

Chemical compounds Fourth-quarter 2011 global chemicals mergers and acquisitions analysis

Special report:
*Using divestitures and
spin-offs to best position an
organization for growth*



Tracey Stover

To our Chemicals Industry readers:

Welcome to the latest edition of *Chemical compounds*, PwC's analysis of mergers and acquisitions in the global chemicals industry. In this report, you'll find an overview of M&A in the sector during the fourth quarter of 2011, and our expectations for deal activity in the near future. Our report also includes a special section on the impact of divestitures and spin-offs, increasingly viewed as essential strategies for helping companies to better position themselves for growth opportunities.

PwC analysts point to several trends affecting the values and locations of deals in the chemicals sector:

- **Deal value and volume declined during the fourth quarter**, largely due to the 88% decrease in the value of mega-deals (those valued at \$1 billion or more). The sole mega-deal was private equity firm Apollo Group's announced acquisition of specialty chemical producer Taminco NV. Overall deal value for 2011 dropped as well, with the year's average falling 29.4%. Deal volume, however, showed a slight uptick during 2011.
- **Financial deals** showed a slight improvement in 2011, particularly during the first six months of the year. Given current economic concerns, financial investors might be looking to invest in less cyclical sectors in 2012.
- **Local deal value in 2011** was driven by North America and Europe. Inbound deal volume and value were driven by North America, and Asia and Oceania drove inbound volume while Europe was the primary driver for outbound volume and value, with 19 deals valued at \$11.7 billion in 2011.



Anthony J. Scamuffa

Investors proceeded with caution during 2011, as concerns about slower-than-expected economic growth led to reduced valuations that negatively affected overall deal values. The dominant chemical end-user industries—automobiles, durable goods, and construction—have improved but have yet to return to pre-recession levels.

While PwC looks to continued recovery in the chemicals deal market, our analysts expect the pace of recovery to be considerably slower than we observed during the beginning of 2011.

We're pleased to present the fourth-quarter 2011 edition of *Chemical compounds* as a part of our ongoing commitment to providing a better understanding of M&A trends and prospects in the industry.

Tracey A. Stover
Global Chemical leader

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Special report:

Using divestitures and spin-offs to best position an organization for growth

Global merger and acquisition activity has risen significantly in recent years, increasing to \$2.54 trillion in 2011, a 7.6% jump over 2010.¹ US M&A activity is expected to continue at the current pace through 2012, according to PwC analysts, and could accelerate if there is increased access to capital.² M&A activity has shown a rise in the number and value of divestitures and spin-offs. US divestiture deal volume as a percentage of total M&A volume increased to 36% in 2011 from 35% in 2010, according to PwC.³

While divestiture activity has increased recently, these transactions often are taking longer to close than in previous years, with some companies being forced to go to market several times before successfully striking deals with buyers. Also slowing such deals:

- Tighter lending standards for a smaller pool of buyers
- Investors made overly cautious by volatile stock markets
- Sovereign debt crises in Europe and the United States
- An uncertain economic forecast
- Shrinking government spend

More diligence is being required by third-party lenders and other constituents, and, overall, buyers have become more cautious. In the mid-size market, corporate buyers have been prepared to pay stronger multiples for the highest-quality IP businesses. Processes are also being structured to better benefit trade buyers, as vendors are able to provide them with more access to management and provide them with more time, although they expect to be paid for their synergies.

Buyers also are often more aggressive in seeking a price below the value sought by sellers. But many companies continue to view divestitures and spin-offs as effective strategies for shedding non-core businesses, rightsizing their organizations, and providing a platform for growth.

Spin-offs were on the rise in 2011 as an attractive way for companies to separate high-growth or low-growth components of the business from more traditional pieces of the organization. Some of these high-profile transactions

included ITT's split into three publicly traded companies, Motorola's spin-off of its mobile-phone division, McGraw-Hill's spin-off of its educational unit, L-3's announced spin-off of several government services businesses, and Sara Lee's spin-off of its international beverage business.

With 23 deals reaching a disclosed value greater than \$50 million and a total deal value of \$7.5 billion during the fourth quarter of 2011, as compared with 33 such deals and a total \$24.5 billion deal value during the same period in 2010, the chemicals industry is experiencing a decline in M&A activity. Divestitures and spin-offs accounted for 66.7% of deal activity with a disclosed value greater than \$50 million in the sector during the fourth quarter.

When it comes to divestitures in the chemicals sector, and in chemicals-related heavy manufacturing, carve-outs are frequent, particularly in North America and Western Europe. The focus is often on product segment spin-offs.

Driving spin-offs and divestitures

Spin-offs, often the best way to dispose of a business while preserving shareholder value, are a sound strategy for businesses with significant appreciated value, as a sale can trigger a large taxable gain. A spin-off is a tax-free transaction that allows shareholders to maintain their appreciated value without generating a substantial profit. Thus, shareholders are allowed to preserve capital gains treatment and control the timing of the realization of the gain. Following the repeal of the General Utilities Doctrine, a tax-free Section 355 spin-off may be the only remaining means by which a corporation can extract appreciated assets without paying corporate-level tax.

Selling a long-standing unit of a company can be a difficult, and often controversial, decision for an organization, particularly if members of the management team have ties to the unit being divested. But by selling a business unit that is no longer on strategy—because it may be poorly performing, in a contracting market, or simply no longer a priority—a company can raise capital to invest in its strategic priorities and allow that business unit to do the same, thereby enhancing overall shareholder value.

¹"On Wall Street, Renewed Optimism for Deal-Making," by Evelyn M. Rusli, *The New York Times*, Jan. 2, 2012

²"Hunt for Growth to drive 2012 US Mergers & Acquisitions," says PwC US," PwC, 2012

³ibid

Tax considerations

Tax consequences should be explored with divestitures in every country. These considerations vary and must be reviewed. The specific discussion of taxes in this report relates to the United States only.

There are numerous ways to structure a proposed divestiture, but considering tax efficiencies in advance may help maximize shareholder value. For example, if a divestiture is treated as a dividend to the shareholders, the result could be taxable income to the individual shareholder. Similarly, the sale of a business to a third party may result in capital gain to the seller. However, the US Internal Revenue Code provides several mechanisms that let taxpayers structure certain corporate divestitures as tax-free reorganizations and/or distributions. In particular, the use of spin-offs, split-offs, and split-ups may allow for the distribution of stock of one or more corporations to shareholders or other security holders without the recognition of gain or loss. The rules governing these types of transactions are highly technical, and to qualify, a taxpayer must meet certain requirements. Some of these include:

- **Active Trade or Business**—Either the distributed corporation or the distributing corporation (or, in some cases, an affiliate) must have conducted this active trade or business for **five** years prior to the distribution. Furthermore, both the distributing and distributed corporations must be engaged in the active conduct of a trade or business immediately after the distribution. This also means that both businesses must be able to demonstrate that they are viable standalone businesses post-split.
- **Business Purpose**—The transaction is required to be carried out for one or more corporate business purposes. It should be noted that the principal business purpose cannot be to provide nonrecognition treatment of any gains or losses on the transaction. Depending on the facts and circumstances, acceptable business purposes may include providing an equity interest to certain employees, facilitating financing transactions (stock offering or debt borrowing), cost savings, resolving competition problems with customers or suppliers, or “fit and focus” (resolving management or other issues resulting from operating multiple businesses in one corporation/group of corporations).
- **Distribution of Control**—When the distribution is made, the distributing corporation must distribute “control” (usually defined as 80% of the voting power and shares) of the distributed corporation.
- **Device Test**—Similar to the business purpose analysis above, the transaction cannot be used principally as a “device” to distribute the earnings and profits of a corporation without garnering dividend treatment. The US tax authorities consider the facts and circumstances surrounding the transaction to determine whether this test is met, but a strong, non-tax corporate business purpose without a prearranged plan or intention by the distributees to sell stock post-spin generally is a favorable factor in this analysis.

Many additional federal, state, and foreign regulatory and tax requirements apply and should be analyzed prior to undertaking a corporate spin-off. Nonetheless, any corporation planning to dispose of a business line ought to consider whether a tax-free alternative is available.

By taking such an approach, an organization can gain the financial resources to inject additional funding into its core business, thereby enabling it to refocus on essential aspects of the business that help define the organization and launch projects that may have been delayed. These initiatives can allow the company to improve its overall performance. The infusion of cash can also help a company shed its debt.

Additionally, certain sellers are interested in acquiring capital as companies look to restructure their balance sheets by building up cash reserves or paying down debt. Selling a high-performing or high-value business unit at a desirable price can go a long way toward helping a company achieve that goal.

Navigating a challenging process

Corporate sellers often delay making divestiture decisions, thanks to the financial and logistical challenges of timing, valuation, and potential pushback from management teams running targeted business units. Participants in a PwC roundtable on divestiture strategies and solutions noted that failing to adequately consider these factors can contribute to a portfolio review that is poorly planned, in turn driving unhealthy or conflicting incentives across an organization. That dynamic can lead to institutional resistance to identifying divestiture candidates and can ultimately hamper or derail divestiture efforts. Timing, price, and ease are priorities that must be balanced when evaluating candidates for divestiture. Once moving forward with a divestiture, leadership and investors should focus on the future of the core business and on expediting the divestiture to limit executive and investor distractions.⁴

Companies in recent years have become aware of gaps in their approach to divestitures: Nearly half of the C-suite executives and corporate development directors responding to a PwC survey reported their acquisition process was better defined than their divestiture process.⁵

The road to closing, too, can be long and complex, with global economic uncertainty increasingly leading buyers to expect and demand more detailed data about a target company. More intensive and extensive due diligence is prolonging the divestiture process. More than half of respondents in the same survey said recent divestitures had taken at least 20% longer to complete than in previous years.

For a corporate entity, divestitures typically are far less common than acquisitions. Consequently, there are great challenges when it comes to effectively managing the process and drawing on their team's experience. Significant value in any acquisition can be captured from acquiring the appropriate target and achieving planned synergies and effective integration to meet the prescribed business case. Many of these activities can be viewed as core capabilities of a management team accustomed to serial acquisitions. However, they are not as relevant to a divestiture.

The list of targets that a company would seek to acquire at the appropriate time and price is refined over the years, with management paying close attention to each target, some of which may be competitors. Identifying a complete list of buyers can be more challenging to management teams—for example, when suitable buyers may not be directly involved in the same industry but instead may be seeking to enter it.

Consequently, sellers are paying closer attention to how they manage the divestiture process from start to finish. They frequently assemble a team dedicated to managing and executing the deal and the operational separation simultaneously.

To close deals and maximize the value of their assets, sellers are striving to gain a better, more comprehensive understanding of the complexities of the divestiture market. They are gauging the full scope of buyer concerns and responding to the global economic crises that have changed the rules of the game, requiring a tweak in strategies.

The overriding goal is to evaluate the business from a buyer's perspective and best position it for sale. Reducing or avoiding delays altogether can be essential to maintaining the desired value of the sale, as the longer a transaction takes, the more opportunity there is for value erosion.

⁴ "Divestiture strategies and solutions," PwC, 2009

⁵ "Divestitures in difficult times," PwC, 2009

Also critical is to prepare for separating the operations of the unit and the parent company as early as when deal preparations begin. Looking out for the unexpected, including dual-track transactions (sale or spin-off), can also be essential to ensuring successful deals.

Asking relevant questions up-front

When planning a divestiture, an organization can enhance its chance of a successful transaction by asking and answering questions in specific areas:

- Who is the anticipated buyer? Public or private? Corporate? Domestic or foreign? Management? Financial buyers?
- How will the transaction team managing the divestiture be motivated or rewarded along with the executives who will be leaving the parent company to commence working for the acquirer?
- How complex is the anticipated divestiture, and the attendant separation of financial systems, people, and operations?
- What will a buyer request in regard to data and additional information?
- What are the risks, and has a plan been developed to minimize risks and surprises?
- What are the anticipated buyers' audit and financial reporting requirements?
- How will the process be managed, and what is the time line for the transaction?
- Who will manage the process, and does the company have adequate internal resources/knowledge?
- What ongoing transactions are to be expected with the divested operations, and how will those be handled?⁶
- What are the taxes or other regulatory requirements that could result in potential additional costs or restrictions on how the divestiture is effectuated?

Each of the three levels of carve-outs most frequently occurring in divestitures of chemical companies requires involvement with different deal dynamics and engagement in multiple complexities.

With a corporate level carve-out, operations typically handled at the corporate level are not included in the divestiture. So there must be negotiations around such areas as the legal, accounting/finance, taxation, treasury, information technology (IT), supply chain, and insurance departments. Typically, a transition service agreement (TSA) will be required for six to 12 months (or longer), until the new leadership of the unit being divested can develop or integrate the necessary corporate services.

In the case of a plant level carve-out—not uncommon in the chemicals industry, many parts of which grew out of the oil and gas industry—every divestiture may result in the division of a plant. The seller typically will keep the half of the plant viewed as core to its mission, and transfer the other half of the plant to the unit being divested. As a result, a series of complex ownership issues must be resolved. For example, will the plant maintenance group, essential to profitable operations going forward, be split, or will one party in the transaction own the group and rent maintenance services to the other party as needed?

Other plant issues have the potential of significant operational and cost consequences, including questions regarding ownership and control of:

- Steam supply
- Meters
- Suppliers
- Rail lines
- Pumps and other equipment

Delineating ownership issues typically requires an extensive walk-through and inspection of the plant site, often resulting in permanent service agreements robust enough to weather plant expansion, inflation, and other ongoing concerns and outcomes that cannot always be predicted accurately.

⁶ "Generating Value from Corporate Divestitures in 2011," PwC, 2011

With supply chain carve-outs, deal negotiations can center on everything outside of the plant that remains operational, including, for example, a common supply contract for propylene. While the buyer of the divested unit may require propylene, its needs for the chemical compound may not be substantial enough to trigger the volume discounts enjoyed by the selling company. As a result, deal valuation may be affected.

There are also concerns around shared distributors. For example, if a chemical company ships products to Asia, the organization's Asian distributor may be handling multiple products sold by the target company's parent or subsidiaries that are not included in the transaction. When a unit is divested, the buyer may need to establish a new, separate relationship with that distributor. Alternatively, the seller and the buyer can create a TSA or continue to use that distributor until which time they can engage their own distributor.

A seller looking to optimize the success of any given divestiture or spin-off will proactively prepare on a number of fronts:

Repositioning to seize opportunities

By employing a well-defined and regular portfolio process, a company can leverage significant opportunities for improvement in business and product portfolio optimization. Forward-thinking companies identify appropriate divestiture candidates based on financial, operating, and commercial parameters such as a business maturing or becoming ripe for sale due to restructuring or market factors; a business requiring a capital infusion or specialized knowledge that resides in the capacity of the portfolio company or company's management; or the business is part of a larger acquisition and does not fit with the overall strategic plan of the company or its portfolio businesses.

After settling on a business to exit, the process begins in earnest by validating the case for separation. The process can encompass resolving such issues as:

- What is the best type of exit for my investors? Is it realistic?
- Which buyers in which markets are most likely to be willing and able to pay full price?
- Would a strategic partner add value? Should I go for a joint venture? If so, which candidates are the best for the business to be divested?

- What scope of diligence on prospective buyers or partners is needed from both a financial and commercial perspective?
- Which deal structures strike the best balance between buyers' and sellers' needs?

Evaluating operations in advance

In today's environment, concerns that buyers might have overlooked in previous years can damage or even derail a deal. To best prepare for a divestiture, sellers conduct an assessment of operations and identify and correct any significant issues, such as unusually high back-office costs and plant inefficiency, and restructure options before going to market. Even if the issues cannot be corrected prior to closing, buyers are keen to gain a full understanding of the target's costs and benefits.

Walking in the buyer's shoes

Adopt a buyer's perspective by performing due diligence of the business before buyers are involved. A full review of the unit slated for sale can be essential when sellers' and buyers' pricing expectations vary significantly. Advance diligence can also help the seller identify and promote the unit's strengths and evaluate alternative transactions and structures from an informed perspective.

Buyers often are suspicious that executing a divestiture is merely a strategy for companies to rid themselves of a problem asset. To defuse that issue, sellers should be equipped to answer critical questions:

- Why is the asset for sale?
- Why has it been underperforming?
- Why is it expected to do well outside the company?
- How will the forecast be prepared?

Determining separation issues early during the process

Human resources, intellectual property, IT systems, employee benefit plans, and other systems and processes that took years to create must be disentangled during a divestiture. The process includes the development of transition service agreements, which provide for services between the seller and the buyer post-closing. Buyers will want not only to outline all of the issues and time lines involved but also to incorporate all TSA and post-TSA costs into their initial valuations.

Presenting the business in the most favorable light

Historical financial results often must be revised to accurately reflect the unit as a standalone unit and exclusive of nonrecurring items. Those results should be clearly and convincingly described in a business plan that links in the forecasts and actions to drive profits.

For the most challenging divestitures to be successful, the vendor must develop a detailed business plan that can be presented to prospective purchasers. The plan will include a detailed analysis of the recurring historical figures and move to describe the forecasts and actions that need to be implemented. A vendor can make a divestiture more attractive to potential purchasers by using strategies such as providing them with contracts for a pre-determined time. Such incentives should be considered when preparing the business plan.

Sellers also should consider the various tax and accounting structures available to them and choose the one that works best from a deal perspective.

Moving quickly to minimize value deterioration

Divestiture transactions, as with acquisitions, can be lengthy processes. Depending on whether a carve-out audit was required and other buyer financing and regulatory requirements, a divestiture typically can take six months to a year, according to a group of corporate development executives surveyed by PwC. The long transaction period can be driven by the complexities of developing an accurate financial understanding of the business unit or carve-out, and disentangling its employees and operations from the larger corporate parent—the latter process can last another six months and tie up resources long after the transaction closes.

A long, cautious preparation period can be critical to a successful sell transaction. The journey to getting the asset marketed and ultimately off the company's balance sheet begins once a business unit is chosen for divestiture. While planning can extend the time spent on a divestiture, it can save time and costs overall, as the process is likely to be more efficient once the seller goes to market.

Avoiding pitfalls

The divestiture process can be long, labor-intensive, and complex. Business development executives recently surveyed by PwC agreed on the need to avoid nine common pitfalls. Among the areas that can damage or derail a deal:

- Failing to understand your anticipated buyer profile
- Failing to address critical pension issues
- Failing to address critical financial reporting issues
- Lack of detailed credible support for the business plan
- Data reconciliation issues while going to market before vetting the numbers, requiring significant bridging from the confidential information memorandum (CIM) to the data room information
- Stranded cost identification
- Lack of risk identification and response
- Lack of a clear transition services plan as well as a vision for post-TSA period
- Lengthy divestiture process due to lack of structure or data preparedness⁷

The critical factor shared by companies achieving their goals for successful divestitures and spin-offs: extensive preparation. Unpreparedness can be costly. Sellers in some industries that found themselves startled by the speed and scope of the economic crisis discovered little bargaining power against buyers that could cherry-pick attractive assets and operations.

In many cases, negotiations moved too quickly to let sellers effectively argue the value of their assets, and having prepared too late, they had no alternative except to take what they were offered or scramble to survive during an extended process. Preparing early and effectively lets sellers act when necessary, retain negotiating power, and, most importantly, realize the greatest value from their divestiture.

⁷ Ibid

Perspectives:

Thoughts on deal activity in the fourth quarter of 2011

In the fourth quarter, we saw a further decline in deal volume, and deal values fell dramatically, with an 88% decline in mega-deal value. Average deal value for the quarter fell as well, compared with the third quarter. For 2011 as a whole, deal value also declined, but deal volume increased slightly. Because of the decline in overall value, average deal value for 2011 fell 29.4% compared with 2010.

Financial deals increased during the fourth quarter; however, the majority of this activity was caused by a single deal valued at \$1.43 billion. Excluding this deal, the contribution of financial deals was only 0.86%, in line with the third quarter's contribution of 1.25%. On an annual basis, financial participation improved, although it should be noted that the majority of this gain occurred in the first half of the year. Given current economic concerns, financial investors might be looking to less cyclical sectors for new investment. For example, the medical technology industry is seeing rapid growth in activity. Sovereign debt concerns in the Eurozone and the recent downgrade of US government credit instruments also added to general pessimism regarding the economy.

As mentioned above, mega-deals (those valued at \$1 billion or more) declined significantly last quarter. The sole deal was the announced acquisition of specialty chemical producer Taminco NV by private equity firm Apollo Group.

On an annual basis, 2011 saw a significant decline in mega-deal value as well. Seventeen mega-deals were announced in 2011, with a combined value of \$59.7 billion, compared with 16 mega-deals valued at \$91.4 billion in 2010. This decline is indicative of the slowing deal activity that we have seen since mid-2011.

North America and Europe drove local deal value in 2011. Inbound deal volume and value were driven by North America as well, while Asia and Oceania drove local volume. In China, deal activity (including deals with undisclosed values) increased more than 75% over third-quarter 2011, and the majority of this activity was local in nature. Europe was the primary driver for outbound volume and value, with 19 deals valued at \$11.7 billion in 2011, including the fourth-quarter acquisition of European specialty chemical producer Taminco NV by US-based Apollo Group.

Concerns about the economy and slower economic growth led to investor caution, ending 2011 on a negative note. The dominant chemical end-user industries such as automobiles, durable goods, and construction showed improvement but have not returned to pre-recession levels. Given these difficulties, PwC expects the recovery in the chemicals deal market to continue; however, it is expected that it will be at a much slower pace than was seen in the first part of 2011.

Commentary

4Q11 deal value and volume continue to decline; 2011 ends on negative note

Both deal volume and value decreased in the fourth quarter. Deal volume (23 deals) was at its lowest point since first-quarter 2010 (23 deals), while values (\$7.5 billion) were at their lowest point since second-quarter 2009 (\$5.3 billion) when the economy was in the midst of a global recession. While deal volume in 2011 exceeded the prior year slightly (114 deals versus 112), deal value saw a significant decline (28.2%) compared with 2010. It should be noted that the decrease in deal value in excess of deal volume was the cause of the decline in average deal values.

Quarterly chemicals deal activity

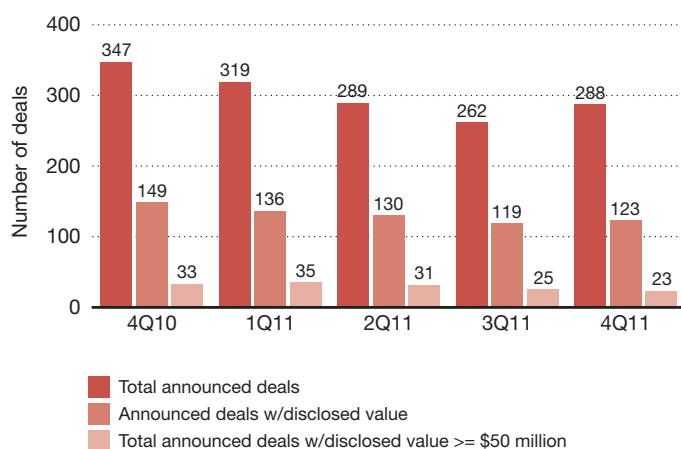
Measured by number and value of deals worth \$50 million or more (1Q09–4Q11)

| | 2009 | | | | 2010 | | | | 2011 | | | |
|-----------------------------|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|-------|-------|
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Number of deals | 9 | 22 | 24 | 30 | 23 | 31 | 25 | 33 | 35 | 31 | 25 | 23 |
| Total deal value (\$ bil) | 11.7 | 5.3 | 7.8 | 8.6 | 22.3 | 16.3 | 50.6 | 24.5 | 43.2 | 14.5 | 16.5 | 7.5 |
| Average deal value (\$ mil) | 1297.2 | 239.1 | 325.6 | 286.6 | 971.0 | 526.6 | 2022.6 | 743.3 | 1233.8 | 468.2 | 661.7 | 325.0 |

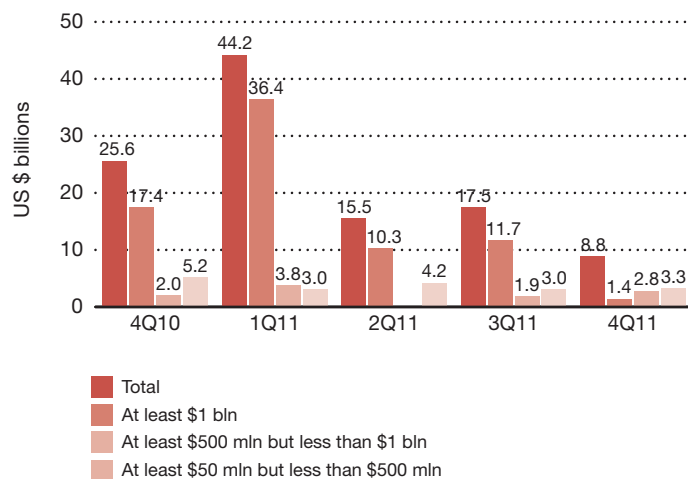
Mega-deal value declines 88% in fourth quarter

The number of deals announced, regardless of size, in fourth quarter 2011 increased almost 10% over the third quarter, from 262 to 288. However, for the same period, total deal value declined, decreasing almost 50%, to \$8.8 billion. This decline in deal value was driven by decreased aggregate deal values for mega-deals (deals valued at \$1 billion or more) in the fourth quarter (\$1.4 billion in 2011 compared with \$11.7 billion in 2010). Deal values excluding mega-deals showed significant improvement, increasing to \$7.4 billion from \$5.8 billion in third-quarter 2011, a gain of 27%.

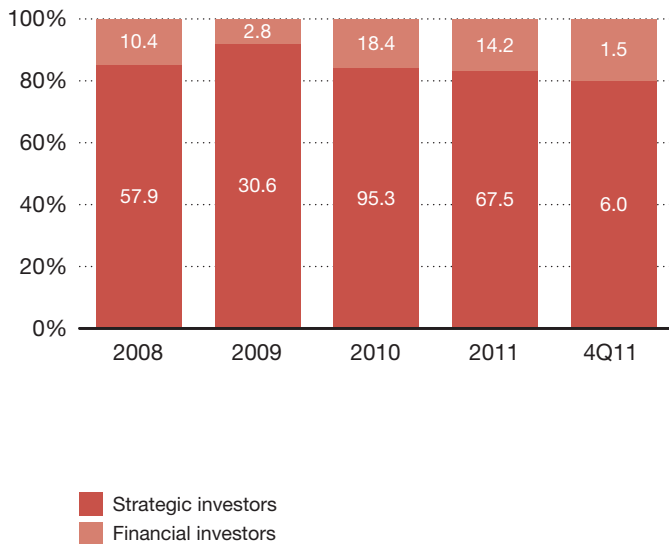
Deal activity by number of deals



Deal activity by total deal value



Deal activity by investor group
Measured by value of announced deals



4Q11 financial deal values increase due to mega-deal

Over the past few years, private equity (PE) firms have faced considerable fundraising challenges, deterring their participation in the deal environment. While credit is available, lending conditions make it difficult to obtain desired returns, given the lower ability to leverage the deals with debt. Until recently, financial investors' involvement remained weak, as availability of credit and low returns constrained M&A activity. In 2010, financial investors' contribution to M&A activity increased to the highest levels since the recession began, setting the stage for further improvement. However, that trend reversed in the third quarter of 2011, as financial investments accounted for only 1.25% of deal activity. While participation increased to 20% in the fourth quarter, it should be noted that of the \$1.5 billion in financial deals announced, \$1.43 billion was from Apollo Group's offer for Taminco NV. Absent this deal, activity by financial investors remains in line with the third quarter (0.86% versus 1.25%).

On an annual basis, financial participation improved, increasing from 16.2% in 2010 to 17.4% in 2011. However, given the current uncertainty in financial markets (e.g., Eurozone sovereign debt issues, the prospects for another recession), it is doubtful that this level of participation by financial investors will continue to increase in the near term as concerns over the global economy continue.

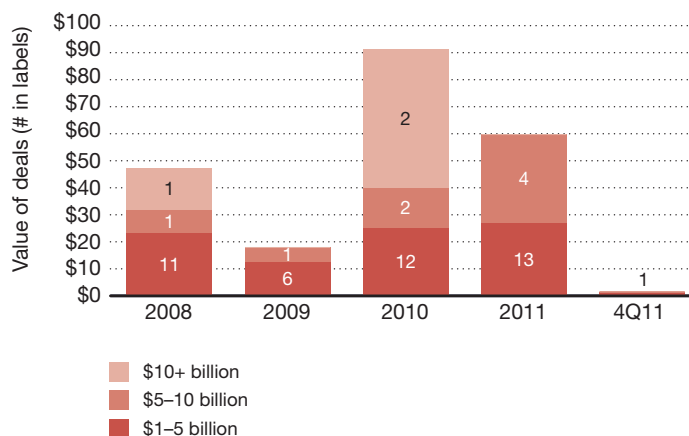
Significant decline in mega-deal activity

There was only one mega-deal in the fourth quarter, compared with four in the third quarter. At the same time, deal value for this fourth quarter mega-deal was only \$1.4 billion, compared with \$11.7 billion for those in the third quarter, a decline of more than 88%.

The sole deal valued at more than \$1 billion this quarter was the December announcement that Apollo Group has signed a definitive agreement to purchase Belgium-based Taminco Group Holdings from affiliates of CVC Capital Partners. The deal is expected to be completed in the first half of 2012. Taminco is the largest independent producer of alkylamines and their derivatives. The agreement ends CVC's exit from Taminco, which the London-based private-equity firm bought for 800 million euros in 2007.

Mega-deal value in 2011 declined significantly as well, compared with 2010. There were 17 deals announced in 2011 with a combined value of \$59.7 billion, compared with 16 deals valued at \$91.4 billion in 2010. This decline of almost 45% is indicative of the slowing deal activity that has been occurring since mid-2011. However, it should be noted that, absent the \$39.7 billion BHP/Potash deal in 2010, mega-deal value would have increased in 2011, so even though mega-deal value fell off in the fourth quarter, it was still relatively strong on an annual basis and exceeded both 2008 and 2009.

Mega-deals (2008-11, 4Q11)



Mega-deals in 2010

| Month announced | Target name | Target nation | Acquirer name | Acquirer nation | Status | Value of transaction in US\$ billion | Category |
|-----------------|--------------------------------|---------------|--------------------------------|-----------------|-----------|--------------------------------------|--------------------------------------|
| Aug | Potash Corp of Saskatchewan | Canada | BHP Billiton PLC | United Kingdom | Pending | 39.76 | Fertilizers & Agricultural Chemicals |
| Dec | Sil'vinit | Russian Fed | Uralkaliy | Russian Fed | Completed | 12.03 | Fertilizers & Agricultural Chemicals |
| Feb | Airgas Inc | United States | Air Products & Chemicals Inc | United States | Withdrawn | 7.65 | Specialty Chemicals |
| Apr | LyondellBasell Industries NV | Netherlands | Creditors | Netherlands | Completed | 6.84 | Commodity Chemicals |
| Sep | JNFL | Japan | Investor Group | Japan | Completed | 4.75 | Commodity Chemicals |
| Jan | Quattor Participacoes SA | Brazil | Braskem SA | Brazil | Completed | 4.13 | Other |
| Feb | Terra Industries Inc | United States | Yara International ASA | Norway | Withdrawn | 4.10 | Fertilizers & Agricultural Chemicals |
| Jun | BorsodChem Zrt | Hungary | Yantai Wanhua Polyurethanes Co | China | Completed | 1.70 | Specialty Chemicals |
| Mar | Styron Corp | United States | Bain Capital Partners LLC | United States | Completed | 1.63 | Commodity Chemicals |
| Oct | Makhteshim Agan Industries Ltd | Israel | China National Agrochemical | China | Completed | 1.54 | Fertilizers & Agricultural Chemicals |
| Nov | Sino Polymer New Materials Co | China | Lumena Resources Corp | China | Completed | 1.47 | Specialty Chemicals |
| Jun | Albaugh Inc | United States | Makhteshim Agan Industries Ltd | Israel | Withdrawn | 1.28 | Fertilizers & Agricultural Chemicals |
| Nov | IFCO Systems NV | Netherlands | Brambles Investments Ltd | United Kingdom | Completed | 1.25 | Commodity Chemicals |
| Dec | Xianglu Petrochemicals(Xiamen) | China | Heilongjiang Heihua Co Ltd | China | Pending | 1.11 | Specialty Chemicals |
| Aug | AWB Ltd | Australia | Agrium Inc | Canada | Completed | 1.10 | Fertilizers & Agricultural Chemicals |
| Feb | Fosfertil | Brazil | Mineracao Naque SA | Brazil | Completed | 1.03 | Fertilizers & Agricultural Chemicals |

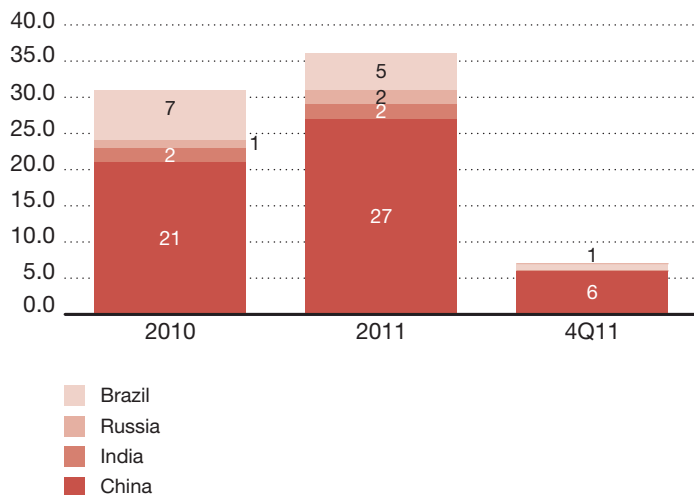
Mega-deals in 2011

| Month announced | Target name | Target nation | Acquirer name | Acquirer nation | Status | Value of transaction in US\$ billion | Category |
|-----------------|--------------------------------|----------------|------------------------------|-----------------|-----------|--------------------------------------|--------------------------------------|
| Jan | The Mosaic Co | United States | Creditors | United States | Completed | 8.88 | Fertilizers & Agricultural Chemicals |
| Mar | Lubrizol Corp | United States | Berkshire Hathaway Inc | United States | Completed | 8.79 | Commodity Chemicals |
| Jul | Nalco Holding Co | United States | Ecolab Inc | United States | Pending | 8.11 | Specialty Chemicals |
| Jan | Danisco A/S | Denmark | DuPont Denmark Holding ApS | Denmark | Pending | 7.21 | Other |
| Apr | Rhodia SA | France | Solvay SA | Belgium | Completed | 4.64 | Specialty Chemicals |
| Feb | PTT Aromatics & Refining PCL | Thailand | PTT Chemical PCL | Thailand | Completed | 3.78 | Other |
| May | International Specialty Prods | United States | Ashland Inc | United States | Completed | 3.20 | Other |
| Feb | Sued Chemie AG | Germany | Clariant AG | Switzerland | Completed | 2.63 | Specialty Chemicals |
| Jan | Elkem AS | Norway | China Bluestar(Group) Co Ltd | China | Completed | 2.18 | Other |
| Mar | Chevron Corp-Pembroke Refinery | United Kingdom | Valero Energy Corp | United States | Completed | 1.83 | Other |
| Dec | Taminco NV | Belgium | Apollo Global Management LLC | United States | Pending | 1.43 | Specialty Chemicals |
| Sep | Exxaro-Mineral Sand Op | Australia | Tronox Inc | United States | Pending | 1.33 | Other |
| Apr | Evonik-Carbon Black Business | Germany | Investor Group | United States | Completed | 1.30 | Specialty Chemicals |
| Jul | Arch Chemicals Inc | United States | Lonza Group Ltd | Switzerland | Completed | 1.20 | Specialty Chemicals |
| Jun | Vale Fertilizantes SA | Brazil | Mineracao Naque SA | Brazil | Completed | 1.13 | Fertilizers & Agricultural Chemicals |
| Feb | Sued Chemie AG | Germany | Clariant AG | Switzerland | Completed | 1.08 | Specialty Chemicals |
| Jul | Vacuumschmelze GmbH & Co KG | Germany | OM Group Inc | United States | Completed | 1.01 | Other |

Mega-deals in 4Q11

| Month announced | Target name | Target nation | Acquirer name | Acquirer nation | Status | Value of transaction in US\$ billion | Category |
|-----------------|-------------|---------------|------------------------------|-----------------|---------|--------------------------------------|---------------------|
| Dec | Taminco NV | Belgium | Apollo Global Management LLC | United States | Pending | 1.43 | Specialty Chemicals |

Distribution of BRIC deals by target nation
 Measured by number of announced deals worth \$50 million or more

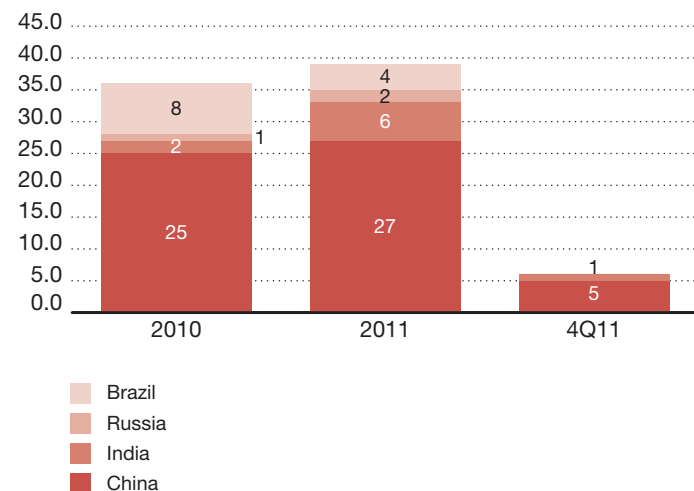


BRIC-affiliated transactions continue to decline in 4Q11

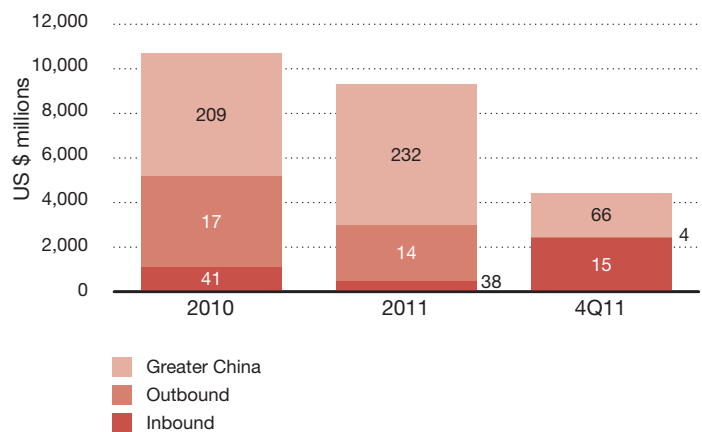
In line with lower deal activity overall in the fourth quarter, the level of activity related to BRIC countries for deals valued at \$50 million or more declined as well. As in the third quarter, China and Brazil generated all of the BRIC-related activity. Of seven deals announced for BRIC targets, six were for targets in China, and one was in Brazil. Of the six deals announced by BRIC acquirers, five were by Chinese companies and one was by a Brazilian company. However, for 2011 as a whole, BRIC activity increased over 2010, from 31 to 36 for targets and 36 to 39 for acquirers.

For the fourth quarter, Chinese deal activity (including those with undisclosed values) grew to 85 deals, an increase of more than 75% from the previous quarter. In line with this increase in activity, deal values improved as well, from \$722 million in third-quarter 2011 to \$4.43 billion in the fourth quarter; the fourth quarter accounted for almost 48% of the year's deal value. For 2011 overall, both volume and activity declined compared with 2010, indicating that recent consolidation volume might be slowing as the Chinese government seeks to cool economic growth.

Distribution of BRIC deals by acquirer nation
 Measured by number of announced deals worth \$50 million or more



Greater China Deals (2010, 2011, 4Q11)



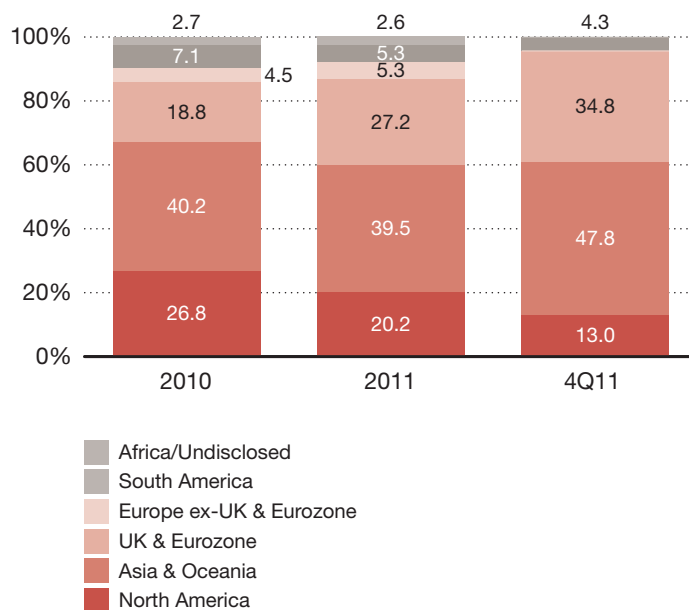
Asia drives deal volume in fourth quarter

During the fourth quarter, targets in Asia drove deal volume and value, assisted by increased activity in China. Deal value in the United Kingdom and Eurozone increased as well, aided by the \$1.43 billion acquisition of Belgium-based Taminco.

For acquirers, deal volume was also driven by Asia and Oceania; however, deal value was driven by the United States, again assisted by the \$1.43 billion acquisition of Taminco by US-based Apollo Group. This could be caused by the relative size of companies in the industry, as well as the propensity for more stringent reporting requirements in the United States (e.g., US public companies are required to disclose M&A transaction values, while Chinese companies are not).

More than half of activity in Asia and Oceania involved Chinese targets, and a considerable portion of this activity involved local market deals, particularly in China, where Chinese companies sought controlling interests in local operations. We expect that this region will continue to drive deal activity, although at a slower pace, as China continues to consolidate inefficient operations.

Regional distribution of deal volume by target region
Measured by number of announced deals worth \$50 million or more



North America drives local and inbound deal value in 2011

North America drove local deal value in 2011, with \$31.5 billion. Deal volume was driven by 41 local deals in Asia and Oceania, many involving China. However, these deals were, on average, substantially smaller than those in North America and Europe.

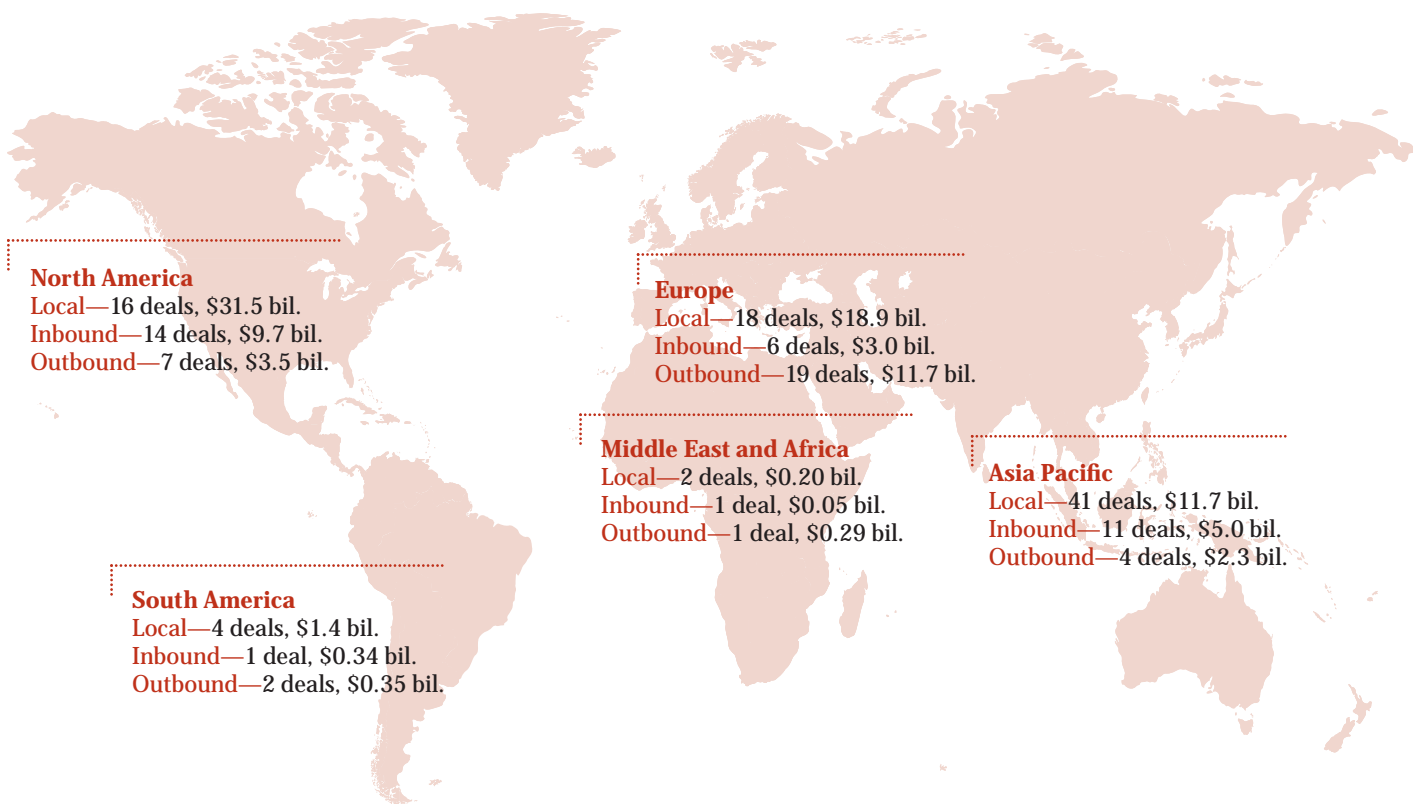
Inbound deal volume and value were also driven by North America, with 14 deals for the year valued at \$9.7 billion; however, inbound deals to the United States could weaken, given the relative strength of the US dollar. Asia's 11 deals were significantly smaller, with a value of only \$5 billion. This difference in average deal value is likely because

companies in the United States (and other developed nations) tend to be significantly larger than those in the developing regions such as China.

Europe, on the other hand, was the primary driver for outbound volume and value, with 19 deals valued at \$11.7 billion in 2011. One driver of this activity might be that European investors seek higher growth rates than may be available from domestic economies, as well as concerns about local economic conditions.

Global chemicals M&A activity

Measured by number and value of deals worth \$50 million or more (2011)



PwC spotlight

In an uncertain global economy, liquidity issues and stakeholder pressures for improved performance have led to an increased focus on divestiture activities in the short term. The need to divest may be an inevitable reality. But a smaller pool of likely buyers and greater scrutiny from banks have resulted in increased levels of buyer due diligence, often prolonging the sales process and sometimes eroding sale prices.

Readying a company for more rigorous buyer due diligence can be critical to preserving the value of a divestiture for the seller. Also important: preparations for mitigating other areas of frequent value loss, including ineffective terms and pricing of TSAs and insufficient infrastructure planning for stranded costs.

How PwC can help

While market conditions have fluctuated dramatically in recent years, extracting top value remains the overriding goal of the divestiture process. The divestiture specialists with PwC's Transaction Services support clients by enabling them to accelerate the speed to market/close, and helping ready companies for the sale, in order to gain the full value of the business in the offering price. Our divestiture professionals, part of a TS team of about 1,000 deal professionals in 16 US cities, can address carve-out financials, standalone audit requirements, identification of potential buyer deal issues, transition service agreements, data room assistance, and structural alternatives designed to help maintain the value of the divestiture.

Divestiture management support:

PwC has put together a winning approach to launching and managing divestitures. We bring a time-tested divestiture and separation methodology and an expansive set of processes, tools, templates, and guides to support the overall divestiture.

Functional divestiture assistance:

PwC is equipped with core competencies in the fundamental infrastructure areas that form the building blocks for capturing (and preserving) value in a divestiture. Our experienced divestiture professionals leverage their subject matter and process experience and expertise to help clients position the business for sale and optimize overall results from transition to transformation.

PwC helps clients ready themselves for rigorous buyer due diligence. We can deliver support, methodology, tools, and templates from start to finish of the divestiture process, assisting with areas including:

- Divestiture strategy
- Candidate acquirer screening
- Sell-side commercial due diligence
- Sell-side financial due diligence
- Define price range from perspective of different buyers
- Financial and tax structuring
- Financial statements and reporting
- Carve-out statements and regulatory filings for regulatory compliance
- People and HR matters, employee benefits
- Operational carve-out analysis
- Insurance risk

- Contract transition
- Divestiture management and separation

PwC deploys a team tailored to each engagement to advise clients. In addition to supporting a speedy, more efficient go-to-market process and close, rigorous divestiture management and due diligence helps clients:

- Execute a smooth transaction, close, and post-close transition
- Minimize risks, avoid costly surprises, and enhance overall control of the process
- Address operation separation issues early, including TSAs and potential stranded costs
- Avoid value deterioration throughout the process and post-close
- Minimize disruptions to both the target and remaining businesses
- Mitigate regulatory, financial reporting, and operational risks
- Optimize transaction value for the seller

Our tailored approach gives clients the appropriate balance of transaction, functional, and industry expertise across the value chain. We start with a client's transaction viewpoint and investment thesis, and then guide a company through assessments and evaluations of divestiture considerations; exclusive or auction situation; planned capital structure and financing sources; timing and deliverables; critical deal and valuation issues; and integration challenges and solutions.

Divestiture and spin-off case study

| | |
|---------------|--|
| Issue | A global chemicals company sought opportunities to divest several business operations that were not central to the organization's core mission. The company urgently needed cash to pay down a lender loan and was required to efficiently conduct a series of divestiture transactions. |
| Action | PwC performed sell-side due diligence on the divested entities, analyzing earnings trends, working capital issues and potential separation concerns. We helped management gain an accurate view of normalized earnings and working capital, and helped prepare the company for buyer diligence by identifying areas of value leakage. PwC also helped the company establish a central divestiture management office and achieve its operational separation goals, including TSAs and tactical IT and people separation. |
| Impact | <p>PwC's involvement helped the company's management and its bankers prepare for the deal negotiations. With the first few weeks of PwC's field deployment, the company:</p> <ul style="list-style-type: none">• Established its divestiture management office• Developed operational and functional Day One separation plans• Conducted separation activities with transition teams <p>The company successfully closed the transactions by the debt call date, raising enough cash to restructure its debt.</p> |

PwC's chemicals experience

Deep chemicals experience

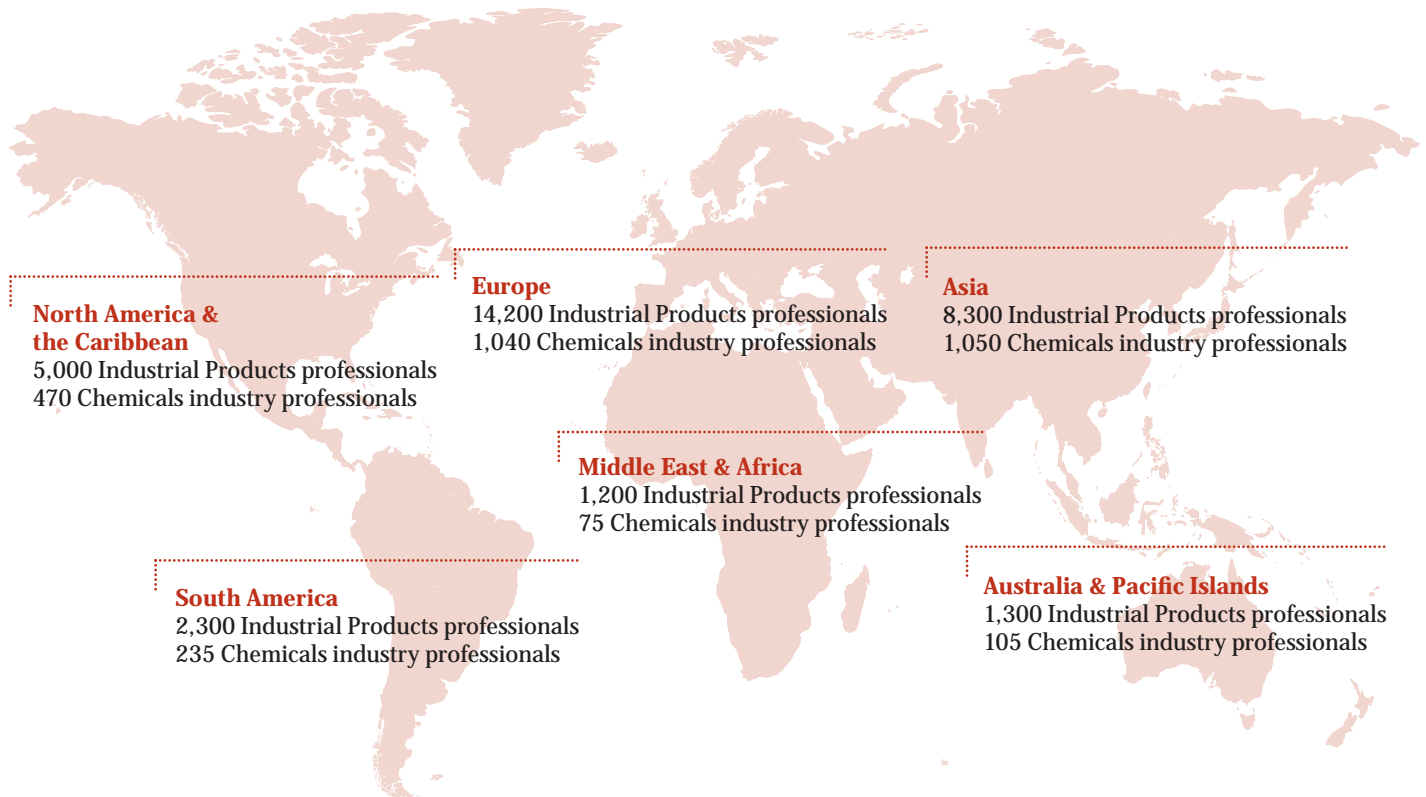
PwC continues to serve the leading market share in the industry. Our Chemicals Industry practice is comprised of a global network of nearly 3,000 partners and client service professionals. Our chemicals team encourages dialogue on emerging trends and issues by holding conferences for industry executives. PwC is also a sponsor of leading industry conferences and frequently authors articles for, or is quoted in, leading industry publications. Our involvement with these organizations represents PwC's commitment to furthering industry dialogue with chemicals industry leaders. Our professionals are concentrated in areas where the chemicals industry operates today and in the emerging markets where the industry will operate in the future.

Quality deal professionals

PwC's Transaction Services practice, with more than 6,500 dedicated deal professionals worldwide, has the right industry and functional experience to advise you on all factors that could affect the transaction, including market, financial accounting, tax, human resources, operating, IT, and supply chain considerations. Teamed with our Chemicals Industry practice, our professionals can bring a unique perspective to your deal, addressing it from a technical aspect as well as from a chemicals industry point of view.

Global connection

PwC's Chemicals Industry practice is part of an Industrial Products group that consists of more than 32,000 professionals, including more than 17,000 providing Assurance services, 8,300 providing Tax services, and 7,000 providing Advisory services.



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PwC's Chemicals Industry practice

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PwC's global Transaction Services practice

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Methodology

Chemical compounds is an analysis of deals in the global chemicals industry. Deal information was sourced from Thomson Financial using the Thomson-defined industry sector of Chemicals and Allied Products for target, and other selected industries acquired by companies that are part of the Thomson-defined Chemicals and Allied Products designation. This analysis includes all mergers and acquisitions for disclosed or undisclosed values, leveraged buyouts, privatizations, minority stake purchases and acquisitions of remaining interest announced between January 1, 2008, and December 31, 2011, with a deal status of completed, intended, partially completed, pending, pending regulatory approval, seeking buyer, seeking buyer

withdrawn, unconditional (i.e., initial conditions set forth by the acquirer have been met but deal has not been completed) or withdrawn. Geographic categories generally correspond to continents with exceptions for Australia (included in the Asia Pacific category), Europe (divided into Western and Eastern categories based upon UN definitions) and the Middle East (defined as a separate category based upon US CIA World Factbook). Where China is referenced in this analysis, it includes both the Peoples Republic of China and Hong Kong, unless otherwise indicated. Where the number of deals is referenced in this analysis it means deals with disclosed values of \$50 million or more, unless otherwise noted.

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