Journal of Business Chemistry

Practitioner's Section

M&A since Y2K - An overview of chemicals deals involving BRIC countries in the new millennium

Bernd W. Schneider*, Stanislav Plakun**, Tim-Frederic Slooth***

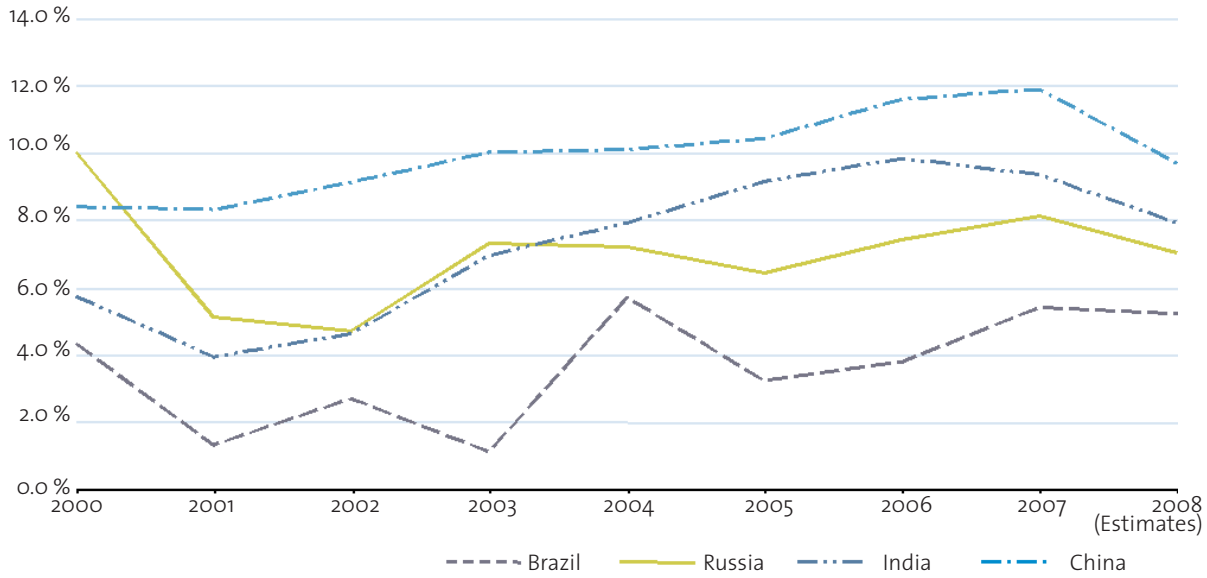
* PricewaterhouseCoopers Corporate Finance Beratung Gmbh, Marie-Curie-Straße 24-28, 60438 Frankfurt am Main, Germany, bernd.w.schneider@de.pwc.com
** PricewaterhouseCoopers Corporate Finance Beratung Gmbh, Marie-Curie-Straße 24-28, 60438 Frankfurt am Main, Germany, stanislav.plakun@de.pwc.com
*** PricewaterhouseCoopers Corporate Finance Beratung Gmbh, Marie-Curie-Straße 24-28, 60438 Frankfurt am Main, Germany, tim-frederic.slooth@de.pwc.com

Brazil, Russia, India and China, also known as BRIC countries or the BRICs, are among the fastest growing economies in the world and have excellent raw material deposits for the chemicals and related industries. By 2007 the BRICs' combined weight in the global economy exceeded 15 % of GDP (O'Neill, 2007). Along with their fast integration into the international trading scheme, many companies within the BRICs emerged as global players, thereby becoming competitive on a global scale. International investors have thus been attracted and driven up the number of takeovers of BRIC-enterprises. More recently, BRIC companies are themselves started acquiring enterprises abroad, e.g. in order to gain access to new markets, know-how, feedstock and/or to increase the economies of scale (Schmiele/Sofka, 2008). Chemicals are among the key industries within the BRIC economies and have been impacted both by the generally observable M&A momentum and by the chemicals specific global reorganization process. The aim of this paper is to provide an overview of M&A deals and trends in the chemicals subsectors involving BRIC countries since the year 2000 ("Y2K").

Introduction

China, for some industries known as the "world's workbench", can apply 800 million potential consumers to cause a strong and rapidly growing demand for a vast variety of goods. Brazil is regarded to be rich of mineral resources like iron ore and has a competitive edge on the agricultural side. India is the world's largest producer of Active Pharmaceutical Ingredients ("API") for generics. Like China, India bears a huge market potential due to the attractive potential customer base. Due to the large natural gas and crude oil reserves Russian chemical companies are equipped with comfortable access to (petro)chemical feedstock. In all countries the GDP growth rates exceed clearly those of the developed countries and as well those of most of the emerging economies (see figure 1). The rapidly developing economies drive up the country's industrial output along with internal chemical consumption. The increasing economic wealth and the high GDP growth rates of the BRIC countries have been calling growing attention of many Western chemical companies as well as rendering the financial power to domestic chemical companies for the purpose of acquiring foreign companies. (O'Neill, 2007)

Figure 1 GDP growth rate in BRIC countries in 2000-2008



Source: IMF World Economic Outlook, October 2008

Table 1 Key indicators of chemical industries of BRIC countries in 2006

	Brazil	Russia	India	China	BRIC Total	World´s Share
Output, EUR billion	64.99	25.36	54.63	204.56	349.53	16.1 %
Consumption, EUR billion	70.62	28.67	54.27	243.80	397.36	18.0 %
Export, EUR billion	7.90	8.76	12.42	32.98	62.06	6.5 %
Import, EUR billion	13.53	12.07	12.06	72.21	109.87	11.2 %

Source: CEFIC, Global Insight, VCI

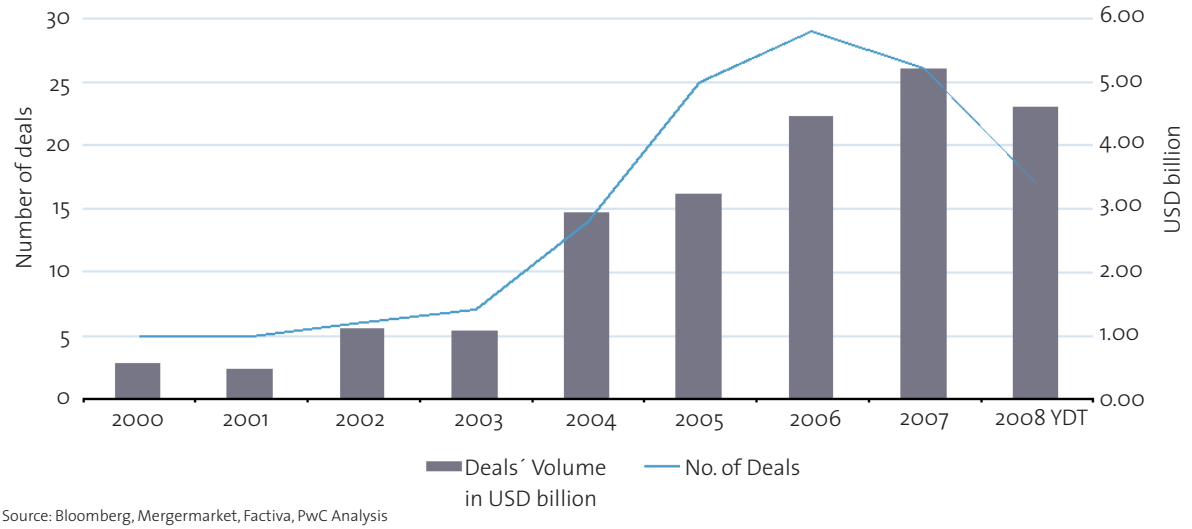
Chemical Industry of the BRIC Countries

The Chinese chemical industry is the largest of the BRIC countries and the second largest worldwide. It accounts for about 9.5 % of global chemicals revenues in 2006. Due to the rapidly developing Chinese economy (GDP growth rate 2007: 11.9 %, figure 1), China is also one of largest importers of chemical products in the world and experiences significant chemicals trade deficit (VCI, 2008, table 1). The core segments of the Chinese chemical industry are basic chemicals, fertilizers & agrochemicals and commodity polymers. Those products primarily serve the strong demand of the domestic agriculture, automotive and construction industries. There are more than ten thousand chemicals enterprises on the Chinese territory, most of them manufacturing only one or two products.

Looking beyond China, the core chemical segments of the BRICs are principally similar, though notably smaller compared to China. In Russia the majority of the industrial assets are distributed among the large oil companies and further raw material players. Despite having access to chemical feedstocks, the chemicals output is rather low, caused by a fairly old and technological outdated asset base. Furthermore the impact of political risks in Russia might deter potential investors.

The chemical production base in Brazil can be characterized by a strong focus on petrochemicals, since Brazil owns crude oil

Figure 2 GDP growth rate in BRIC countries in 2000-2008



Source: Bloomberg, Mergermarket, Factiva, PwC Analysis

resources. Furthermore, Brazil is the world biggest producer of Ethanol from renewable resources like sugar cane. Brazil exhibits a large trade deficit, e.g. due to a low capacity of the domestic market for production of fine chemicals and their high internal demand.

One of the reasons why India is the only country among the BRICs without chemicals trade deficit, lies in the capability of the Indian enterprises to balance between serving internal demand and export activities. With India being the world's largest generics manufacturer there's a strong fine and partially specialty chemicals industry. Cost disadvantages caused predominantly by relatively high energy costs and import duties continue to be the main challenges of the Indian chemical industry.

Analysis and key findings

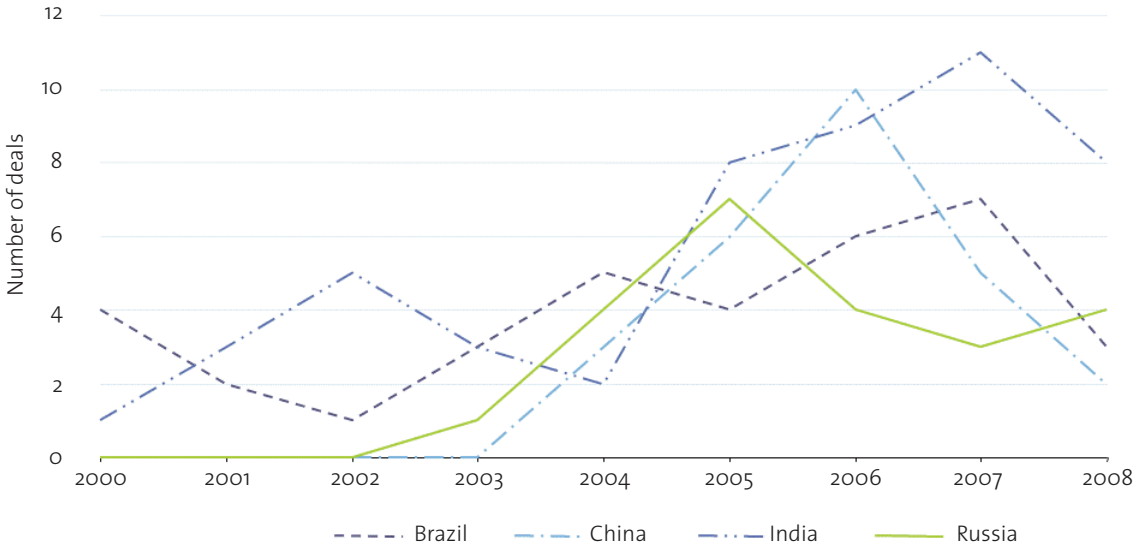
Research approach

The data for our analysis were collated using following databases: Mergermarket, Bloomberg and Factiva, as well as websites of relevant enterprises. We analysed all available information about M&A transactions within the chemical industry with a deal value over USD 20 million involving at least one of the participating parties (buyer and/or seller) being headquartered in a BRIC-country. Transactions in the oil and gas exploration and oil refining business were excluded as well as biotechnology and pharmaceutical deals. The analysis time frame covers deals that had been completed between January 1st 2000 and October 31st 2008.

Number and value of completed deals

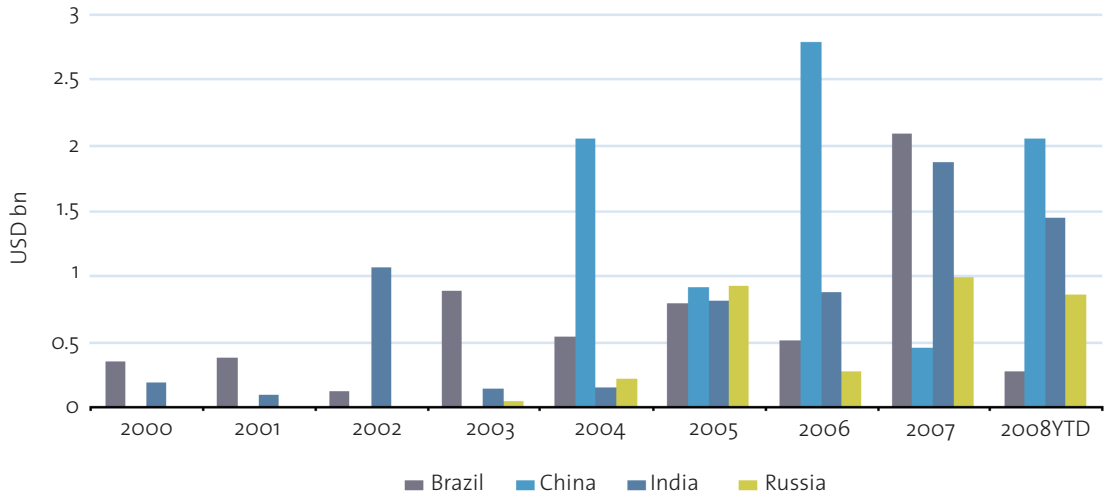
134 deals worth USD 20 million or more were recorded in the chemical industry of the BRIC countries since the year 2000 (see figure 2). At large, both the volume and the total deal value grew considerably until 2007. In contrast to the industrial economies of Europe and the USA, characterized by a large number of deals and a high deal volume (PwC, 2008), only few deals - mainly domestic or inbound - could be observed in BRIC Countries. This grounds on the relatively weak economic development level of the BRIC's in 2000. From 2001 to 2003 the number of deals and the transaction values continued to be low, caused mainly by the global economic downturn as consequence of the "dot-com bubble" crash and the Asian financial crisis from 1997 to 1999 (O'Neill, 2007). Beginning with the global picking up

Figure 3 Number of M&A deals of the chemical industry in each BRIC country in 2000-2008YTD



Source: Bloomberg, Mergermarket, Factiva, PwC Analysis

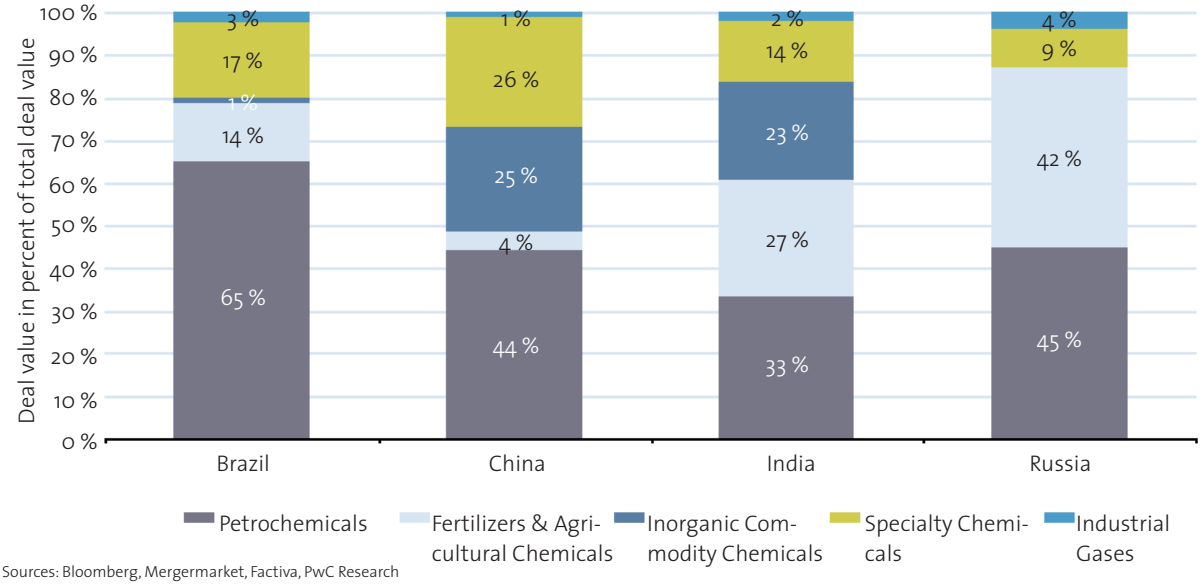
Figure 4 Volume of M&A deals of the chemical industry in each BRIC country in 2000-2008YTD



Source: Bloomberg, Mergermarket, Factiva, PwC Analysis

of momentum in world economy including chemicals at the end of 2003, M&A activities increased in the following years with respect to volumes and numbers of deals. Continuously low interest rates, readily available investment opportunities and available private equity funds together with relatively low enterprise values have contributed to that increase. In 2007, the deal volume (exceeding USD 5 billion) peaked, dominated by several mega deals with transaction volumes higher than USD 1 billion (e.g. the acquisition of Indian Petrochemicals by Reliance). Compared to the worldwide M&A activity in the chemical industry with an overall deal value of more than USD 100 billion (PwC, 2008), M&A in BRIC countries represent only a minority. In 2008YTD there was still high activity with 16 reported deals, thereof two large deals with a value

Figure 5 GDP growth rate in BRIC countries in 2000-2008



Sources: Bloomberg, Mergermarket, Factiva, PwC Research

above USD 1 billion. Looking at the second half year until now, only two relatively small deals were reported. One key reason for this trend might be the continuing impact of the financial crisis, making higher risk investments more expensive.

Figure 3 shows the number of deals in the chemical industry in each of the BRIC countries. In Brazil, the deals numbers grew relative steadily between 2000 and 2007, whereas the situation in India is more volatile. Especially from 2004 to 2005 there's a strong increase of deal numbers. As to Russia, the first deal is reported in 2003 and growing up to eight deals in 2005, while afterwards remaining rather constant (about 4 deals p.a.). Transactions in China occurred in 2004 and significantly increased until 2006. When looking at 2008, the deal number majorily turns down (except Russia).

A closer look at the transaction values for each BRIC country proofs, that the values vary from year to year in the observed period due to several acquisitions of petrochemical companies with disproportionately large deal sizes. The high aggregate transaction values for China in 2004 and 2006 are mainly driven by acquisitions of Sinopec, China's largest oil and petrochemical corporation, which reinforced its downstream operations into higher margin value chain steps. The value in 2008 is caused by principally one large deal (conducted by Qinghai Digital Net Invest). The main driver for the fairly high values in 2002 and 2007 in India is Reliance Industries. Reliance acquired Indian Petrochemicals and became the leading chemical company in India. As to Brazil, Braskem, a financial investor consortium and Lanxess were determining the large deal volume in 2007 (with Braskem also in 2003).

Chemical subsectors of M&A transactions

Figure 5 shows a percentage-breakdown of the deal values according to the chemical subsectors for each of the BRIC countries, clearly pointing out the dominance of the petrochemicals sector. Especially in Brazil, 65 % of the aggregate deal values have to be allocated to that sector. Petrochemicals also account for the largest percentage of the total sum in the rest of the BRIC countries, though being not as dominant as in Brazil. For the fertilizers and agrochemicals the situation is different. Particularly in Russia (44 %), but also in India (27 %) the deal value contribution of that subsector proves to be

Table 2 Summary of large deals (> USD 500 million) in the BRIC countries in 2000-2008YTD

Date Announced	Target Name	Target Nation	Acquirer	Acquirer Nation	Value of transaction in US$ billion	Category
Jan-08	Qinghai Salt Lake Ind. (Grp) Co	China	Qinghai Digital Net Invest	China	1.98	Inorganic Commodity Chemicals
Dec-04	Sinopec Group Chemical Assets	China	Sinopec Group	China	1.49	Petrochemicals
Mar-07	Indian Petrochemicals Corp	India	Reliance Industries Ltd	India	1.13	Petrochemicals
Jan-08	General Chemical Industrial	United States	Tata Chemicals Ltd	India	1.01	Inorganic Commodity Chemicals
Oct-07	CIA Petroquimica	Brazil	Braskem SA	Brazil	0.76	Petrochemicals
May-07	JSC Salavatnefteorgsintez	Russia	Gazprombank JSB	Russia	0.74	Petrochemicals
Jul-02	OPP Quimica SA	Brazil	Braskem SA	Brazil	0.63	Petrochemicals
Feb-06	Sinopec Yangzi Petrochemical Co. Ltd.	China	Sinopec Group	China	0.61	Petrochemicals
Oct-06	Rhodia (Silicone division)	France	China National Bluestar Corp.	China	0.50	Specialty Chemicals

significantly high. Especially the deals in Russia have been supported by a strong, export orientated, but still fragmented fertilizer industry and large mineral resources, e.g. potash. Deals involving manufacturers of inorganic commodity chemicals like soda ash were mainly reported in China and India. Regarding the deal values for specialty chemicals, China is the country with the highest aggregate transaction value, which is caused by a government's programme to strengthen the country's specialty chemicals sector. The investigation towards industrial gases deals revealed only a few small deals in all BRIC countries.

Large deal summary (> USD 500 million)

About ten deals with a value larger than USD 500 million could be tracked. These deals reflect once more the domination of the inorganic commodity chemicals and petrochemicals sectors in the BRIC countries. It is interesting to note that the only large deal in the specialty chemicals subsector is outbound with the target in Europe.

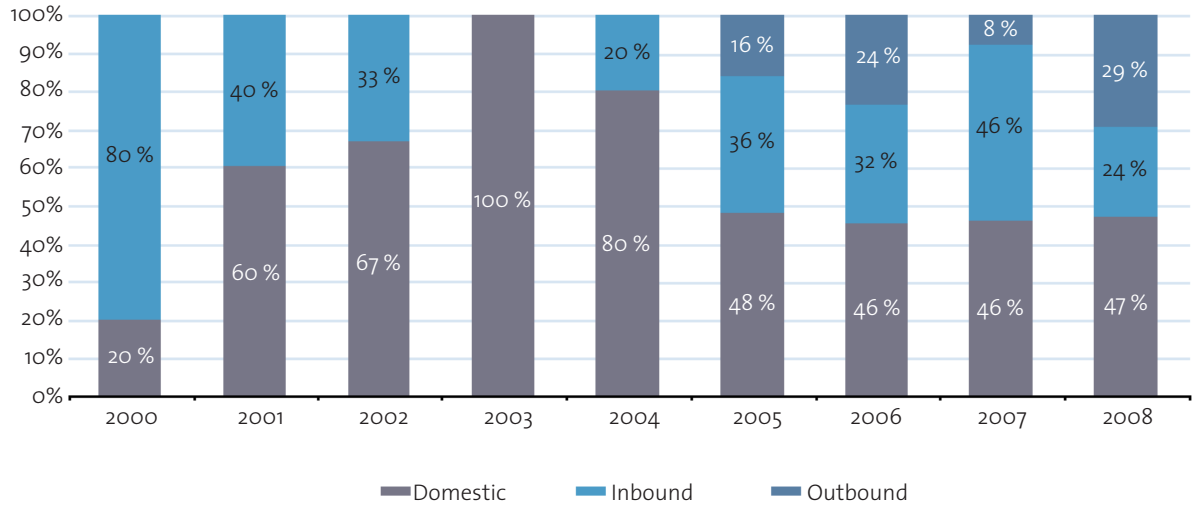
Qinghai Digital Net Investment Share Holding Group Co. Ltd. (QD) merged with Qinghai Salt Lake Industry (Group) Co. Ltd., a soda ash manufacturer, in exchange for slightly less than three billion new QD ordinary shares, valued at 14.28 billion Chinese Yuan (USD 1.98 billion), in a reverse takeover transaction. The shares were valued based on QD's closing stock price of 4.8 Yuan (USD 0.666) on January 24, the last complete trading day prior to the announcement. Upon completion, QD was to become the going-forward entity.

China National Petrochemical Corporation (Sinopec Corporation), China's largest oil & petrochemicals corporation, built on its downstream operations with the acquisition of various petrochemical assets from its parent, Sinopec Group, in an asset swap valued at USD 1.5 billion.

Reliance Industries, Indian's largest private company, acquired Indian Petrochemicals Corp (ICPL) and became the dominating oil & gas, refining and petrochemical company in India. ICPL was India's second largest petrochemical firm.

In October 2007, Braskem - the largest

Figure 6 Domestic vs. cross-border deals in the chemical industry of the BRIC countries 2000-2008YTD



Source: Bloomberg, Mergermarket, Factiva, PwC Analysis

Brazilian petrochemicals company - gained access to the petrochemicals producer CIA Quimica via the conjoint acquisition of the oil and chemical conglomerate Ipiranga. The acquirers' consortium comprised Braskem, Petrobras and Ultrapar.

Some years earlier, in July 2002, Braskem incorporated polyethylene producer OPP Quimica in order to strengthen its downstream business in the context of the total reorganisation of the whole company.

Sinopec Group purchased back its listed subsidiary Sinopec Yangzi Petrochemical Co. in order to deliver its promises to restructure its assets, thereby strengthening the competency of its core business.

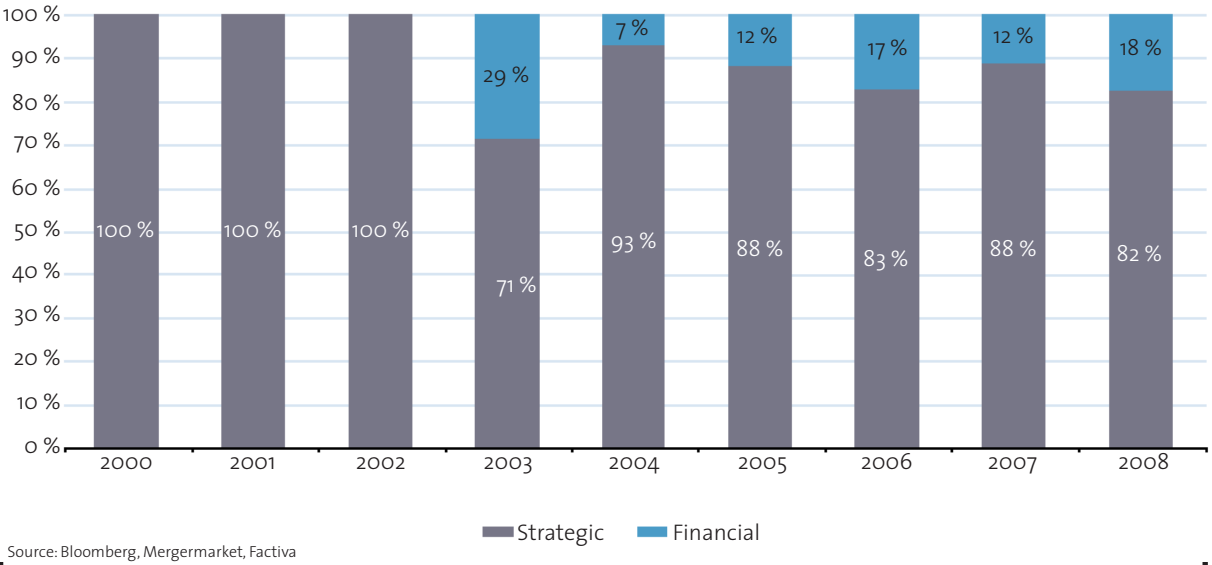
Gazprombank, a subsidiary of the Russian Gas Company Gazprom OAO, has acquired 54 % stake in Salavatnefteorgsintez OAO, a Russia based petrochemical and refining facility, from the government of the Republic of Bashkortostan for a consideration of RUB 19 billion (USD 736 million).

China National BlueStar (Group) Corporation, a subsidiary of ChemChina, took over the Silicone division of Rhodia, a listed France based specialty chemicals company, for a consideration of USD 504 million. The acquisition is supposed to enable BlueStar to expand the domestic silicon production scale, its industrial network and to gain competitive advantage on a global scale.

Ownership classification: domestic vs. cross-border deals

The observation of consolidated data for the BRIC countries shows that in 2000 80 % of the deal numbers were inbound (figure 6). In the following years the importance of domestic deals gained more importance with its climax in 2003 where all deals were domestic. Since 2004 the number had fallen down and has been remaining constant at 46-48 % from 2005 YTD while those of cross-border transactions kept taking their place. With reference to inbound deals, there is an increasing activity balancing between about 20 % and over 40 % from 2004 to 2008YTD. From 45 inbound deals the majority of the target companies was situated in India and Brazil. Looking at 2005, the first outbound deals were reported and grew up to 29 % of total deal number in 2008YTD. The dominating country for outbound deals is India since 15 of the 18 reported outbound deals were operated by Indian companies. The overall proportion between inbound and outbound deals is about 3 to 1. This reflects the strong dependence of the BRIC countries on foreign capital investments as engine for the strong economic growth in the BRICs. The main reason for outbound deals is the gain of know how, e.g. the acquisition of Rhodia's silicone division by China National Bluestar, or the access to new mar-

Figure 7 Strategic vs. financial investors of M&A deals in the BRIC countries 2000-2008YTD



Source: Bloomberg, Mergermarket, Factiva

kets and resources (e.g. the acquisition of General Chemical Industrial by Tata Chemicals).

Investor Types

Strategic investors dominate the consolidated M&A landscape throughout the observed period. The share of financial investors increased just slightly during the last several years (see figure 7). As to the chemical subsectors, a dominating subsector for financial investor could not be observed. Looking at the countries, the majority of the deals including financial investors took place in India with 7 of 17 reported deals.

Outlook and Summary

This study examined M&A activities in the chemical industries of the BRICs from January 2000 to October 2008. We found that the number and value of deals increased significantly throughout the observed period in every BRIC country. The petro- and agrochemicals segments resulted to be most affected by M&A activities in all BRIC countries. Further affected subsectors strongly differ from country to country. While analysing the investor types, we found that strategic investors clearly prevailed in the observed M&A transactions. The number of financial investments, however, has been playing a minor role.

Domestic transactions dominated the landscape in terms of the ownership nationality classification as a result of consolidation which took place within the industries. Despite that fact, shares of cross-border transactions have been growing over the last seven years. International companies (primarily investors from the US and Europe) participated more actively in acquisitions of chemical enterprises in the respective emerging economies. However, it can be seen that an increasing number of enterprises from the BRICs also took the opportunity to acquire chemical companies abroad.

The recent economic downturn indicates a slowdown of the consolidation commenced in the recent years. In the long term, the trend towards internationalisation of the globally still fragmented chemical activities can be expected to continue and BRICs might play a key role.

Additionally, we would like to note that the statistical coverage of M&A deals in Emerging Markets is still developing. Therefore it can be assumed that the data basis for M&A deals might be comparatively poor, and the real number and value of completed deals can be expected to be higher.

References

O´Neil, Jim (2007):"BRICS and Beyond" http://www2.goldmansachs.com/ideas/brics/book/BRIC-Full.pdf

PricewaterhouseCoopers LLP (2008): "Chemical compounds - Global Chemicals mergers and acquisitions analysis third quarter 2008" http://www.pwc.co.uk/pdf/chemical_compounds_q3_2008.pdf

Schmiele, A./Sofka, W. (2008): „M&A-investments from Brazil, Russia, India and China in Germany", in M&A Review, July 2008

Verband der Chemischen Industrie VCI, (2007): "Chemiewirtschaft in Zahlen 2007" http://www.vci.de/Default2~cmd~get_dwnld~docnr~81447~file~CHIZ_2007.pdf.htm

