dr Ingles maintains probably the most comprehensive database of worldwide chemical sector M&A – for example, one table presents 720 deals of \$50m plus completed between January 1997 and October 2005.

Some of the major topics covered are:

- The pressures that have driven change
- The transformation of the business portfolios of oil, pharmaceutical and diversified companies
- New patterns of ownership:
 - the rapid growth of private equity investment
 - private ownership (e.g. Ineos, Cargill, Koch)
- The rise of shareholder activism
- Emerging nations: the rise of new producers and their international ambitions
- Consolidation and focus: is big beautiful? Includes portfolio analysis of the top 200 global companies

Chart 10.7: Fertiliser Sector Leaders 2004



Source: David Ingles Consulting

The downturn bottomed in 2001 since when there has been a sharp upturn reflected in much improved fertiliser pricing. Several companies have taken advantage of this improvement in the industry's fortunes and in the buoyancy of stock markets to float or list businesses: the Scandinavian companies Norsk Hydro and Kemira have in 2004 floated their fertiliser interests as independent and focused businesses; the US co-operative CF Industries was floated in an IPO in August 2005; the salt producer Compass Minerals floated in an IPO in December 2003. Anglo American Corporation sold its remaining 48% stake in Terra Industries in a private placing in December 2004. Compass Minerals had been bought from IMC Global by private equity house Apollo in November 2001.

The growth markets for fertilisers are in the developing countries in regions such as South America, Asia, Central and Eastern Europe and the former FSU. It seems probable that the development focus of the top tier companies will turn increasingly to these higher growth markets and to securing low cost mineral deposits and low cost sources of natural gas for nitrogen production. As an example, Yara has recently entered a partnership with Russian fertiliser producer Rossoch in which it will hold a 30% stake. Yara has also secured the marketing rights and a 30% stake in Burrup Fertilisers, a new export-oriented ammonia plant based on Western Australian natural gas.

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Table 9.1: The Classification of Business Portfolios (continued)

Rank	Company	Chemical Sales (\$bn)	Group Sales (\$bn)	Chemical % Group	Portfolio Classification	% P&P	% SP&R	% Fibres	% Inorg	% Ferts	% Gases	% Coat	% Spec	% Col-our	% Fine	% Ag
143	LG Petrochemical	1.56	1.56	100.0	Focus	100	0	0	0	0	0	0	0	0	0	0
144	Makhteshim Agan	1.53	1.54	99.4	Focus	0	0	0	2	0	0	0	5	0	4	89
145	EVC	1.52	1.52	100.0	Focus	66	32	0	0	0	0	0	2	0	0	0
146	Firmenich	1.52	1.52	100.0	Focus	0	0	0	0	0	0	0	100	0	0	0
147	Albemarle	1.51	1.51	100.0	Multifocus	0	0	0	7	0	0	0	74	0	20	0
148	Terra Industries	1.51	1.51	100.0	Focus	13	0	0	29	58	0	0	0	0	0	0
149	Pemex	1.48	68.40	2.2	Oil / Focus	87	0	0	13	0	0	0	0	0	0	0
150	Flint Ink	1.47	1.47	100.0	Focus	0	0	0	0	0	0	88	0	12	0	0
151	Acordis	1.45	1.45	100.0	Focus	0	0	100	0	0	0	0	0	0	0	0
152	Imerys	1.43	3.57	40.1	Diverse / MF	0	0	0	65	0	0	0	35	0	0	0
153	Symrise	1.41	1.41	100.0	Focus	0	0	0	0	0	0	0	91	0	9	0
154	Denka	1.41	2.60	54.2	Broad	50	20	0	4	10	0	0	17	0	0	0

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The report analyses the industry overall, then gives sub-analyses for each key segment – including specialty chemicals, specialty plastics and resins, coatings (inks and paints), fine chemicals, petrochemicals and plastics, industrial gases, commodity organics, agrochemicals and seeds, chemical distribution and broadly-based companies.

Charts the good, the bad and the ugly deals over the last 20 years – why they happened and the models they created

About the Author

David Ingles has worked for nearly 40 years in and around the chemical industry. Having obtained his DPhil in Chemistry from Wadham College, Oxford, he spent the early working years in marketing and corporate planning roles with Air Products, Glaxo and Yule Catto.

He changed career to become a stockbroker in the City of London, where he quickly became a top-rated and highly respected financial analyst, focused on the global chemical sector – a position he maintained for over 20 years. In this time he built up an encyclopaedic knowledge of the industry, its dynamics, the players, the personalities, and the deals.

David today acts as an industry consultant specialising in corporate strategy, M&A advisory work and investor relations, and has served as a non-executive director on the boards of two quoted chemical companies.

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...plus over 60 tables, covering:

- Analysis of all deals of \$50 million plus since 1997– by sector, by region and by ownership
- Deals involving private equity funds
- Comparison of IPO deals
- Valuation of deals by sector
- Classification of the business portfolios of the top 200 chemical companies
- Business consolidation and focus by sector

...and over 30 charts, including:

- EBITDA margin analysis, 1985 – 2004
- Relative performance of chemical stocks
- Market leadership, by sector
- Recessions compared
- Private equity activity, 1997 to 2005
- EV/Sales ratios
- EV/EBITDA ratios

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