Since the Velvet Revolution in 1989 the Czech Republic has undergone a complete transformation, moving from a Soviet-style planned economy to a market economy in the Western mold. Political and economic reforms culminated in the country’s accession to the European Union on 1st May 2004.

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Czech Mate! – a strategic move in Europe’s Chemical Industry

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tuated in the heart of Europe, the Czech Republic shares borders with Germany (its main trading partner), Austria, Poland and Slovakia - the other state created by the Velvet Divorce in 1993. Its economic situation today is, on the whole, very healthy. GDP growth reached 4.4% in Q1 2005, whilst interest rates are at an all-time low at 1.75%, the second lowest in the EU after Sweden. Eurostat (the European Commission’s statistics office) puts unemployment at 8.6% but confidence in the coalition government is rising following the installation of Jiri Paroubek as Prime Minister in April, the country’s third Prime Minister in the space of nine months.

A country of 10.2 million people, the Czech Republic has resources in black coal in the East and lignite in Western Bohemia. Industry, however, has long been heavily dependent on imports of materials such as crude oil, iron ore and natural gas. As a result, the Czech Republic has had to work at steadily reducing its trade deficit, which stood at $0.84 billion for 2004, an impressive reduction of over $2 billion from the previous year. The main reason for this strong performance was the increase in exports to the EU member states, particularly in value added products.

Foreign trade has also been boosted by foreign investment. Central and Eastern Europe (CEE) attracted 31% of Foreign Direct Investment (FDI) in Europe in 2004. As the most westerly of the ten new EU member states, the Czech Republic represents a very attractive proposition. In a recent survey by consultants Ernst and Young, the Czech Republic was named as the seventh most attractive country in the world for foreign investors. It is not hard to see why CzechInvest, the government’s investment and business development agency, handled foreign and domestic investment projects worth a total of $1.94 billion in 2004. The country has a strategic geographical position, good infrastructure and competitive labor costs for such a skilled workforce. The government also offers attractive incentives to investors which have already lured companies from around the world to establish significant production units in the republic.

Czech Republic has resources in black coal in the East and lignite in Western Bohemia.
Driving the Economy

By far the most significant sector for investment in the past decade has been the automotive industry, accounting for 47 per cent of investment between 1993 and 2004. Its effects can also be felt in the chemical industry. These investments have opened up massive opportunities for automotive suppliers in the rubber and plastics sectors, prompting CzechInvest CEO Radomil Novak to earmark plastic injection molding as a specific area for growth due to increasing demand for automotive components.

Carbon black producer CS Cabot is also reaping the rewards of the TPCA project, as the demand for the substance for the manufacture of automotive tires has risen significantly. CS Cabot is a joint venture between the Boston-based Cabot Corporation and Deza, a Czech processor of crude benzol and tar. 40% of CS Cabot’s production goes to the Czech and Slovak markets, with Poland being the largest export market. Managing Director Ladislav Stefan points out that almost all of the big players in the tire industry are present in nearby Poland, including Michelin, Bridgestone and Goodyear. Stefan is also pleased with investments in neighboring Slovakia, where Korean tire manufacturer Hankook recently confirmed it will begin work on a plant in Levice, only 250 km from CS Cabot.

A Change at the Top

2005 has seen more foreign capital pouring into the Czech Republic via significant privatizations. On 24 May the Czech government finally managed to offload its 62.99 per cent stake in petrochemicals concern Unipetrol to Polish giant PKN Orlen. This takeover was approved by the European Commission on 20 April after PKN Orlen had paid 10% of the $480 million deal last year. Unipetrol has controlling stakes in key refineries and chemical plants in the Czech Republic, whilst PKN Orlen is Poland’s largest manufacturer and distributor of fuel.

PKN Orlen had agreed to sell those assets of Unipetrol which were not key to its core business activities to Agrofert Holding, the Czech Republic’s second biggest chemicals group and itself a former candidate for the purchase of Unipetrol, only to pull out of the deal and instead go into a co-operation agreement with PKN. Now, however, PKN Orlen is said to be considering canceling its contract with Agrofert and instead opting to pay a fine because the agreed price for subsidiaries Agrobohemia, Aliachem, Chemopetrol, Kaukuk and Paramo was undervalued by around $250 million.

Agrofert has experienced an astronomical rise to success for a company founded in 1993, but the roots of the chemical industry in the Czech Republic date back to 1778 with the production of sulphuric acid. Today the manufacture of basic chemicals accounts for 60% of revenues from the sector. Though production was reduced due to severe floods in 2002, production facilities remained intact and there were few long-term effects.

With exports up significantly in 2004, the outlook for the Czech chemical industry is positive. Nonetheless chemical companies have concerns over the proposed EU chemicals legislation, REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), which would require companies manufacturing or importing more than one tonne of a chemical substance each year to register it with a central database. REACH is expected to threaten small and medium-sized businesses with increased costs but as it is still at a proposal stage and likely to be thoroughly reviewed before it becomes law, the impact it will have on Czech companies remains to be seen.

The following articles were written after two months of research in the Czech Republic and meeting with the main players in its chemical industry. It studies the impact of EU accession, foreign investment, increased competition on the domestic market and the challenges facing the industry as it converges with its Western counterparts.
The heart of new Europe: Investment is pumping in

With the Czech Republic now over a year into life as a fully fledged member of the European Union, its government is proudly pointing to higher exports thanks to accession. However, many claim that joining the EU was of little consequence, since all the necessary groundwork in conforming to EU standards was carried out in the years preceding accession.

In the chemical sector the reaction to EU membership is far from consistent. The most positive response came from Spolchemie, situated close to Germany in Usti nad Labem and a real key player in epoxy resins, who now considers the entire European Union its domestic market.

Yet for many smaller companies, any hopes that EU membership would enable them to penetrate traditional Western European have been dashed. Due to the saturation of markets in these countries, Czech companies lack the capacity and ambition to look to the West and have their sites fixed on Eastern markets.

One way of breaking into the West has been to concentrate on supplying highly sophisticated products for the pharmaceutical and cosmetic industries. Petr Svec, Managing Director of Penta, a company producing and supplying laboratory and pharmaceutical chemicals, is sure that accession has had a positive effect on his company. Certification was crucial, since many of the compounds in Penta’s range are classified as dangerous. In 2003 the company was given a European Good Practice Award for the prevention of risks from dangerous substances at work. Though Penta still exports to Slovakia, Poland and Latvia, solid certification, together with facilitated transport of goods, has led to an increase in exports to the EU countries, including Germany and the UK, where Penta is supplying special organic compounds for biological research.

Another company experiencing a shift in exports from the East to the West is aerosol specialist Aveflor. Active in cosmetics, medicaments and veterinary preparations and already exporting approximately 65% of production, Aveflor managed a successful penetration of the German market last year. Managing Director Jiri Zubaty believes the company owes its success in export to the acquisition of SGS quality certificates and the relatively short-term registration process, enabling it to sell products in the European Union. Another factor was the uniqueness of Aveflor’s AKUTOL product, a plastic dressing based on acrylic copolymers used for the treatment of minor scratches and cuts. Small quantities of AKUTOL have also been sold in Austria, Denmark and Holland.

The success of AKUTOL is a sign of things to come. Though in the past, it was veterinary preparations which fared best in exports for Aveflor, today the company is focusing on products for pharmaceutical preparations and medical devices. With rising prices of fuel gases, such as propane-butane and tetrafluoroethane, Zubaty has spotted potential in the production of aerosol gels for medical use, since there is at present no manufacturer in the Czech Republic and all such products are imported. Aveflor hopes to launch production of a bleeding stopper in gel form next year. Zubaty’s ability to see the gap in the
market is crucial to survival in the Czech Republic – and much more significant than certification. Czech companies often talk with pride about their ISO 9001 certificate, but whilst Western European clients may be re-assured, ISO certification is becoming so widespread that it is losing its pulling power. With multinationals flooding the market, it is becoming increasingly more important for Czech companies to stand out from the crowd.

Aveflor’s foresight is shared by a handful of Czech firms, who have been able to overcome the might and inevitably superior know-how of multinational firms by identifying and taking advantage of niche markets in the chemical sector, in some cases facing little competition on a global level.

One such firm is Contipro Group, a holding company established last year and uniting production of raw materials for pharmaceuticals on the one hand, and for cosmetics and nutrition on the other. Contipro enjoys a 30% share of hyaluronic acid production worldwide, exporting to over 35 countries, most notably the U.S., Germany, Japan, South Korea and Italy.

Dr Vladimir Velebny, a former lecturer and researcher at Charles University, founded Contipro C, the pharmaceutical arm of the holding, in 1990. Research into connective tissue helped Velebny to recognize the key role that hyaluronic acid would play in pharmaceuticals and cosmetics, where it is now an effective moisturizing agent. As the first company to introduce hyaluronan to the nutritional industry, Contipro is very well placed to acquire new business on what is a rapidly growing market. In 2005 the group expects to triple its sales of pharmaceutical hyaluronan, though cosmetics currently still accounts for 50% of the business.

Another company making the most of an uncrowded global market is Lucebni Zavody Kolin, which produces the trade-marked Synhydrid, a non-selective reduction agent during hydrogenation. Selling mainly to pharmaceutical firms, Lucebni Zavody Kolin faces only one competitor worldwide, in the United States. With a new production site currently under construction, specifically to increase production capacity of Synhydrid, Managing Director Miroslav Urban is targeting Asian markets, especially India, where the company has been active since 2000, and China, where early efforts to break through have so far seen little reward.

Even with certification, small Czech companies without the niche products of Contipro and Lucebni Zavody Kolin will find it difficult to access the markets of the old EU-15, since few further openings exist on a very developed Western European chemicals market. For many, 1st May 2004 was somewhat of an anti-climax since the Czech Republic was already fully compatible with the EU and, ultimately, nothing changed overnight.

As a result, only the shrewdest of the smaller firms can boast significant increases in exports to the EU in the past year. With labor costs bound to rise and take the edge off Czech Republic’s competitiveness, companies wishing to avoid being eliminated or swallowed by a multinational firm must find a way to be shrewd in the future.

The Czech Republic has a strategic position in the heart of Europe, between Eastern resources and lucrative markets in the West. Currently the country has 55,400 km of highways and 9,500 km of railways but much important work on transport infrastructure is now being carried out to compensate for a lack of investment in the past. And of course, with no customs clearance necessary since EU membership, more trucks are on the roads and distributors no longer need to worry about 15-hour queues at the border. These factors, together with the Czech Republic’s net-importer status, have not escaped the attention of foreign distributors.

Following market leader Brenntag’s acquisition of its nearest competitors in the CEE region—Neuber and HCI (Holland Chemical International) in 2000, mid-sized local and foreign companies are left to compete for the remainder of the market. The second biggest distributor of chemicals in the Czech Republic is a Czech company: EUROSarm. Founded in 1992 and focused exclusively on chemical distribution since 2001, EUROSarm reached a turnover of CZK 700 million ($29 million) in 2004. Managing Director Oldrich Zah-
radnik attributes the company’s success to “flexibility, reliability and selective recruitment of employees”.

Co-operating with giants such as BASF and Dow Chemicals, EUROSarm is also looking to the Eastern Bloc countries in order to reduce the costs of importing. The firm is already importing solvents from Poland’s PKN Orlen. On the export side, the company’s activities remain modest, since it has no storage facility abroad and the completion of its presence on the Czech market is the main priority. There are three storage sites in the country for solid and liquid chemicals, with a product distribution system operating between them, ensuring they are a speedy, cost-effective supply line for their customers.

Family-owned Kratoska Chem has its sites set on expansion and has 6,000 m² of unused storage space to fill at its headquarters in Prague. Having started off in 1991 competing against state-owned companies, Kratoska now faces competition from multinational companies like Brenntag. Unable to match the range of products offered by its larger rivals, the ensuing strategy was for Kratoska to concentrate on particular branches. Today around 50 per cent of the turnover goes to the glass and ceramics industry but Managing Director Miroslav Kratoska sees most potential in the future in the automotive and cosmetics industry.

Dealing only in solid and inorganic chemicals, Kratoska has profited from its role as agent and sole distributor of Borax and with its own fleet of trucks is selling in Slovakia, Poland and Hungary. There is no ambition to penetrate Western European markets, since Kratoska is mainly importing from Western European suppliers and it would make no sense to sell the products back to the countries whence they came. Indeed, Czech producers think they themselves are best placed to sell their own products on the Czech market and have few dealings with local distributors.

The future for the smaller chemical traders in the Czech Republic will be difficult. A lack of local trade exhibitions to promote their businesses and the entry of larger foreign players on the Czech market will see them forced to try and carve out a market niche. The bigger players are the ones with an extensive list of partnerships with the biggest suppliers and will simply reap the rewards of increasing demand and improved transport infrastructure in the Czech Republic as well as its surrounding region.

**Uncertain Remedies:**

A look at the accession pains of the Czech pharma industry

The last four years have seen the Czech pharmaceutical market grow at an average of nearly 9% every year, with foreign capital pouring into Czech companies, notably from the US, Switzerland and Croatia. In 2004, the pharmaceutical industry in the Czech Republic had a 16.2% share of revenues generated from the chemical industry as a whole, accounting for 17.9% of employees. Medicaments are cheaper in the Czech Republic than anywhere else in Europe, since the bulk of manufacture is made up of generics. Annual consumption of pharmaceuticals per capita stood at $88 in 2004, some way behind the EU average of $350.

Despite the presence of multinational companies such as GlaxoSmithKline, Pfizer and Aventis, it is Zentiva which leads the way on the Czech and Slovak market. Zentiva, born from the merger of Leciva and Slovakofarma in 2003, formerly the biggest pharmaceutical companies in their respective states, is oriented to generic equivalents, taking a 50% share in branded generics in the Czech Republic and 16% of the overall retail market in prescription pharmaceuticals.
Zentiva has been able to register generic equivalents quickly after the expiration of relevant patents, and in more than just one country. Due to the gradual harmonization with European and international regulations, the registration process has become much easier.

Zentiva believes that Western European market is by no means out of their reach. The major obstacle at the moment is a lack of any significant sales force there. There is also a lot of potential on an increasingly stable Russian market, where in 2004 the company launched its most successful cardiovasular products, Simvacard, a cholesterol-lowering agent, and Lozap, an anti-hypertensive drug.

On a Czech market where large firms take 80% of the revenues, growth for the smaller pharmaceutical companies looks difficult without some form of co-operation with Zentiva or one of the multinationals that have entered the Czech market in recent years.

**Constrained Development, Exceptional Potential:**

**Chemical engineering in Czech**

Restructuring and investment in the Czech chemical industry translates into the need for new units, plants and laboratories. This is good news indeed for companies specializing in the provision of complete engineering services. Rudolf Limbersky, Managing Director of the Block Group, founded the company in 1991 having recognized there would be a great need for restructuring in the pharmaceutical sector. “There were new regulations for the pharmaceutical industry. Companies had to follow GMP (Good Pharmaceutical firms are investing in highly sophisticated manufacturing equipment.
Manufacturing Practice) regulations within six years. At the time we concentrated on the building of clean rooms but we gradually became involved in the delivery of complete turnkey equipment for the pharmaceutical industry.”

Bemoaning the lack of testing institutes in the Czech Republic from which the necessary certificates for deliveries to Western countries can be obtained, Limbersky views the harmonization of standards as a positive result of EU membership. Though Russia is the leading export market at present, with certification under their belts since last year, Block Group is starting a campaign to develop Western markets.

Russia has been an important market for pharmaceutical technologies firm Favea, located in Koprivnice, as that is where it sells most of its trademark tablet coating system: Easycoat. Nevertheless, to Dr Milan Krajicek, the company’s Managing Director, EU membership gives Favea the opportunity to tap into Western Europe’s pharmaceutical markets.

Dr Krajicek’s optimism partly stems from what he terms as Favea’s “process know-how”. 25% of Favea’s activities are focused on its own production line, which encompasses human and veterinary pharmaceuticals, food supplements and cosmetic substances, giving the company an edge over its competitors in its role as a supplier and tester of equipment.

Favea’s real specialization today is the micronization of active substances, which was born out of one of many partnerships with academic institutions. The company aims to become a key European player in this field in years to come.

EU membership has certainly not overwhelmed everybody in the Czech Republic. Martin Slaby, Managing Director of Cheming, an engineering firm based in Pardubice, remembers how Western ideas of corporate governance and project management were implemented in his company after it became part of the Belgian company Tractebel Engineering, today the engineering arm of the Suez-Tractebel group, in 1993. As a result, he feels that EU-status has not brought any significant increase in the number of projects Cheming has been contracted to carry out abroad. Slaby views Cheming’s 33 per cent increase in turnover from 2003 to 2004 as a general reflection of the increased output of the Czech economy.

A key area for Cheming has been environmental projects. Having profited from a wave of desulphurization projects in the Czech Republic between 1994 and 1998, stringent EU directives for 2005, requiring the sulphur content of unleaded gasoline and diesel fuels not to exceed 50 mg/kg, have seen Cheming involved in the implementation of a 3 Cut Splitter as part of the “Clean Fuels” project at Ceska Rafinerska in Kralupy. Cheming is also working on the remediation of dioxin burdens at Spolana, listed as one of the heaviest environmental burdens in the world.

Exporting around 10% of its services, with a daughter company in Slovakia and a sister company in Poland, Cheming retains a high level of independence from its mother company and is hoping for further co-operation with existing clients who are looking to continue development.

**Low Cost does not mean Low Quality**

Market leader ABB Lummus Global’s Managing Director, Ger- not K Gross, believes his company, formerly part of Czechoslovakian monopolist engineering firm Chemoproukt in communist times, has been able to combine the Czech mentality with Western know-how, placing a strong emphasis on safety matters, a pre-requisite for co-operation with high-profile clients.

Gross, himself a German, describes the Czech Republic as “Ko- rea in the middle of Europe” due to the excellent quality on offer
for a low price. “When people come here they think that they are coming to the Wild East, but in reality you are in Central Europe. The message which we always give to everybody is that low cost does not mean low quality. On the contrary, the work which is produced here is as good as in Germany, or as in Holland or in Italy. That is important but the costs are less than half.”

Though joining the EU has made complicated import and customs duties a thing of the past, Gross would like to see a complete freedom of services across the European Union in addition to a freedom of goods: “Freedom for services is still very much limited. We would like very much to work with our engineers in Germany or in Holland but it is not always possible because you still need a work permit - and work permits in an economy which is suffering from unemployment are difficult to obtain.”

Permit problems aside, the company is undergoing transition, reducing the number of employees in high-cost countries such as Germany and building up staff levels in countries like the Czech Republic, a process Gross acknowledges will not be without problems. “This is a challenge because engineers who can perform as we want them to are not waiting on the street. We have a good base of labor here but you need to identify them, you have to train them and only then are they helping to reduce costs.”

Gross’s views on the difficulties in finding skilled professionals in the Czech Republic are shared by many in the sector. Kamíl Jankovsky, Managing Director of the Phar Service Group in Prague, a company involved in the design and implementation of engineering projects for the pharmaceutical industry, is keen on expansion but not willing to sacrifice the quality of his company’s services: “In the Czech Republic it is a problem to find real professionals. We could increase capacity with people on an average level but the quality of our work would go down. I prefer to give our customers top-level services.”

Skeptical about the significance of ISO certification, Jankovsky runs his own quality management system, insisting that quality is not a factor preventing Phar Service from being successful in Western Europe. Instead he blames the economic situation in Europe, which has resulted in countries protecting their domestic markets.

Though Phar Service has undertaken many technological projects for Czech market leader, Zentiva, the relatively small size of the Czech domestic market means that Jankovsky is looking further afield. Phar Service already owns a 40% stake in Ukrainian company Contec, which is used as a base for installations in Eastern Europe and Russia. Jankovsky sees a lot of opportunities on the Bulgarian pharmaceutical market but claims the potential for a real boom for businesses like his lies in the food industry, since the production standards and conditions are so close to those of the pharmaceutical sector.

With the barriers preventing Czech companies from taking their services to Western Europe, it seems sensible for them to look to the East, where low costs and fewer regulations are attracting a lot of foreign investment. As investors may be inclined to contract an engineering firm from their own country, the challenge for Czech companies is to take advantage of investment in Eastern Europe. In order to achieve this they must convince the investors that they can not only match their Western counterparts in terms of professionalism and quality, but also offer the advantage of local market knowledge.
**Fosfa hits a fertile patch**

After nearly going out of existence only three years ago, Czech phosphates producer Fosfa has undergone a remarkable turnaround under its current CEO, Ivan Batka. Since acquiring Fosfa in 2002, when the previous management, unable to repay loans secured against the company’s assets, left Fosfa hovering above bankruptcy, Batka has scored an average annual turnover growth of 33%, hitting CZK 1.41 billion ($57 million) in 2004.

“Our estimate is that in 2005 we will have a slightly lower increase but the one reason for this is that we are making an €8 million ($9.7 million) investment here in the plant, which is not allowing us to utilise our full capacity,” says Batka. Even with the reduced capacity he is still predicting an increase to €60.3 million for 2005 and a figure of €72.3 million in 2006.

The investment Batka mentions is mainly oriented towards the construction of a new distribution centre, as the company looks to make the most of its excellent geographical position in Breclav-Postorna, on the border with both Slovakia and Austria. Thanks to good highway connections and an aggressive export policy, Fosfa was able to penetrate markets in Poland and Hungary, hurting rival businesses in the process.

“I would say that the European market was not expecting us to bounce back, but we have now become one of the key European players in the phosphoric acids business. We are basically one of the four biggest players and as regards thermal phosphoric acid, we are the second biggest producer in the whole of Europe,” says Batka, now having taken the company’s exports from zero to over 60% of production.

“I would say the key markets for us are Western European markets. What we are proud of is that we have become very strategic suppliers for companies like Henkel and B&G, which is proof that we have built up the credibility of the company.”

CS CABOT Ltd. produces and sells carbon black for the production of tyres and mechanical rubber goods in its production plant in the city of Valašské Meziříčí in the Czech Republic. This plant is one of the 6 European carbon black plants of the US based firm, CABOT.

In addition to carbon black for the rubber industry, CS Cabot also produces carbon black for special applications in plastic materials, coating compositions, paints and varnishes, printing colouring matters and toners.

CS CABOT believes that it is possible to prevent all accidents concerning both people and the environment. Our highest priority is to be a respectful, responsible and understanding member of the community.
Peter Choulik, Managing Director of Linde Technoplyn, hopes that the potential offered to the Czech economy by EU entry is not at an end: “The big advantage of joining the EU is the general development of the Czech economy. After the doors were opened, lots of investors came from outside. This gave us new deliveries, new possibilities, new customers.”

In the industrial gases market, Czech plants tend to be very modern, since most were built within the last 15 years. Choulik has attracted investment to the tune of €400 million ($485 million) from the German group Linde since 1991, providing Linde Technoplyn with the most modern technologies and making it the market leader.

Choulik believes that the partnership represents more than just a strategic advantage. He believes it is often essential if a company is to survive: “Refineries have to cover high transport costs and I think that the Czech chemical industry cannot survive without being integrated into bigger international companies. If you look at the world market of industrial gases, there are only six big competitors, who have 70% of the world market. If you stay outside, it is not easy.”

Because of high transport costs – Linde mainly distributes in steel cylinders - it is not efficient for Linde to transport gases over long distances, and export is limited to liquid and specialty gases. To this end they have concentrated on establishing an excellent coverage of the Czech Republic and the border regions of neighboring states. Today Linde has production sites across the country, from Usti nad Labem in Northern Bohemia to Ostrava in the East, a city housing the major steelworks and providing easy access to Slovakia.

Another strategic move was the construction of a new plant in Sokolov, close to the German border, where production started in July. The decision was made with the intention of meeting demand from Bavaria but Choulik says the decision could not have been taken so easily had the Czech Republic not been on track to join the EU.

Looking ahead, Choulik sees strong potential in laser welding gases and detects a need to not only deliver gas but to show the customer how to use it: “The business will be more and more sophisticated, more and more oriented towards engineering applications.”

Useful Contacts in the Czech Republic

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**Czech Association of Pharmaceutical Firms**  
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