



M & A REPORT

Dynamism in German M&A Market Continues

The latest ZEW-ZEPHYR M&A Index indicates that when it comes to mergers and acquisitions (M&A) involving German companies, things are continuing to go well. In January 2016, the index had a value of 123 points, indicating a dynamic start to 2016. Indeed, 96 transactions took place in January 2016 – more mergers and acquisitions have not been achieved in the same period since January 2013. The latest wave of mergers, which began in April 2011 and which since then has continued almost without interruption, saw a slight decline before now once again increasing. This is reflected in the twelve-month moving average of the ZEW-ZEPHYR M&A Index.



Number of Announced Deals Remains High

The twelve-month moving average of the M&A Index reached its previously highest value of 92 points in October 2014, before falling to 83.4 points up until October 2015. In January 2016, the twelve-month moving average temporarily exceeded the 90 points-mark and currently reads 89.4 points (March 2016). The future outlook for the moving average is also positive, with the number of announced new mergers and acquisitions remaining high.

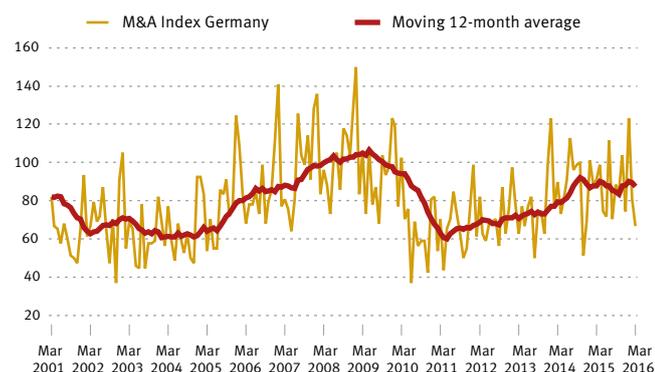
These markets are, however, not only dynamic in terms of the number of foreseen transactions. In addition, a number of mega deals involving German companies are set to take place. Current

rumours suggest a takeover battle in the plant protection product and agrochemical sector which is currently in a process of consolidation. Initially the US American seed and herbicide multinational Monsanto aimed at taking over the CropScience Division of Bayer or BASF after having recently lost out to the Swiss agricultural giant Syngenta, which won the fight to buy out ChinaChem in March 2016 for 38 billion US dollars.

However, meanwhile the hunter was turned into the hunted and Bayer's CropDivision is now trying to take over Monsanto. If Bayer's current bid of 67 billion US dollars will be accepted, it would make it the biggest deal in German history.

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ZEW-ZEPHYR M&A-INDEX GERMANY



Source: Zephyr database, Bureau van Dijk; calculations by ZEW

The **ZEW-ZEPHYR M&A Index** measures the number of M&A transactions completed in Germany each month. It considers only mergers and acquisitions by and with German companies. It does not differentiate between the country of origin of the buyer or partner. This means that both domestic as well as international buyer companies are considered, provided the target companies are active in Germany.

The M&A Report is a biyearly publication issued by the Centre for European Economic Research (ZEW) and Bureau van Dijk (BvD). It uses the Zephyr database to report on current topics and developments in global mergers and acquisitions. The Zephyr database, which is updated daily, contains detailed information on over one million M&A, IPOs, and private equity transactions across the world.



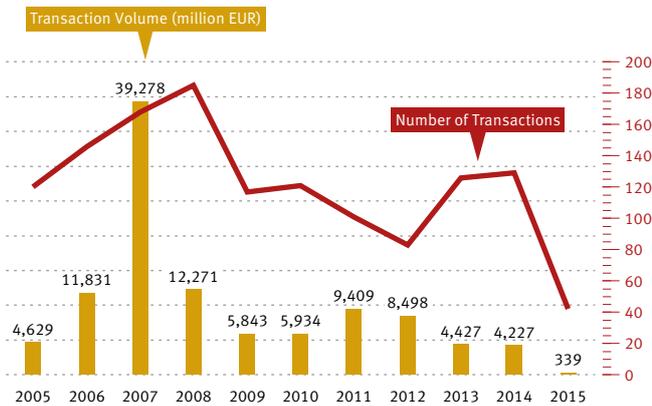
BUREAU VAN DIJK

Mergers and Acquisitions Between Russia and OECD Members Collapse

The number of mergers and acquisitions (M&A) taking place between Russian companies and companies located in countries included in the Organisation for Economic Co-Operation and Development (OECD) have come to an almost complete standstill as a result of the latest political events surrounding the crisis in Crimea. In 2015, only 43 M&A transactions took place between Western and Russian businesses, fewer than ever since data collection began.

In 2014, 129 deals were completed. The latest development therefore equates to a 67 per cent decrease within one year. Even in 2012, the year which previously had the lowest number of M&As on record, 83 mergers and acquisitions took place, double the number seen in 2015.

M&A TRANSACTIONS BETWEEN RUSSIA AND OECD COUNTRIES



Source: Zephyr database, Bureau van Dijk, calculations by ZEW

Commodities Sector in Crisis

Things seem even more drastic if one considers the aggregated financial volume of all completed M&A transactions. Whilst the volume of deals in 2014 totalled 4.23 billion euros, which was already the lowest recorded aggregated transaction value since records began, this value fell by more than 90 per cent in 2015. The financial volume of deals has fallen to 339 million euros. This development is not, however, exclusively a result of political tension. Over the last years, several of the large deals with Russian involvement, such as the acquisition of the Canadian nickel corporation Lionore by the Russian firm Norilsk Nickel in 2007 (3.8 billion euro), or the 50 per cent participation of the Russian oil corporation Rosneft in the Germany-based company Ruhr Öl in 2010 (1.6 billion euros, now in the process of being dissolved), took place in the commodities sector. For some time past, this sector has been in crisis and has just recently undergone significant consolidation.

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M&A Activity in Europe's Water Industry Follows No General Trends

In the past 15 years M&A activity in Europe's water industry has remained steady, with an average of around 21 transactions a year but a notable spike in 2013. By contrast, transaction volumes were considerably higher in the first half of this period, peaking in 2008 only to decline in the following years. (It should be noted that volume data are incomplete, as the values of some deals were not disclosed.)

The highest level of transaction volume in 2008 was primarily the result of Gaz de France's 45.5-billion-euro purchase of the French conglomerate Suez. With the state acting as principal shareholder, the creation of GDF Suez was meant to fend off a hostile takeover bid by the Italian multinational Enel. As part of the deal, the water and waste division of Suez, valued at 7.4 billion euros, was split off to form Suez Environnement. Of the other transactions during the observation period, only three come close to the GDF

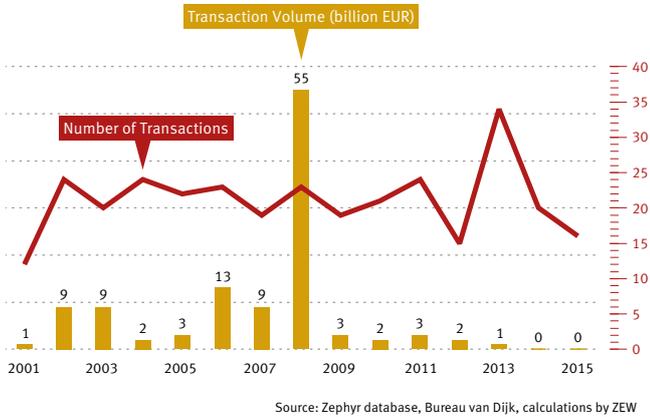
deal in terms of volume, and all involve British companies: the 2006 acquisition of Thames Water Holding by Kemble Water (11.9 billion euros), the 2008 purchase of the Kelda Group by Saltaire Water (7.4 billion euros), and the 2007 takeover of Southern Water by Greensands Investment (6 billion euros).

UK Leads Transactions

Great Britain saw the greatest number of mergers and acquisitions in Europe's water industry, taking in 18 per cent of the total from the past 15 years. Rounding out the top five was Spain (17 per cent), Italy (15 per cent), Germany (10 per cent), and France (8 per cent). Also worthy of note is that Germany's average transaction volume for disclosed deals after 2008 was 661 million euros, far greater than that of Great Britain, with the next highest



M&A ACTIVITY IN EUROPE'S WATER INDUSTRY



average at 355 million euros, and that of Spain and France, each in the vicinity of 120 million euros. Two deals were responsible for Germany's results: first, the capital-intensive purchase of Thüga AG by the municipal consortium Integra Energie in the year 2009

for 2.9 billion euros, and second, the gradual recomunalisation of Berlin's water utilities between the years 2012 and 2013, totalling 1.2 billion euros.

On the whole, M&A activity in Europe's water industry has not followed any general trends. This is due to the diversity of the sector. Unlike the power industry, the water sector has not undergone an EU-led liberalisation of its natural monopoly, and the ratio of private to state-owned companies differs from one country to the next. England and France have the highest levels of privatisation, with England's water industry completely transferred to the private sector. In most other EU states, public-sector enterprises dominate the industry.

In the year 2014 the European Parliament considered a petition by the citizens' initiative Right2Water demanding that the European Union safeguards the UN-recognised right to water and sanitation by excluding water services from liberalisation (among other measures). This citizens' initiative has, however, not found its way into legislation yet, and it's hard to predict what the future holds for the water sector.

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US Megadeals Play Vital Role in World Oil and Gas Industry

Three megadeals closed in the US within the past year ensured that the global transaction volume for merger and acquisition activities in the oil and gas sector remained high. With a global transaction volume of 151 billion euros, 2014 has been a record-breaking year but with 148 billion euros the year 2015 remains only close behind. With deal volumes of 20, 18 and 16 billion euros respectively, the three megadeals executed in the

US made up for more than a third of the total global transaction volume in 2015. Indeed, these transactions were the third, fourth and fifth largest transactions ever recorded in the American market.

Largest Takeover for Ten Years

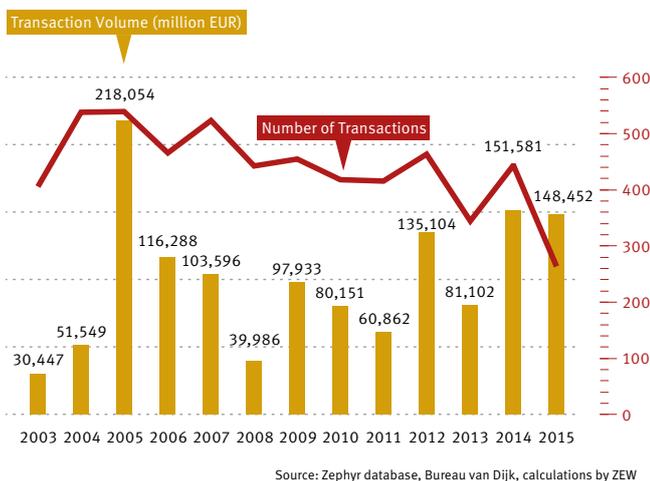
However, the most recent megadeal in this sector was recorded on European soil (not included in the graph). With a value of around 60 billion euros, the takeover of the Reading-based English BG Group by Royal Dutch Shell in February 2016 was the largest takeover in the oil and gas sector for ten years. While the transaction volume remains high, the number of transactions reported is, however, clearly decreasing.

After 444 transactions in 2014, only 264 deals were documented in 2015. After more than one year of depressed oil and gas prices, the sector has now entered a new period of uncertainty and realignment. As no major price increases are expected in the medium-term, it seems that corporations prefer to hold onto their cash, rather than engage in risky ventures.

In addition, especially American fracking firms have incurred large debts as a result of significant investments made in recent years. In case of a takeover, debts must be taken over by the acquirer, which clearly inhibits transfers. This development will result in a cooling-down of the market following the latest megadeals.

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M&A ACTIVITIES IN THE OIL AND GAS SECTOR WORLDWIDE



Temporary End to Major Acquisitions in German Property Market

German real-estate companies' tendency to engage in increasingly large acquisitions seems to have come to an at least temporary end. In February 2016, shareholders of the Frankfurt-based real-estate company Deutsche Wohnen voted against a takeover offer from the market leader Vonovia, based in Bochum (formerly Deutsche Annington). The takeover of the second largest real-estate company would have been the largest transaction of all time in the German property market, and would have seen further expansion of the market leader Vonovia.

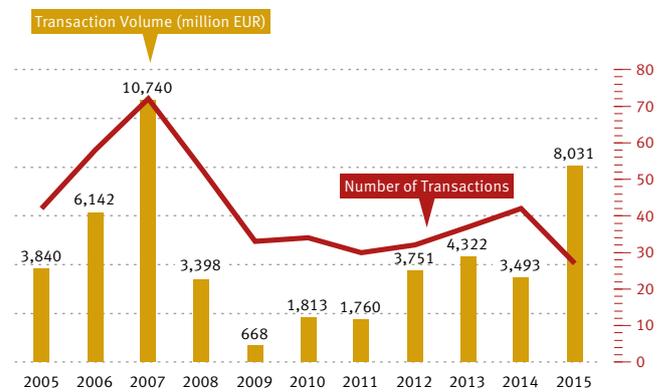
Financial Crisis Brought Activities to Standstill

Following the boom in the mid-2000s, the financial crisis brought acquisition activities in the German property market to a near standstill. The number of transactions taking place in 2009, during the financial crisis, was only 33 per cent, whilst the transaction volume totalled only 668 million euro. This constituted respective falls of 54 and 94 per cent from the levels seen in 2007, the most active year in the German property market.

Following the crisis, the number of mergers remained low in comparison to pre-crisis levels. The transaction volume, however, showed significant increases. This development was above all a result of the expansion activities undertaken by Deutsche Annington and Deutsche Wohnen. Deutsche Annington's takeover of its competitor Gagfah for 4.3 billion euro not only caused a stir in the property market, but also contributed more than half of the total transaction volume for 2015. The largest German real-estate corporation, Vonovia, developed as a result of this merger.

Deutsche Wohnen was also able to significantly increase its market share through its takeover of GSW Immobilien for 1.7 billion euros, thereby establishing itself as the second largest competitor in the property market. The failed merger between

M&A ACTIVITIES IN THE GERMAN PROPERTY MARKET



Source: Zephy database, Bureau van Dijk, calculations by ZEW

Vonovia and Deutsche Wohnen is the second large acquisition to have failed in the last six months. In October 2015, a possible takeover of LEG by Deutsche Wohnen for an estimated value of around eight billion euros also failed as a result of objections raised by the shareholders of Deutsche Wohnen.

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Apartment block of Deutsche Wohnen in Berlin.

