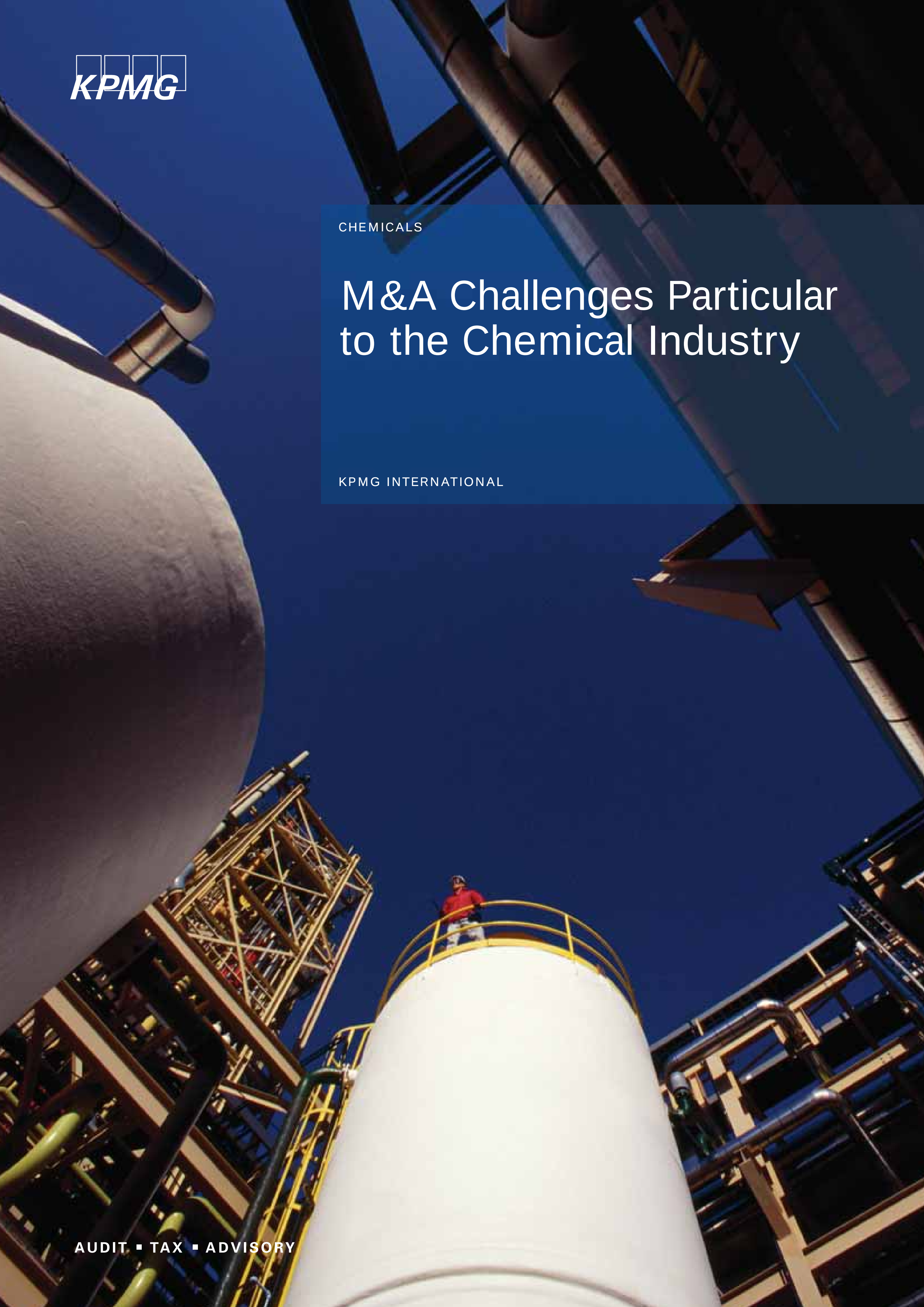


CHEMICALS

M&A Challenges Particular to the Chemical Industry

KPMG INTERNATIONAL

AUDIT ▪ TAX ▪ ADVISORY

KPMG’s Global Chemicals Practice

KPMG is a global network of professional firms providing Audit, Tax, and Advisory services. We operate in 148 countries and have more than 113,000 professionals working in member firms around the world. The independent member firms of the KPMG network are affiliated with KPMG International, a Swiss cooperative.

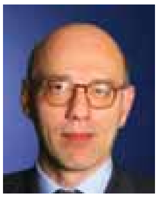
Through its member firms KPMG has invested extensively in developing an experienced chemicals industry team with over 1,000 professionals. Our understanding of the industry is both current and forward looking, thanks to global experience, knowledge sharing, industry training, and use of professionals with direct experience in the chemicals industry.

KPMG member firms serve the market leaders within the chemicals sector. The member firms provide audit services to over 30 percent of the companies in the Chemical Week list of the world’s 140 largest chemicals companies, and are a major provider of other services to many more. Our strengths lie in our professionals, and their knowledge and experience gathered from working with our member firms large and diverse client base. Our industry experience helps our team understand both your business priorities and the strategic issues facing your company.

KPMG’s presence in many major international markets, combined with our industry knowledge, positions us well to assist you in recognizing and benefiting from opportunities as well as implementing change.

Foreword

John Morris
Global Head of Chemicals,
KPMG's Pharmaceuticals Practice
KPMG in the U.K.



Dr. Ekkehart Hansmeyer
Sector Head, Chemicals
KPMG in Germany

This paper is the result of a workshop organized by KPMG International that took place in Baden-Baden, Germany from March 22 to March 23, 2007. Participants included representatives of the M&A departments of chemicals companies, private equity houses, and investment banks. Prior to the workshop, KPMG professionals carried out 13 interviews with some of the participants and other individuals from the industry to provide a basis for discussion.

We would like to thank all the participants at the workshop for the frank and open discussions, as well as those individuals who provided input to the interviews but were unable to attend.

We would like to additionally acknowledge the European Chemicals group of KPMG's Strategic and Commercial Intelligence practice, particularly Dr. Simon Jones and Dr. Olga-Tatjana Rauch for their valuable contribution to this white paper.

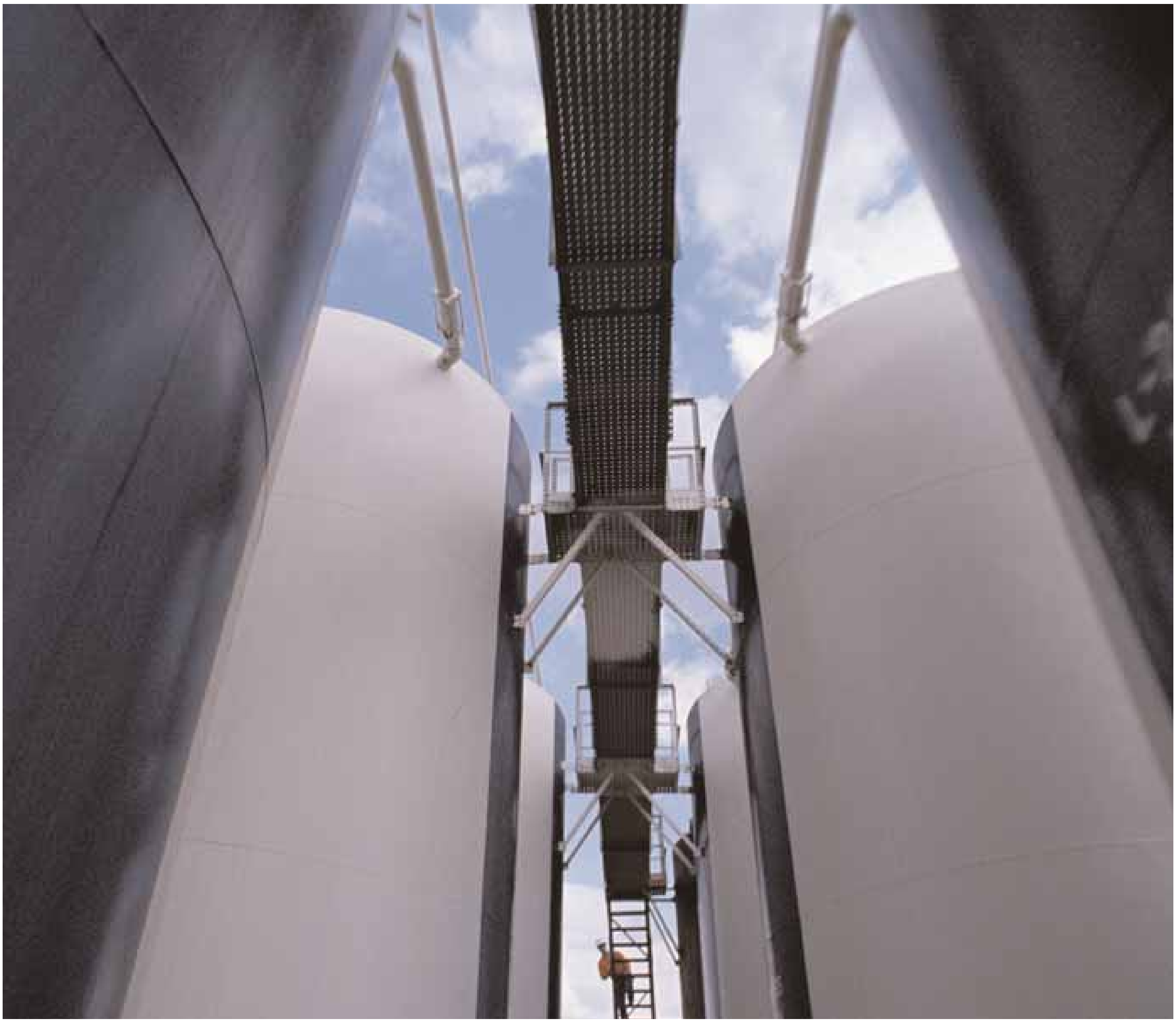
List of Abbreviations

API	Active pharmaceutical ingredient
CEFIC	Conseil Européen des Fédérations de l'Industrie Chimique (European Chemical Industry Council)
HSE	Health, safety, and environment
GDP	Gross domestic product
GE	General Electric
IPO	Initial public offering
M&A	Mergers and acquisitions
MBO	Management buyout
PE	Private equity
R&D	Research and development
REACH	Registration, Evaluation, and Authorization of Chemicals (EU legislation)
VDD	Vendor due diligence

Contents

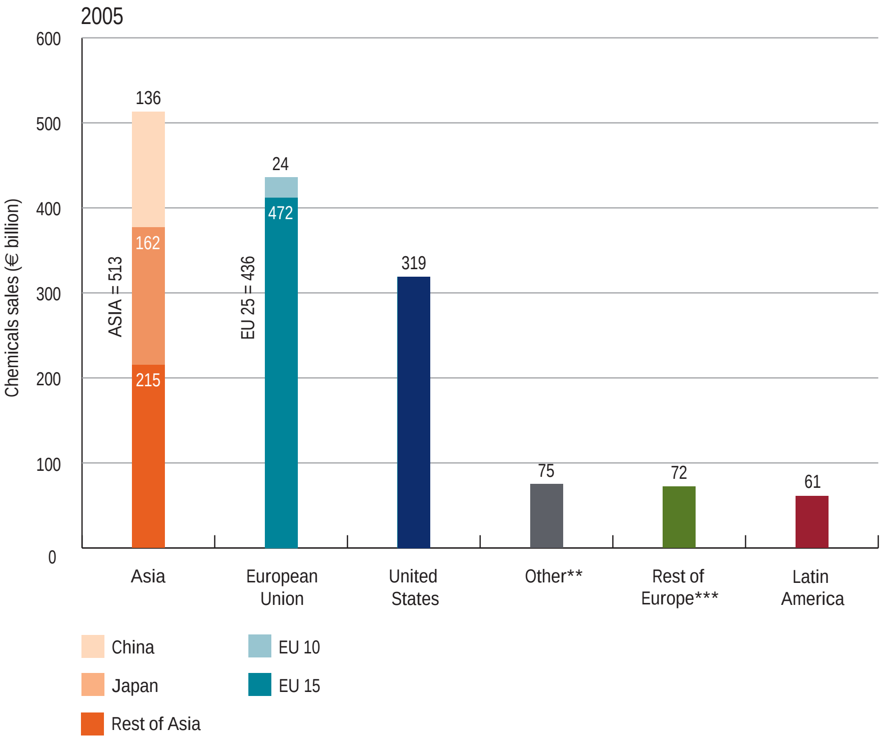
1 Transactions in the Chemical Industry

Chemicals M&A activity continues to be significant against the backdrop of an industry which is arguably wrestling with its role in the global economy.



World chemicals sales (excluding pharmaceuticals) in 2005 were estimated at 1,476 billion euros according to the latest statistics provided by the European Chemical Industry Council (CEFIC). The chemical industry in the European Union (EU) had sales of 436 billion euros in 2005 (excluding pharmaceuticals), globally dropping to second place after Asia by sales.

Figure 1: Geographic Breakdown of World Chemicals* Sales



World chemicals sales (excluding pharmaceuticals) in 2005 are estimated at €1476 billion

The EU accounts for 30 percent of the total

*Excluding pharmaceuticals

**Including Canada, Mexico, Africa & Oceania

***Switzerland, Norway, and other Central & Eastern Europe (excluding the new EU 10 countries)

Source: CEFIC Facts and Figures, December 2006

In Europe, 80 percent of the chemical industry is concentrated in Western European countries, namely Germany, France, Italy, the United Kingdom, Spain, and the Benelux (see Figure 1). In these countries the industry is mature and shows growth slightly above each country's Gross Domestic Product (GDP). Significant growth can now be seen in Eastern Europe; however, their growth starts from a smaller base than in the Western European countries.

Although the market has grown quickly in Asia, 13 of the top 30 companies in the world, accounting for nearly 15 percent of chemicals sales, are still headquartered in Europe. This indicates that European chemicals companies have become global players and moved parts of their business into the fast growing Asian market. Overall, the chemicals industry is characterized by truly multinational companies of all sizes, as well as local and regional players.

The chemical industry in Europe continues to face a wide range of issues including:

- the unsatisfactory financial performance of many companies in terms of operating results, return on capital, and level of working capital
- the erosion of prices and margins, in many cases driven by competition from Asia, the lack of discipline in managing product and customer portfolios, and weak pricing power over a consolidated customer base
- costly supply chains, expensive sales organizations, and uncompetitive levels of overhead costs
- the need to expand into high-growth regions such as Eastern Europe or Asia, increasing the need for capital and often leading to overcapacities in Western Europe and North America
- a lack of quality and efficiency of innovation, while at the same time facing the need to continuously develop new products and novel processes.

However, the industry has made progress. For example, labor productivity in the European chemical industry has improved versus the overall industry.[1]

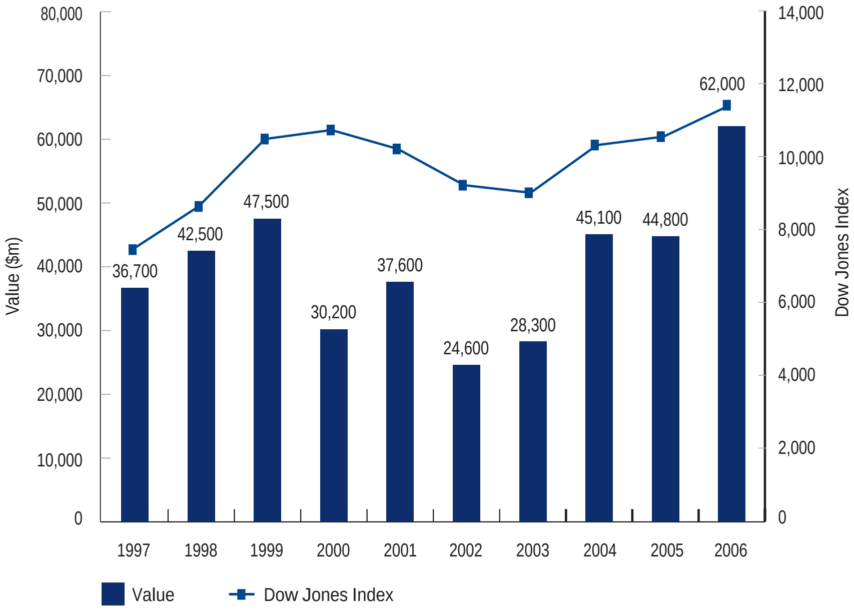
In fact, the chemicals industry overall is the second-best generator of value per employee in Europe, just behind the pharmaceutical industry.[2] Levels of value generation differ between the various segments in the chemical industry: whereas commodity chemicals require relatively few well-trained employees to operate capital-intensive assets, formulators rely on a larger number of employees with varying qualifications to develop and manufacture performance products for specific applications, often in relatively simple plants.

1 CEFIC Facts and Figures, December 2006, page 2
2 ibid, page 9

M&A activity in the chemical industry appears to be linked to the performance of the financial market as can be seen by the comparison of the Dow Jones index with the overall value of deals in the chemical industry.

In order to overcome the current issues facing the industry, ongoing change and restructuring are the norm. M&A is one tool available to reconfigure the industry so as to keep the European chemicals industry globally competitive.

Figure 2: Overall value of M&A transactions and Dow Jones index



Notes:

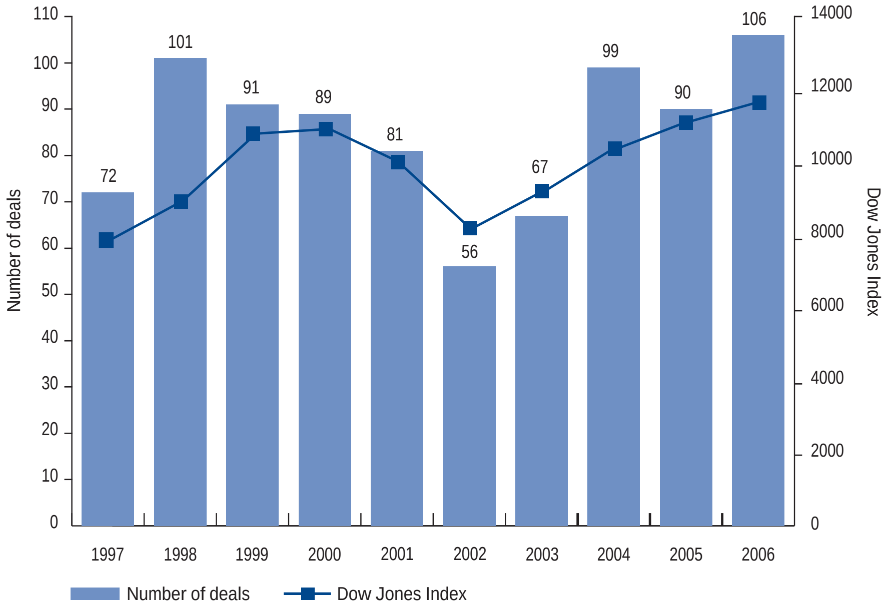
1) M&A transactions in the chemical industry > US$ 50 million

2) Dow Jones Index: annual average

Source: David Ingles Consulting; Bloomberg; KPMG International analysis, July 2007

The number of deals less closely track the Dow Jones than overall deal value. The economic downturn of 2001-2003 would appear to have had a significant impact on the appetite to buy and sell businesses.

Figure 3: Number of M&A transactions and Dow Jones Index



Source: David Ingles Consulting, Bloomberg, KPMG International analysis, July 2007

It should be noted that in some years one major deal can account for a significant share of the total deal value. For example, the sale of Basell by BASF and Shell in 2005 at a total value of US$5.3 billion represents more than 15 percent of the total deal value in that year.[3] In May 2007, GE Plastics was sold for US$11.6 billion to Saudi Basic Industries (SABIC).[4] These two examples are typical for portfolio adjustments continuously being carried out by most larger companies. Both deals are related to polymers, a product class that is capital intensive and requires privileged access to raw materials as well as economies of scale, in order to be able to be cost leader. Consumption of polymers has seen a marked shift towards Asia, as key consuming industries move their manufacturing base into cheap labor regions. Basell was bought by an investment fund, whose plan is likely to exit the investment via an initial public offering (IPO) once Basell has achieved attractive levels of sales and profitability.

3 BASF and Shell complete sale of their stakes in Basell to Nell Acquisition joint media release, www.shell.com as accessed on July 16, 2007

4 Handelsblatt news, as accessed at http://www.handelsblatt.com/news/_pv/_p/200038/_t/ft/_b/1270842/default.aspx/index.html on May 21, 2007

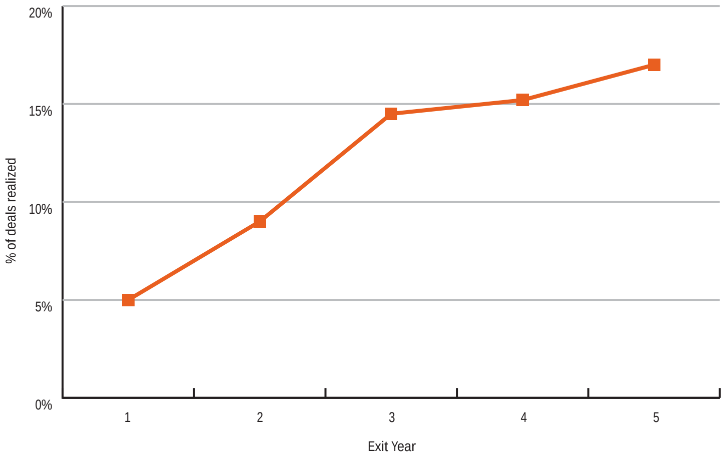
The majority of M&A transactions are in the product categories specialty chemicals and formulations. Companies active in "value-added" chemicals are attractive to private equity investors for a number of reasons, including:

- innovative technology and products addressing niche applications with high entrance barriers and, hence, in many cases attractive levels of profitability
- size of deal/enterprise value in the appropriate range for a large number of mid-cap private equity houses
- shorter investment cycles compared to commodity chemicals companies
- typically lower exposure to their chemicals cycle, as on the one hand the customers are often active in less cyclical markets themselves, and on the other hand because they are not directly exposed to the volatility of the oil and gas markets.

Private equity activity in this segment has further boosted M&A activity, thereby increasing company valuations, which has been beneficial for potential sellers.

Private equity is estimated to have accounted for about 23 percent of deal value from 2000 to 2006.[5] Exit from an investment is always a key issue for a private equity organization. There are only a few quick exits from chemical investments: statistics indicate that five years after the takeover of a company only a little more than 42 percent of the private equity investments have been sold.[6]

Figure 4: Exits from PE Buy Deals



Source: David Ingles Consulting, July 2007

5 David Ingles Consulting, July 2007
6 Ibid

Challenge: Understand Pricing and Cyclicality in the Industry

Cyclicality and relocation are generally regarded as some of the most important trends in the chemical industry. A chemicals business may be subject to a number of cycles, including those downstream (e.g., automotive, pulp and paper, etc.). During the workshop in Baden-Baden, participants discussed whether the business and M&A cycles correlate. One side argued that there has been little correlation between the chemicals business cycle and M&A activity; The data on pages 4 and 5 of this report confirms their second opinion. The restructuring of the industry is independent of business performance.

The other side believed that M&A activity is positively correlated with economic activity, even more so in the chemicals industry than in other industries. "In a downturn, corporates will not buy because they are busy restructuring. At such a time it is difficult to obtain board decisions. The board is more cautious of anticyclical behavior because you do not know when the cycle will go up again," one participant said.

All parties agreed that industry and financing cycles need to be taken into account in the cash flow, which directly affects the price a financial investor is willing to pay for an asset. To do this requires solid market experience.

Prices

Valuation multiples have steadily increased for chemicals assets over the past few years, from typically four to five times EBITDA to typically eight to nine times EBITDA (in some segments even ten to twelve times EBITDA). Sales multiples are often between 0.8 and 1.2. This increase in prices is the result of the high levels of liquidity in the market as well as the increasingly professional auctions. Very few assets are sold nowadays without some form of auction process.

Participants believe that 2007 will be the top of the cycle. However, multiples are expected to remain at the current already high levels or increase slightly due to stiff bidding competition and PE activity. Not all assets achieve these high multiples. In particular, (listed) enterprises sometimes may sell difficult assets at a rather low price when their intent has been officially announced. In this situation PE houses would typically sit back and wait for the right price.

Investment banks appear to aggressively drive deals to achieve high prices. Additionally, some bidders are apparently willing to buy at any price. It was felt that some of the newer PE houses and those with new funds are under pressure to invest.

A number of industry observers believe that the issue is not so much the liquidity of the PE houses, but the liquidity in the debt market. This results in financial institutions needing to lend money. Therefore, the level of equity required to finance a deal has decreased significantly: in the past, 40 percent equity was usual, now only 25–30 percent is reportedly required. Currently some deals are financed or leveraged at aggressive levels, which worries some observers as it increases the risk of defaults if the business cycle goes down. Events of the past few weeks would seem to be proving views expressed during the KPMG workshop in Baden-Baden.

One hypothesis to consider is that high liquidity and prices may lead to more restructuring than actually necessary.

Due to high liquidity, for example in the Gulf region, searching for attractive investments, investors mainly from the Middle East but also from India and China are increasingly active on the European chemicals M&A market, and this is expected to increase, especially in downstream segments. Chinese companies currently are showing an interest in strategic technologies, and Indian companies are said to be willing to pay a premium for companies in Europe, which give them access to specific markets (for example to the active pharmaceutical ingredients (APIs) markets).

It is expected that the number of M&A deals will remain at past high levels. However, it is probable that the total value of deals will increase as public companies become targets of large private equity houses and IPOs of private equity–held chemicals investments become more frequent.

2 The Three Ps to Successful M&A Transactions

Any successful deal requires careful preparation, planning, performance and post-deal integration. This section covers a sell-side process, but can be readily adapted to a buy-side situation.[7, 8]

7 We acknowledge, in particular, the contribution of Hugh Tidbury, Greenhill & Co International, to this section.

8 For further analysis of the best practices in a disposal process, we recommend the 2007 KPMG International survey "Increasing Value from Disposals," available from your local KPMG representative.

2.1 Preparation and Planning

Organizations should understand what they are selling and prepare thoroughly for a disposal. As a seller, be forewarned and prepared. Try to see the deal from a bidder's view. Involve the right people in the organization from the start; too often issues are identified during the process that could have been addressed early on by the right person. Typically, a private equity (PE) fund will discount value if unexpected issues arise; the less certainty, the lower the price. For this reason, sellers should clearly identify and address any negatives or potential deal breakers as early in the process as possible (e.g., proactively provide the health, safety and environment (HSE) history and prepare the business case well.)

Sellers should attempt to understand what might change during the course of the process (e.g., market, other M&A deals) that might affect the process, for example:

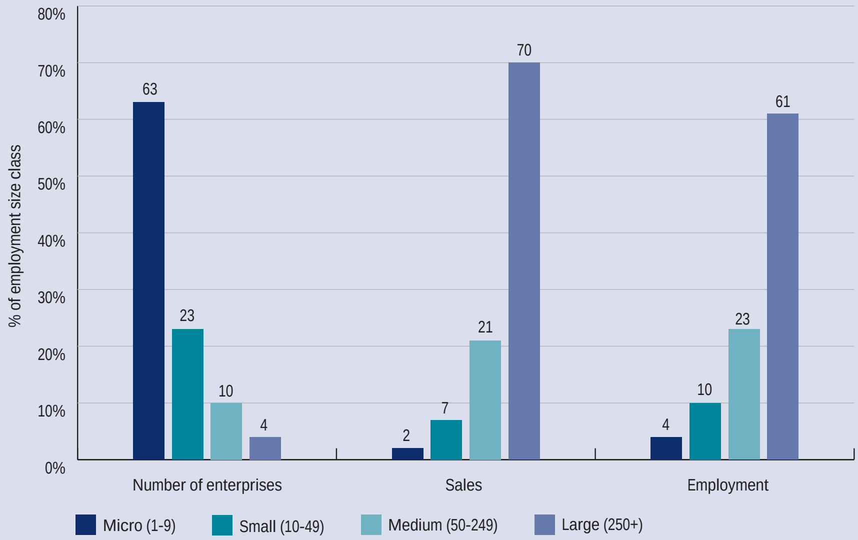
- Where is the business in the cycle?
- Has a strategic analysis of the timing been carried out?
- Is the timing right, or should the process be postponed?

A vendor due diligence (VDD) is helpful due to its third-party view of the business; the seller may even discover things that management was unaware of. Some businesses have been withdrawn from the sales process due to the VDD, in some cases where unexpected issues have jeopardized the process, but in other instances due to the understanding of the value in the venture which had not been seen previously.

Challenge: Identify the right M&A Opportunities in the Chemical Market

The chemicals industry is overall still very fragmented in Europe. According to statistics provided by CEFIC, the EU chemicals industry (excluding pharmaceuticals) comprises about 27,000 enterprises of which 14 percent – about 3,800 companies – accounted for around 91 percent of sales in 2005, or in absolute terms 397 billion euros. On average, each of these companies achieved around 105 million euros of sales in 2005.

Figure 5: The EU Chemical Industry: Number of Enterprises, Sales and Employment by Size-Class



Note: numbers excluding pharmaceuticals

Sources: CEFIC and Eurostat 2001

Based on these figures, there would appear to be a significant number of potential M&A candidates.

This is supported by feedback from karet participants, as they believe that:

- Consolidation is expected to be ongoing and to provide further opportunities as some chemical industry segments are still very fragmented.
- In particular, specialty and fine chemicals still offer opportunities due to fragmentation, overcapacities, restructuring needs, and price pressure from China/Asia. Additionally, if a downturn should materialize, some of the family owned assets may be financially endangered, forcing the owner, in the worst of circumstances, to sell the company at a greatly reduced price.

- Further focus on core businesses leads major chemical players to continuously make small and medium-sized adjustments of their portfolios, which might provide attractive opportunities for potential buyers.
- Finally, succession in small or mid-sized family-owned companies also presents an opportunity for M&A.

Larger enterprises will not only sell off businesses but also continue to purchase companies to strengthen their position in core businesses and markets. Examples of this behavior can be seen at BASF, and also at pharmaceutical companies such as Novartis.

Workshop participants stressed that most enterprises strive to be. *"number one or number two in a certain segment."*

Chemical Parks: A Special Investment Case?

Many chemical sites in Europe have been transformed into what are called chemical parks. These parks are in most cases owned by one or more of the chemical producers on site. The chemical park organization operates the site infrastructure at arms length from their owners and attempts to provide other customers on the site with cost competitive services.

Additionally, chemical park operations make it easier to sell off businesses which are based there, especially to outside investors. The costs in chemical parks are normally more transparent and flexible than in a carved-out entity, as the business is already being managed at arm´s length from site operation, other suppliers and facilities.

Chemical parks as an investment opportunity have been a topic in some business circles for a number of years. The rationale is that chemical parks often have overcapacities. However, consolidation across parks has not materialized to date.

Large chemical conglomerates keep their sites not because they are an attractive business, but because they cannot sell them. Also, conglomerates are worried that losing control of the costs and services provided by the site may be disadvantageous.

The business case for investors might not be particularly compelling because mainly local synergies can be captured. Some site operators do believe however that they will increasingly work together.[9]

9 "Kernthesen fur langfristigen Entwicklung von Pharma-und-Chemie-Standarten in Europa," J.Vormann, Presentation to CDCH, June 28, 2007.

There may, however, be some areas of interest to investors:

- The maintenance and engineering groups in chemical park organizations might be an interesting opportunities if the services can be sold to other chemical sites or industries in the region (e.g., automotive, etc.).
- Energy companies may be attracted to sites with energy/power plants that provide an additional market for excess energy/power capacity, scope for further expansion and access to new markets.
- Chemical parks might be of interest to PE houses—despite low margins—due to their stable cash flows.
- Two key issues have to be resolved, particularly for a PE investor:
  - Who takes on the environmental risks?
  - How can too-high labor (and other) costs be reduced to competitive levels?

In summary, the workshop participants agreed that chemical parks should be run as a service business, not as a chemicals business if they are to be attractive M&A targets for investors.

Brownfields

The term Brownfield Site can be defined as land that is or was occupied by a permanent structure, which has become vacant, underused or derelict and has the potential for redevelopment.[10]

Acquisition, remediation and valorization of brownfields have been the focus of specialized private equity funds in the United States and Canada for some time. This type of activity appears to be spreading to Europe. As the chemical industry relocates production away from traditional sites in Europe, could specialized funds contribute to solving the problems related to the closure and decommissioning of the operations as well as mediating and finding new uses for the land?

There appears to be no statistics for brownfield chemical sites in Europe, however some numbers are available for a number of countries as shown in table 1.

Table 1: Some brownfield statistics

Country	Number of Sites	Total Area in Hectares
France	200,000	20,000
England	65,780	100,000
Germany	362,000	128,000

Source: The Scale and Nature of European Brownfields, Concerted Action on Brownfields and Economic Regeneration Network, 2005

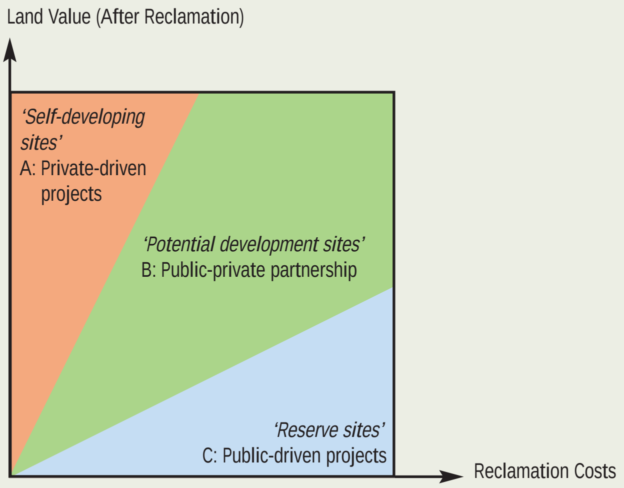
[10] www.mercatusland.net

In Germany alone the Federal Environment Agency has calculated that 10 hectares of brownfield area is created every day.[11] In the UK it has been estimated that 2 percent of the sites have been contaminated by chemical activity.[12]

The specialized funds appear to be quite successful. One North American private equity house raised its fourth institutional fund in 2005, a dedicated brownfield fund comprising $1.2 billion of committed capital, enabling the firm to purchase, clean up and redeploy contaminated real estate in properties throughout North America and Western Europe.[13]

Obviously, not all brownfield sites will be of interest to private investors. The "Cabinet" project funded by the European Union has developed a basic classification of remediation opportunities (Figure 6).

Figure 6: Classification of reclamation opportunities



Source: Concerted Action on Brownfields and Economic Regeneration Network, 2007

In Europe, in particular older chemical sites are often close to urban areas and can have attractive land value. These sites may also have the added benefit that previous owners and local authorities will participate in covering the cost of remediation.

In summary, private equity investors interested in chemical assets should possibly consider teaming up with specialized funds to dispose of unwanted sites. It might be even possible to obtain some value from these assets.

11 "The Future lies on Brownfields", Federal Environmental Agency, 2005
12 "Measuring Environmental Performance", Environment Agency, UK, 2005
13 www.cheorkeefund.com, as assessed on July 30, 2007

"Talking to management is appropriate at a certain time in the process. If I were to find my management talking to PE without authorization, I would kick the PE fund out of the process,"

Workshop participant

2.1.1 M&A Processes

Efficient internal M&A processes and speed are some of the key success factors. Set a time line that both allows control over the process, and at the same time provides room to maneuver.

The sales process should be designed carefully:

- Is a standard process or an individualized approach appropriate?
- Will an information memorandum or a presentation be more helpful to convince interested buyers of the business potential?

Contact between management and prospective buyers needs to be carefully orchestrated. The seller wants to expose management as little as possible to the prospective buyers before closing or at least before the stage of exclusive negotiations. The prospective buyer would like to have as much contact as possible.

2.1.2 HSE Considerations

Health, safety and environmental (HSE) risks or issues are particular to the chemicals industry. A full understanding of environmental risks is probably an illusion at many sites given the long history of operations at the locations, sometimes up to 100 years or more. For many investors the issue related to environmental risks is challenging in terms of the transaction and contract. Obviously, some sites/companies have a better environmental reputation than others.

Challenge: Include REACH in the Valuation of a Target

REACH is the new European Union chemical registration regulation, which has come into force on June 1, 2007, and will require all substances manufactured and imported in the EU at and above one tonne per year to be registered (affecting approximately 30,000 chemicals).

REACH could trigger portfolio optimization, as some companies may try to sell businesses in order to avoid registration or to minimize the financial burden (an "abandon" strategy). The European chemicals industry could see in some cases a shift of production capacities to export markets overseas in order to stay within a lower tonnage band for registration. However, in many instances, relocation costs are probably higher than REACH costs.

REACH registration of a chemical is unlikely to be a selling point to customers as only a small number of them really care about environmentally friendly products (e.g., Blue Angel in Germany). However, most chemical business is B2B, and downstream customers of the chemical industry are interested in close support from their suppliers, as they are worried that REACH may impact their business.

REACH is seen by some to be merely a cost issue. Buyers of chemical businesses can be expected to reduce a purchase price because of REACH. However, it is unlikely to be a deal-breaker. An M&A transaction has to be centered on a strategic decision; REACH cost savings alone would not justify paying a premium for a company.

Nevertheless, REACH issues should be managed carefully from the beginning of the deal. It is recommended that the following questions among others be addressed:

- How far has REACH planning and implementation progressed in the company?
- What costs are expected for the REACH implementation? When are the expenditures expected?
- How will REACH impact the company's business?
- Will the impact be positive (higher revenues because of less competition for a certain substance) or negative (lower revenues due to unregistered substances or the discontinuation of a product).
- How well are the effects of REACH accounted for in the implementation planning (e.g., on the IT systems, the supply chain, tax, and accounting)?

2.2 Performance

One of the keys to performance is to maintain the initiative while remaining flexible, i.e. staying in control of the auction process.

Companies, whose core business involves the manufacturing and selling of chemicals must learn from private equity how to make quicker decisions during the M&A process. The corporate decision-making process is often slow and not transparent. However, the speed of the transaction depends on how well the corporate M&A department is structured and the number of stakeholders involved in the deal. A large number of stakeholders in any one decision can be detrimental to the process; overanalyzing does not improve the quality of the decision. Deals may be lost due to lengthy corporate deliberations. An organization is well advised to separate M&A investment decision making from running the day-to-day business. Ideally, a dedicated team led by the M&A department should have the authority to decide on most issues arising during a deal.

M&A is the core business for private equity. PE houses are fast at the beginning of a transaction, but often take their time to negotiate a deal when they have exclusivity. If a company has a structured process in place and focuses on it, it can be as quick as a PE house, especially if team members have deal-flow experience and are used to deal dynamics.

Challenge: Understand the PE View of M&A issues

The chemicals sector is of interest to many PE houses. However, many PE houses are cautious with respect to the industry as only a few have the resources and background to understand its business models. Additionally, chemicals companies have relatively long investment cycles and payback periods that are difficult to fund. Understanding the cyclical nature of the relevant markets is critical, and the expert investor will attempt to play the cycles (See above: “Challenge: Understand Pricing and Cyclicality in the Industry”). Investors are well advised to be very selective in this sector. At the same time, the fact that not many PE houses dare to invest in the chemical industry presents an opportunity for those organizations with the necessary experience and resources: fewer of their peers compete for these assets.

Additional questions which confront a potential financial investor in the chemical industry:

- The trend toward global businesses for all industries leads to the risk that customers and products relocate outside of Europe. For PE houses this poses the question whether they would be willing to invest in chemical facilities to follow the customers—and whether they have the resources and the right expertise outside Europe.
  Do the payback periods for factories outside Europe fit your investment cycle?

- The competitive intensity in the chemicals industry may force the owner to run the business on cash cost instead of accounting profit.
  Will you be able to do that?

- Since PE houses buy complexity and sell simplicity, a transaction needs to be followed by restructuring and/or carve-out activities.
  Are you prepared to do this?

- Timing is critical: Invest at the right time.
  Do you know what you are doing?

- Investing is the easy bit. Adding value and exiting can be more difficult.
  Do you see a clear exit?

- Management buyouts (MBOs) require the right management (many managers of companies in central Europe are alarmingly inactive with PE houses as compared to other regions).
  Does your target´s management know how to work with PE houses?

In order to successfully handle these challenges, have the right team and choose operating partners who know the market well.

Source: Brian Veitch, Cognetas (KPMG International M&A Workshop) March 2007

2.3 Post-Deal Integration

Integration is challenging—as it is in most industries. Speed and rigorous project management are critical.[14]

A well-prepared business and integration plan based on thorough market and competitor analysis can avoid integration issues. Measures planned well in advance need to be put in practice immediately after the deal.

These measures typically include:

- addressing concerns by clearly communicating to employees, customers, and suppliers
- maintaining or improving market focus and ensuring that clients' needs are satisfied better than in the past.

Cultural differences may be difficult to overcome and can destroy value. This often happens in merger situations where there is no clear dominant party. Some of the best-prepared PE houses take people and cultural issues very seriously. For example, they will send advisers to the company to look at the second level of management. An acquisition or a merger can be the initiator to change a company's culture (e.g., the incentive scheme).

The chemicals industry is a complicated network of supplier and customer relationships; the industry is its own largest customer. Due to mergers or acquisitions, suppliers may become competitors and/or customers. Other industries, such as the automotive industry, have linear supply chains, where materials flow only in one direction through various tiers of differentiated component manufacturers. The integration of chemical deals may therefore be more complex with respect to the carve-out of the acquired business and the restructuring of a new entity. In chemical sites, some of the large number of interactions between the business and other operations on a site may be obvious; others more subtle.

Challenge: Realizing Synergies and Maintaining Value

Realizing (and tracking) synergies can be challenging. Deal drivers are typically growth-oriented (e.g. enhance portfolio, enter new markets, and discover market potential for price increases). Market and revenue synergies are often difficult to quantify due to lack of relevant market information before closing and are believed to take longer to realize than cost synergies. On the other hand, the calculation of cost synergies is standard practice (e.g., consolidate capacities, reduce administration costs, and combine R&D projects). However, some cost synergies may be more difficult to realize than others. Headcount reduction in some countries is costly, may cause disruption, and take time. As well as the challenge to realize synergies, the organization faces the issue of potential value leakage once the deal completes. Over two-thirds of sellers experience post-completion challenges, especially warranty and indemnity claims and completion accounts disputes.[15]

Remember that value is a common denominator for all activities in the deal. Organizations should confirm the value of all transitional arrangements and supply agreements in the contract.

[14] For an extensive study on post-merger issues, see KPMG firms publications such as The Morning After — Driving for Post-Deal Success, available from your local KPMG representative, published in 2006.

[15] The Morning After - Driving for Post Deal Success, January 2006.

3 Summary: What Makes Chemicals Deals Different from Those in Other Industries?

Companies in all industries face the challenge of carrying out successful transactions in order to realize growth strategies. Efficient and professional internal processes are required to maintain control of the complex process, using the three Ps:

1 Preparation and planning

2 Performance

3 Post-deal integration.

At the same time, there are some peculiarities to M&A processes in the chemicals industry, in addition to the generic challenges of transactions in all manufacturing industries: The cyclicality of the business, the high asset intensity of the industry, and the complexity of production sites—with potential health, safety and environmental issues and resulting carve-outs—make many chemicals deals challenging to potential buyers.

Workshop participants felt that advisers with a background in the chemicals industry are crucial for the M&A team of a potential investor with limited industry experience. Buying a chemical company is no different from purchasing anything else: the better one understands what one is buying, the more likely one is going to be satisfied with the purchase once it is completed.

An in-depth understanding of the markets consuming the chemicals produced by the target, the underlying dynamics of these markets as well as the interactions and substitutions between different types of chemicals are ideally brought to the table to identify market potential and deal-breakers at an early stage of a deal. The better factors such as the market, the customers, product pricing mechanisms, etc. are understood the easier it is to price the target and win the deal.

KPMG´s Strategic and Commercial Intelligence Services (SCI)

Strategic and Commercial Intelligence (SCI) is KPMG´s dedicated transaction strategy consulting unit. We help our firms' clients understand the strategic, commercial, and operational issues in businesses that they acquire by means of a Commercial and Operational Due Diligence. The Commercial Due Diligence, for example, will typically provide answers to the following questions:

- How attractive is the target market?
- What is the target's competitive position?
- Are the projections in the business plan achievable?

Typical services in a Commercial Due Diligence:

- Market interviews: in many markets, publicly available information is insufficient and may, in the worst case, be misleading. Desk research is therefore supported by our own primary research such as customer and industry expert interviews.
- Business plan review: the findings of our market and commercial intelligence research are tied into an independent opinion of a business plan, with a clear link to historic performance. More detailed models can be in some cases useful to quantify sensitivities as well as risks and opportunities which may be important for the valuation of the target.

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