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CHINESE MERGERS AND ACQUISITIONS ON THE EUROPEAN MARKET IN THE CHEMICAL SECTOR

CHIŃSKIE FUZJE I PRZEJĘCIA NA RYNKU EUROPEJSKIM W SEKTORZE CHEMICZNYM

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Summary: The article focuses on the case study analysis of selected Chinese companies which concluded agreements such as mergers and acquisitions on the European market in the chemical sector between 2005 and 2015, that is: the agreements between BorsodChem Zrt and Wanhua Industrial Group, as well as between Pirelli and National Chemical Corp. The purpose of the paper is to recognise the premises and results of those investments. Therefore, first specifics of the Chinese chemical sector and the characteristics of the analysed companies have been presented. Then the analysis of the premises, the strategic goals, as well as the course of the agreements and the implications of these forms of integration, in the context of shaping the economic strength, position and direction of strategic growth of companies on the European market have been presented.

Keywords: mergers, acquisitions, M&A, Chinese companies, chemical sector.

Streszczenie: Artykuł koncentruje się na opartej na metodzie case study analizie wybranych przypadków porozumień typu fuzji i przejęć, dokonanych przez firmy chińskie na europejskim rynku, w sektorze chemicznym, w latach 2005–2015, tj. na porozumieniu BorsodChem Zrt i Wanhua Industrial Group, a także Pirelli i National Chemical Corp. Celem artykułu jest rozpoznanie przesłanek oraz skutków tych inwestycji. Punktem wyjścia do analizy przypadków było przedstawienie specyfiki sektora chemicznego oraz charakterystyki badanych firm. Następnie podjęto analizę przesłanek, strategicznych celów, przebiegu oraz skutków nawiązania tych form integracji w kontekście kształtowania siły ekonomicznej, pozycji oraz kierunków rozwoju strategicznego firm na rynku europejskim.

Słowa kluczowe: fuzje, przejęcia, chińskie przedsiębiorstwa, sektor chemiczny.

1. Introduction

Facing the growing challenges of internationalization and globalization, Chinese companies today take on various forms of expansion into foreign markets. In these efforts an important role is being played by agreements such as mergers and acquisitions, which are considered an effective way to increase and strengthen companies position on the market. Understanding the dynamics of the ever-changing global market is, in turn, possible only with the ability to properly identify the market and follow its development trends.

The purpose of the paper is to recognise the premises and results of the largest investments, in terms of value, of merger and acquisition type, that were conducted between 2005 and 2015 by Chinese enterprises in the chemical sector on the European market, i.e. the agreements between BorsodChem Zrt and Wanhua Industrial Group, as well as between Pirelli and National Chemical Corp.

The research applies the case study method within which empirical data that show functioning and financial results of operations of analysed companies are used. Conducted analyses were complemented using qualitative approach, based on the opinions of experts specialised in the issues of business models of Chinese enterprises selected from the press. Specialist literature, mainly foreign, concerning the forms of international expansion of Chinese enterprises is also used in the interpretation of the results of conducted research.

It should be emphasized that the problem taken in this article is rooted in international business theories, mainly in Dunning's international production theory [Dunning 1980]. The explanation for the merger and acquisition mechanism can be found in the context of Dunning's eclectic international production theory, where the author presents the three main premises and determinants of foreign investment undertaking by companies, i.e. having some advantage over competitors, namely, ownership advantage, internalization advantage and location advantage. To date, the competitiveness of Chinese enterprises has been based on the production of labour-intensive, low-value goods. At present, however, this competitiveness is not limited to traditionally used methods and areas anymore. Chinese players are successfully absorbing new foreign technologies, becoming a strong competitor for companies from developed countries. Labour costs, interest rates, exchange rates and economies of scale are the strongest determinants of the competitiveness of Chinese enterprises.

The adaptation by Chinese companies of the world-wide patterns associated with the way of business conducting and quality of products offered can lead to increased acceptance in international markets, increased share of Chinese companies in those markets, and increased sales volumes and hence profitability as well as overall reputation of Chinese companies.

2. Characteristics of Chinese chemical sector

Chemical industry is characterised by diversified profile of conducted manufacturing activity. It must be emphasised that China has abundant sources of raw materials. Furthermore, the country is increasing production of artificial fertilisers, which is reflected in their position of the largest manufacturer of nitrate fertilisers and one of the largest producers of phosphate fertilisers. The growth of importance of plastics production and development of refining industry, stimulated by growing oil extraction is also observed. It is estimated that currently Chinese refineries have the capacity of 100 million tons of oil. Shanghai, Nankin and Tiencin should be mentioned among the largest multi-branch centres of Chinese industry [KPMG 2011; Morawietz et al. 2016].

In the last decade, Chinese chemical industry was both the major driving force for record-breaking growth of Chinese economy, and its primary beneficiary. Large investments of the last decade that supported increase in productivity in the sector, enabled advancement of Chinese chemical industry to the group of world leaders. 2010 was the critical year when the value of chemical sector production was for the first time higher than the value earned by chemical sector in the USA. As a result, chemical industry in China was considered the largest in the world, while taking the leading position [KPMG 2011].

Nowadays Chinese chemical industry is on the path of sustainable development, and the new economic reality of China will expand its development opportunities in the coming years. It is associated with continuation of stable GDP growth on the level of 7%, growing urbanisation, increase in domestic consumption and increased demand on cars and electronic products, as well as greater involvement of the state in research and development activities. As a result, reaching an optimum growth of chemical sector, i.e. on the level of 9–13% is estimated between 2012 and 2016 [Lakshman, Duran 2013]. This is because such a rate of growth is perceived as more sustainable than above average growth (22.3%) reached by the sector between 2007 and 2011. At the same time, it must be emphasised that all actions undertaken by China that are focussed on departure from the model based on investments towards a model oriented at consumption and services, reflect the aspirations of the state to achieve larger economic maturity in a long term.

Despite strong and stable growth of chemical sector, dependence on imported goods, and consequently, on fluctuations of prices on global market is its weakness [KPMG 2013]. In 2012 the Middle Kingdom imported almost 10% of their specialist chemical products and over 50% of electronic chemical products. However, China is planning to increase its self-sufficiency in the sphere of new chemical materials from 56% in 2009 to 76% in 2015 [Lakshman, Duran 2013].

Inadequate level of regulations in Chinese chemical sector, especially related to occupational safety also brings a lot of concern. Frequent accidents in this sector are a negative consequence of deficiencies in the sphere of regulations. While referring

to data obtained from the state webpages and media reports, Greenpeace indicates 232 accidents in Chinese chemical plants that occurred in the period of first 8 months of 2016 (200 people were killed and 400 were injured). Therefore, to ensure occupational safety in Chinese chemical branch, the necessity of comprehensive reform in the sector management is emphasised [Greenpeace 2016].

3. Merger/acquisition of BorsodChem Zrt by Wanhua Industrial Group

3.1. Characteristics of companies

Wanhua Industrial Group is a Chinese chemical company that is the world's largest producer of isocyanates (MDI). As a global investor, the company is aware of the importance of social responsibility for functioning of economic and social processes. This finds reflection in implementation of actions that have positive effects on the environment. Wanhua is regularly creating whole series of green chemical chains of large durability and high added value. Through conducted business activity, the company aims at achievement of the position of a leading holding company, specialised in production, research and scientific, as well as marketing activity in polyurethane industry and correlated segments. As an innovative technology enterprise, Wanhua assumes that innovation is the fundament of success and the force driving the process of sustainable company development [Wanhua 2016b].

On the other hand, **BorsodChem Zrt** is one of the largest industrial plants in Hungary, and a leading producer of isocyanates (MDI and TDI), polyvinylchloride resins, as well as basic and special chemicals in Central and Eastern Europe. The company supplies high quality materials for production of all types of goods in many branches including household appliances, automotive industry, production of drinks, construction, clothes and shoes, electrical and electronic equipment, furniture and linen, packaging, paints and varnish, pharmaceuticals and rubber. Furthermore, Borsod has its branches in seven countries, including Hungary, the Czech Republic, Poland, Belgium, Croatia, Italy and Great Britain. As a result of conducted activity, the company has received numerous rewards for the development of the technology of isocyanate extraction, and work devoted to development of innovations supporting the environment [BorsodChem 2013].

Acquisition of 100% of shares of BorsodChem Zrt, a Hungarian manufacturer of isocyanates by the largest producer of isocyanates in the region of Asia and Pacific, i.e., Wanhua Industrial Group (Wanhua), that took place in 2011 is a good example illustrating the impact of expansion of Chinese capital on European market. The Chinese tycoon bought then all the shares of its previous majority owners, i.e., Permira and Vienna Capital Partners Funds (VCP) while changing the structure of power in chemical sector.

3.2. Premises and strategic objectives

The operation was the result of financial restructuring of the Hungarian company, started in 2010. Wanhua supported BorsodChem with funds amounting to EUR 1.4 billion (USD 1.6 billion) which the company used to construct a new TDI-2 power station and nitric acid production plant. Complete acquisition of BorsodChem by the Chinese investor, supported by the federation with the Bank of China as the leader, enabled further development of the Hungarian company in the long term, while consequently preventing mass redundancies.

3.3. Results of merger/acquisition

This project not only saved BorsodChem from collapse, but first it brought transformation of the two aforementioned regional companies into a global corporation and the achievement of the position of the third largest producer of isocyanates in the world.

As a result of acquisition of BorsodChem, the largest producer of toluene diisocyanate (TDI [BorsodChem 2016c]) in the regions of Europe, Middle East and Africa, Wanhua became a modern company, applying high-performing technology, efficient production lines and committed team of workers who remained with the company. The success of the agreement also finds its reflection in financial results obtained by the company, particularly in the total income that was gradually growing from RMB 13.662 million in 2011 to RMB 22.088 million in 2014 (Table 1) [BorsodChem 2011; Wanhua 2017].

Table 1. Financial results obtained by Wanhua Industrial Group after acquisition of BorsodChem Zrt (in RMB million)

	2014	2013	2012	2011
Total income	22,088,4	20,238,0	15,942,1	13,662,3
Operating revenue	4,602,1	4,519,1	,896,3	2,879,6

Source: own case study based on [Wanhua 2017].

While functioning within the structures of Wanhua Group, BorsodChem company is responsible for all its transactions conducted on energy market. Wanhua has won the acceptance of the previous majority owners, i.e., the funds operated by Premira and VCP (Vienna Capital Partners), that supports the Chinese investor as a partner. Wanhua's president is planning to increase and strengthen the acquired company until it becomes not only the largest employer in Hungary, but mainly the largest producer of isocyanates in Europe, which should ensure its constant development [BorsodChem 2011].

As the largest and most profitable manufacturer of methyl diphenylene isocyanate (MDI), and the fastest developing distributor of polyurethane materials, Wanhua-

BorsodChem constantly cares about strengthening of its position on market, increasing the level of customers' trust and improvement of the quality of offered services. To achieve this, at the end of 2014 the company decided to implement actions aiming at creation of local bases of customers operated in many countries, for example in Sao Paulo among others [BorsodChem 2014b].

Wanhua-BorsodChem is a new player on the market of Latin America that, through undertaken initiatives, not only stimulates its development activity but also establishes the image of the company committed to the region in a long term. Furthermore, while implementing the strategy of global network formation, Wanhua-BorsodChem opened local branches all over the world, for example in such cities as Amsterdam, Moscow, Istanbul and Dubai [BorsodChem 2014c].

It should be emphasised that in 2014 Wanhua-BorsodChem declared an intention to build a new production plant in Hungarian city of Kazincbarcik for condensation of hydrochloric acid. The investment of the value of EUR 84 million is expected to bring at least 70 new workplaces. The company initiative won approval of Hungarian government which was proved by the declaration of the State Secretary of the Ministry for Foreign Affairs and Trade of Hungary to provide financial support to Wanhua-BorsodChem for implementation of this project. In this way, the importance of Chinese investments that contributed to creation, in Hungary, of a chemical production centre on European market was appreciated.

Construction of a new hydrochloric acid condensation plant shall facilitate implementation of strategic objectives of Hungary in the sphere of foreign trade that concerns the policy implemented in 2010 and focussed on opening of the state to the East. Transformation of Hungary into a regional centre of European business for Chinese companies is the reason for the policy. Consequently, this should contribute to increase in export activity of Hungarian companies. Investments made by Wanhua favour implementation of these objectives.

What is more, as the leader in three segments of chemical industry in the region of Central Europe, BorsodChem became one of the largest employers in the northern region of Hungary, while offering employment to 2500 workers. On the other hand, the company products are used in industry branches that are of key importance for Hungarian economy, i.e., energy, construction and automotive sectors.

Investment in the construction of the plant in Kazincbarcik shall allow BorsodChem to fully use its production capacity with respect to isocyanide while contributing, at the same time, to its transformation into a more eco-friendly company. Furthermore, considering the fact that 75% of goods manufactured by BorsodChem is sold abroad, this not only increases the size of Hungarian export, but as a result, it contributes to strengthening of the competitive position of the company on market [Ministry of Foreign Affairs and Trade 2014].

Currently BorsodChem Zrt is focussed on implementation of suitable improvements in specific areas of conducted activity, particularly, in the development of responsible management of natural resources and intensification of work on

increase in energy consumption effectiveness and implementation of more energy-efficient and technologically advanced solutions [BorsodChem 2014a]. To achieve this, in 2016, the process of implementation of an innovative energy management system, developed by the company in accordance with the regulations determined by ISO 50001 standards was started. This action was supported by previous introduction (in December 2015) a new energy policy in the company. The new system is supposed to cover all activities undertaken by BorsodChem and all associated institutions. This forms the expression of great ambitions of the company and its commitment to implementation of sustainable development strategy [BorsodChem 2016a].

Support for the initiatives undertaken by BorsodChem both from Hungarian and Chinese governments, as well as observed sustainable company development that aim at increase of its production capacity encourage other Chinese entrepreneurs to make investments in Hungary. This is proved by strategic agreement concluded at the end of July 2016 by Wanhua-BorsodChem with the world leader in production of IT and telecommunication equipment and solutions, i.e., the Chinese company Huawei Technologies. Both parties approach the agreement as a crucial step on the path of their development on European market.

Huawei declared adaptation to business requirements of BorsodChem and supply of advanced products and solutions enabling the company to develop smart manufacturing systems that are highly important for the development of both companies. Wanhua-BorsodChem, on the other hand, perceives the cooperation with Huawei as the opportunity to establish a common European Computerisation Centre in Hungary. Thanks to the possibility to apply larger knowledge resources, this will contribute to the achievement of better manufacturing results. At the same time, it must be emphasised that these changes certainly have a revolutionary nature because support from Huawei shall allow Wanhua-BorsodChem to establish a smart production base that will enable to increase competitive advantage on European market.

Therefore, the partnership of the two largest Chinese investors on Hungarian market is very profitable for both parties and furthermore, the companies declare the willingness to support economic development on national and regional level thanks to employment of local workers as well as suppliers [BorsodChem 2016b; Łopacińska 2015].

4. Merger/acquisition of Pirelli by China National Chemical Corp

4.1. Characteristics of companies

China National Chemical Corp company known under the name of ChemChina is a Chinese state-owned chemical concern conducting business activity in agrochemical products, rubber products, plastic, specialist chemical products, industrial devices and petrochemical processing. With respect to income gained globally, the company was in the 234th position in the ranking of Fortune Global 500 ranking, published

in 2016. It has been included in the listing for six years and its current result is the expression of development aspirations of the company that moved upwards by 31 positions from the 265th in 2015 [ChemChina 2016; Fortune 2016].

On the other hand, Pirelli is the fifth with respect to the size of earned revenue and the first high class producer of tyres on global market. The company has 19 manufacturing plants in 13 countries, operates in over 160 countries and is oriented both on emerging markets and mature markets. Pirelli has over 140 years' experience, and 70% of earned revenue comes from the sale of high-performance tyres, used in passenger cars of medium and top class that apply the most advanced technology.

The company portfolio includes 1200 types of approved tyres carefully adapted to each vehicle model, so that the highest possible ride comfort is achieved. Long presence of the company in the sector allowed to develop a strong tradition based on innovativeness in establishment of strong brand of fast, manoeuvrable and reliable tyres. This is proved by a contract with Formula 1 for which Pirelli became a sole supplier between 2014 and 2016. Currently, being aware of the importance of corporate social responsibility, the company is investing in research and development for the purpose of implementation of the strategy of the so-called green efficiency and development of high-quality tyres that have the least negative impact on the environment [Pirelli 2016].

4.2. Premises and strategic objectives of the merger/acquisition

Acquisition of 100% of shares of Pirelli, an Italian manufacturer of tyres, by ChemChina, a Chinese, state-owned chemical concern from the sector of agrochemical products can be considered the largest investment in 2015 and one of the most impressive of all investments made by Chinese companies on the European market [ChemChina 2016].

The merger of companies was formally concluded in 2015 after previous acquisition of 26.2% of shares of Pirelli from Camfin, the largest shareholder of the Italian holding company, by a subsidiary ChemChina – China National Tire & Rubber. While not taking into account the debt reaching nearly EUR 1 billion, the company was finally valued at EUR 7.1 billion [Chee, Neely 2015] (EUR 15 per share), and afterwards it was withdrawn from the stock exchange. Ren Jianxin, the president and founder of China National Chemical Corporation, became a new head of the Board of Directors.

On the one hand, the venture shall enable the Chinese company to gain access to technologies of the Italian concern, applied in manufacture of high-quality tyres, and on the other hand, it will open the gate for Pirelli to reach the Chinese market. Consequently, this will allow the two companies to develop significantly, and extend the scope of activity previously conducted by them. ChemChina approaches the agreement as a chance to double its existing manufacture of industrial tyres, and predicts establishment of a leading centre of growth on emerging markets which is of a key importance for implementation of “Made in China 2025” production strategy.

Furthermore, implementation of a new strategy based on application of four major advantages of People's Republic of China, i.e.: market, enterprises, strategies and talent, is supposed to transform China, until 2049, into a leading manufacturer on global market. Actions conducted within this strategy will be focussed on ten sectors of the key importance for China, including: innovative technologies sector, numerically controlled devices, aviation systems, high-tech devices, high-speed trains, energy saving, new materials, medical equipment, agricultural machines, and energy generation. The goal of discussed strategy is to combine manufacturing activity with information technology while respecting five key principles, i.e. development of innovations, achievement of high quality for customers, care about eco-friendly solutions in creation of products, optimisation of structure and the use of talents [Lee 2015; Kennedy 2015].

Pirelli is a symbol of the highest quality of offered products and services. Therefore, it must be emphasised that revival of this international brand of rich history demands integration of activities of both parties to the agreement. The challenge is even greater as there is a gap between Pirelli and ChemChina, which causes problems in adaptation to new conditions of functioning, including the need of being open to development of successful cooperation. To achieve this, a 50-days' plan of integration of the companies has been developed and implemented. It is oriented on coherent and complementary work of all departments responsible for brand establishment, marketing, sale, technology as well as manufacturing.

It is anticipated that the merger of China National Chemical Corporation with Pirelli will contribute to increase in competitiveness of both companies, whereas the very prestige of the Italian brand, as well as integration of the management model with Chinese model and the access to modern technologies will significantly affect the development of manufacture of the tyres of Chinese brand.

Dynamically developing, and competitive Chinese car market became the subject of enormous interest from global automotive companies that present the will to invest in it, while aiming at the same time at establishment or development of relationships with local enterprises. A large potential of Chinese market is proved by the fact that in 2014 there were 107 cars for every 1000 inhabitants of China, whereas it is anticipated that this number will have grown over twice, to 257 before 2024 [ChemChina Newsletter, 2015]. Furthermore, a growing rate of development of hybrid, electric and clean energy-powered cars can also be observed on the Chinese market. Anticipated intensification of these changes with increasingly higher share of innovative technologies in them constitutes a good opportunity for the tyre sector. A declaration by Xi Jinping, the President of the People's Republic of China, concerning reduction of carbon dioxide in China by 60–65% before 2030 is an additional impulse for these changes [The White House Office of the Press Secretary, 2015]. This will stimulate the purchase of eco-friendly vehicles and thereby it will increase the demand on high-quality tyres that allow for economical car operation.

ChemChina anticipates that in the context of contemporary changes on global market and implementation of “Made in China” plan, the agreement with Pirelli company will bring significant improvement in achieved results and development of innovativeness of the company production. Increase in added value from manufacture of tyres for the benefit of the recipients – the product users is going to be its result. Integration of activity of the company oriented on the market of trucks with the activity of ChemChina will facilitate searching for business opportunities on emerging markets, mainly on Asian markets. Consequently, this may bring doubling of the number of cars intended for this market.

5. Conclusions

Analysed cases of mergers and acquisitions in chemical sector are the response to the challenges of 21st century. Presented example of acquisition of BorsodChem Zrt, a Hungarian producer of isocyanates, by Wanhua Industrial Group, a Chinese manufacturer of isocyanates, illustrates the aspirations of the Chinese company to expand its operation to foreign markets (including European market in this case), and to create the image of socially responsible company, concerned about the problems of the region. Thanks to concluded agreement, the Chinese company of Wanhua obtained necessary technological support from BorsodChem and implemented innovative solutions developed by its Hungarian business partner. Agreement with this partner contributed to strengthening of the position of the Chinese company on European market.

On the other hand, for the Hungarian company operating after acquisition under the name of Wanhua-BorsodChem, the agreement with the Chinese partner not only strengthened the competitive position of the company, but firstly provided the opportunity for its long-term development. It must be emphasised, that the newly-established company of Wanhua-BorsodChem managed to stop the wave of redundancies and to gain the position of one of the largest employers in Hungary. Formation of a common production centre together with the Chinese partner strengthened the grounds for achievement of better results in manufacturing activity. It was possible thanks to increase in the access to new knowledge resources. Consequently, the company could develop necessary, innovative solutions and implement innovative energy management system. Considering the acquisition of shares of Pirelli, the Italian manufacturer of tyres by ChemChina, a Chinese, state-owned chemical concern, the experience of the Chinese company in performance of mergers and acquisitions, positive results can be expected, even though the experts currently rate the chances for success of Pirelli and ChemChina merger at only 25%. This is because first the development of long-term company strategy and not only joining manufacturing capacities and shares in the market of cooperating companies is the key to international agreement of merger or acquisition type. Support for the managing staff and changes in the management model while taking existing cultural

differences into consideration, as well as acting in compliance with the principles of tolerance, respect and mutual trust are also highly important.

Several successfully concluded agreements of merger and acquisition type prove effectiveness of the strategy previously followed by ChemChina. They include such partners as:

- Adisseo, a French company (global manufacturer of animal food) the revenue of which increased four-fold, and the profit without taxation twelve-fold from the moment of its acquisition in 2006 [Adisseo 2016],
- Qenos, an Australian company, currently the world leader in polyethylene manufacture and in the sphere of safety, health and environment-related issues, acquired in 2012 [Qenos 2016],
- Elkem, a Norwegian producer of solar silicon, the business system and the system of production management of which are based on lean management, helped ChemChina to restore five production plants [Elkem 2016],
- REC Solar – an American supplier of products and services in the sphere of photovoltaic installations (PV) that reported a 40% increase in sale for the third quarter after acquisition in 2015 [REC Solar 2016].

Submission, in 2016, of the offer of purchase of the world largest producer of plant protection products, i.e. Syngenta, a Swiss chemical concern, for a record amount of USD 43 billion is also an expression of strategic operations of ChemChina company. It is highly important with reference to the government plans of China concerning introduction of limitations in agricultural production. This will facilitate satisfaction of the growing demand on food that is anticipated until 2030.

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