

**CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE**

**Faculty of Economics and Management**

**Department of Economics**



**BACHELOR THESIS**

**The Industrial Zones,  
Case Study of the Czech Republic**

Author:  
Supervisor:

Renáta Levá  
Ing. Mansoor Maitah Ph.D.

**Declaration**

I declare that I have worked on my bachelor thesis called “The Industrial Zones, Case Study of the Czech Republic” by myself and I have used only the sources mentioned at the end of the thesis.

Pregue, the 30<sup>th</sup> April 2009

.....

Renáta Levá

## **Acknowledgment**

I would like to thank Ing. Mansoor Maitah for being my supervisor, for consultations concerning my bachelor thesis and useful advices. I also want to thank my parents for giving me information about the industrial zones in Kladno, the situation and working environment in a production company, the history and development of Kladno.

# **The Industrial Zones, Case Study of the Czech Republic**

---

## **Průmyslové zóny, případová studie České republiky**

### **Summary**

This bachelor thesis focuses on industrial zones in the Czech Republic, their origin, amount, placing, problems, and possibilities of investment incentives and other kinds of industrial support. It explains the meaning of the terms industrial zones, brownfields, and investment incentive, among which there exist different kinds of support in the Czech Republic. The thesis also deals with industrial supportive programmes, under which it is possible to get appropriate support (grant, financial support or land transfer), conditions which must be fulfilled by the applicant, the process of investment incentives allocation, and kinds of investment incentives. The part about investment opportunities in the Czech Republic follows, which contains brief introduction into the situation in the Czech Republic, PEST analysis of the Czech Republic, and a detailed view is dedicated to various branches of industry where these opportunities are hidden.

In the practical part, there is a characterization of Kladno city (area, inhabitants, basic macro economical information). A bigger part is dedicated to the famous history of industry, which included the black coal mining and industrial production. Nowadays, there are two big industrial zones in Kladno and many brownfields in the form of former black coal mines. Kladno with the cooperation of CzechInvest tries to change this situation.

The Chapter SWOT analysis concerns with strengths, weaknesses, opportunities, and threats of Kladno from the aspects of industrial zones and investment attraction, transportation, human resources, and quality of life.

Industrial zones could be a torn in an eye to many inhabitants living nearby, especially when they are unused or decays, but nobody can deny their importance for everybody and the effort to their preservation, development, or coming of age is more than recognizable in recent years.

## **Souhrn**

Tato bakalářská práce se zabývá průmyslovými zónami v České Republice, jejich vznikem, počtem, umístěním, problémy a možnostmi investičních pobídek a jiných forem podpor průmyslu. Definuje termíny průmyslová zóna, brownfield a investiční pobídka, u které popisuje její druhy v České republice. Dále jsou popsány programy na podporu průmyslu, pod kterými lze požádat o příslušnou pomoc (grant, finanční pomoc nebo převod území), podmínky, které musí žadatel splňovat, proces, kterým se udílení investičních pobídek řídí a druhy pobídek. Následuje část o investičních možnostech v České Republice, která zahrnuje stručný popis situace v České republice, PEST analýzu České republiky a detailnější pohled věnuje různým odvětvím průmyslu, kde se možnosti investic naskýtají.

V praktické části se práce zaměřuje na charakteristiku města Kladna (rozloha, počet obyvatel, základní makroekonomické údaje). Větší část je věnována slavné historii průmyslu, která sestávala z těžby uhlí a průmyslové výroby. V nynější době se v Kladně nachází dvě velké průmyslové zóny a brownfieldy v podobě nevyužívaných černouhelných dolů. Tuto situaci se snaží změnit samo město ve spolupráci s agenturou CzechInvest.

Kapitola SWOT analýza pojednává o silných a slabých stránkách, možnostech a hrozbách města Kladna z hlediska průmyslových zón a přilákání investorů, dopravy, lidských zdrojů a kvality běžného života.

Průmyslové zóny mohou být trnem v oku velkému počtu obyvatel, zvláště při jejich nevyužití a chátrání, ale nikdo nemůže popřít jejich důležitost pro všechny a snaha na jejich udržení, zvelebení nebo znovuoobnovení je v posledních letech více než znatelná.

## **Key word**

Industrial zones, brownfields, investment incentives, investment opportunities

## **Klíčová slova:**

Průmyslová zóna, brownfield, investiční pobídky, investiční možnosti

## Table of Content

1. Introduction.....	4
2. Objectives of Thesis and Methodology .....	5
3. Literature Overview.....	6
3.1. Key and Important Words Characteristics.....	6
3.2. Industrial Zones and Brownfields.....	8
3.3. CzechInvest.....	9
3.3.1. CzechInvest – History, Mission, Values.....	9
3.3.2. Organisational Structure of CzechInvest.....	10
3.4. Investment Incentives.....	11
3.4.1. Investment Incentives Development.....	11
3.4.2. Investment Incentives Conditions.....	12
3.4.3. Procedure When Applying for Investment Incentives.....	13
3.4.4. Types of Investment Incentives.....	14
3.4.5. Supportive Programme for Industrial Zones Development.....	15
3.4.6. Operational Programmes.....	16
3.5. Investment Opportunities.....	19
3.5.1. Investment Climate in the Czech Republic.....	19
3.5.2. PEST Analysis of the Czech Republic.....	20
3.5.3. Investment Opportunities in the Czech Republic.....	24
3.5.3.1. Real Estate Investment.....	24
3.5.3.2. Joint Ventures, Long-term Cooperation and Suppliers.....	25
3.5.3.3. Acquisition of Private Companies.....	26
3.5.3.4. Investment Opportunities in Specific Sectors.....	26
4. Case Study of Kladno.....	29
4.1. Kladno.....	29
4.2. History of Industry in Kladno.....	30
4.3. The Enterprise Zone Kladno.....	31
4.4. Kladno and Brownfields.....	33
4.5. Important Companies in Kladno.....	34
4.6. CzechInvest and Kladno.....	34
5. SWOT Analysis.....	36
6. Conclusions.....	43
7. Bibliography.....	44
8. Supplements.....	47

## **1. Introduction**

Industrial zones are usually very large, ugly areas connected with a certain rate of pollution and noise in their surroundings, damaged landscape, brownfields emergence, and destroyed communications. But, on the other hand, they are very important for countries, towns and even for people who do not like them. In the Czech Republic, the state economy is based on manufacturing, production, and connected services. The importance of those areas has been recognised by the Ministry of Industry and Trade.

Since 1998, CzechInvest has operated in the Czech Republic in order to improve competitiveness. It provides information about industrial zones in the Czech Republic, about the Czech Republic itself, finds contacts, and tries to attract foreign investors.

After joining the European Union, we have got access to its structural funds and money from this source became a big part of investment incentives. The Czech Republic has a good and well-developed investment incentives scheme, according to which the money is allocated.

The foreign direct investors can invest into a completely newly developed industrial zone or into a used industrial zone, where buildings already exist but usually ecological burdens are there as well. Brownfields, as used and abandoned industrial areas are called, represent higher initial investment and also higher potential due to their placement and developed infrastructure. They mainly arose after the fall of communist regime, because they had created huge industrial zones which were inconvenient and untenable in the long run.

## **2. Objectives of Thesis and Methodology**

The first objective of this thesis is to bring closer the situation of industrial zones in the Czech Republic, the situation concerning brownfields and their reconstruction, and the function of CzechInvest.

The second objective is to gather and to summarize information about investment incentives, about the procedure when applying for them, the type of investment incentives, the programmes under which it is possible to get investment incentives, and about condition under which a state support can be obtained.

The third objective is to sum up the situation of industrial zones and brownfields in Kladno and its surroundings. I also would like to find out the attractiveness of Kladno for investors.

The methodology used is gathering useful information from the internet, mainly obtained from web sites of CzechInvest, the Ministry of Industry and Trade, and the Czech Statistical Office. Other information came up from my own experiences and observation of the industrial zones in Kladno, from Kladno inhabitants' narratives and from searching databases.



### **3. Literature Overview**

#### **3.1. Key and Important Words Characteristics**

##### **Industrial zones**

Industrial zones, according to CzechInvest, are defined as: “self-contained complex of compact general-purpose buildings which are appropriate for light industry and hygienically unexceptionable manufacturing with solved transportation and a big portion of greenery between individual buildings”<sup>1</sup>. Another possible definition is, that: “An industrial zone is a self-contained complex of industry and services with many integrated professional functions.”<sup>2</sup> I would prefer the second definition because the first one contains the part about greenery and it is not always true that individual buildings are in the middle of grass.

##### **Strategic industrial zones**

“Strategic industrial zones are industrial zones covering a minimum of 200 hectares or at least 100 hectares when the zone is in a built-up unused area. These zones are prepared for serious and important investors that undertake to implement significant investment and create a certain number of jobs.”<sup>3</sup> Strategic industrial zones and investment incentives are important instruments for attracting investors (especially from the area of advanced industrial technologies).

##### **Brownfields**

Next term, which is connected with industrial zones, is brownfields. “Brownfield is any disused industrial, agricultural, military and mining site that is gradually deteriorating and is often ecologically burdened.”<sup>4</sup> From another point of view, brownfields are defined as: “completely or partly abandoned or minimally used areas inside urbanised regions”<sup>5</sup>.

---

<sup>1</sup> <http://www.prumyslove-zony.cz/blog/prumyslove-zony-53> [2008-12-28]

<sup>2</sup> <http://www.prumyslove-zony.cz/blog/prumyslove-zony-53> [2008-12-28]

<sup>3</sup> <http://www.czechinvest.org/en/strategic-infrastructure-projects> [2008-12-28]

<sup>4</sup> <http://www.czechinvest.org/en/czech-republic-seeks-way-to-resurrect-old-industrial-sites>[2008-12-28]

<sup>5</sup> <http://www.brownfieldsinfo.cz/souvisejici-clanky/> [2008-12-28]

## **CzechInvest**

“CzechInvest is the investment and business development agency of the Czech Republic whose services and development programmes contribute to attracting foreign investment and to developing Czech companies.”<sup>6</sup>

## **Investment incentives**

Investment incentives could be defined as: “financial or non-financial support designed to promote investment, employment, product mix and various other aspects”<sup>7</sup>, or as: “financial or non-financial support to encourage investment and promote the inflow of foreign capital and technology”. “Government schemes aimed at stimulating private sector interest in specified types of capital expenditure, or investment in areas of high unemployment or backwardness. These incentives may take the form of direct subsidies (investment grants) or corporate income tax credits (investment credit) that compensates the investors for their capital costs.”<sup>8</sup>

## **Investment**

“According to economic theories, investment is defined as the per-unit production of goods, which have not been consumed, but will however, be used for the purpose of future production. According to business management theories, investment refers to tangible assets like machinery and equipments and buildings and intangible assets like copyrights or patents and goodwill. In finance, investment refers to the purchasing of securities or other financial assets from the capital market. It also means buying money market or real properties with high market liquidity. According to personal finance theories, an investment is the implementation of money for buying shares, mutual funds or assets with capital risk. According to real estate theories, investment referred to as money utilized for buying property for the purpose of ownership or leasing.”<sup>9</sup>

---

<sup>6</sup> <http://www.czechinvest.org/en> [2008-12-28]

<sup>7</sup> <http://www.nasarawastate.org/incentives.htm> [2008-12-28]

<sup>8</sup> <http://www.businessdictionary.com/definition/investment-incentives.html> [2008-12-31]

<sup>9</sup> <http://finance.mapsofworld.com/investment/> [2008-12-29]

## **Foreign Direct Investment (FDI)**

“FDI refers to an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor. Further, in cases of FDI, the investor’s purpose is to gain an effective voice in the management of the enterprise.”<sup>10</sup>

“FDI represents the possession of assets by any foreign company. The assets may be any company, factory, mines and many more.”<sup>11</sup>

## **Small and Medium-Sized Enterprises (SMEs)**

SMEs are all micro, small, and medium sized enterprises which have less than 250 employees, an annual return not exceeding EUR 50 million, and an annual balance sheet not exceeding EUR 43 million.<sup>12</sup>

## **3.2. Industrial Zones and Brownfields**

Industrial zones are very important areas for every country, town and even persons living there. They are usually connected with a high rate of pollution, damaged landscape and destroyed communication, but these disadvantages go hand in hand with great advantages – job opportunities, new business, inflow of investment. Because of the possibility of job opportunities, industrial zones spread through whole countries and are usually located near workforce and resources. It means that the town periphery or a space between two towns is ordinarily the place, where industrial zones emerge. This place also has to have good connection to resources and developed infrastructure.

Nobody knows the precise number of industrial zones in the Czech Republic, because there is no limitation of area in definitions.

Disused industrial zones results in brownfields. There are many of them in the Czech Republic. It was caused by a centrally planned economy of communism reign and their passion for megalomania. Industrial zones became extensive areas with wasteful management and after the revolution in 1989, big changes happened. Before

---

<sup>10</sup> <http://www.unctad.org/Templates/Page.asp?intItemID=3146&lang=1> [2008-12-29]

<sup>11</sup> <http://finance.mapsofworld.com/investment/foreign-direct.html> [2008-12-29]

<sup>12</sup> Tomšík K., Business Economics, 2008

the revolution, there was not any private enterprise, but then the state economy was converted into the market relations and an avalanche of privatizations could begin. Some of them were successful but big portion of them was not. The industrial zones with unsuccessful privatization became bankrupt and workers had to be released which resulted in high unemployment in those regions. This was not good for a state economy and in order to make the situation better, a state agency CzechInvest was established.

### **3.3. CzechInvest**

#### **3.3.1. CzechInvest – History, Mission, Values**

CzechInvest is the Czech agency for foreign investment which was established by the Ministry of Industry and Trade of the Czech Republic. Its main mission is to improve the competitiveness of the Czech economy on a global scale. It tries to fulfil this mission by promoting foreign direct investment and the implementation of programmes which are focused on development and on consolidating the competitiveness of companies, human resources, and the business environment in the Czech Republic. The agency has also its values. The main of them is the development of the Czech economy which is the purpose of its work. The others are: customer satisfaction, which is considered as a yardstick of performance, its team, the key to success, and innovation, the way to develop.

Firstly, it offered clients comprehensive services (information, consulting, finding contacts) to help investors to run production projects in the Czech Republic. As the agency has become more experienced, the agency broadened its scope of activities and has transformed into a development agency supporting the restructuring of industry.

On 2 January 2004, the Business and Investment Development Agency CzechInvest was created by a merge with two other agencies – Business Development Agency and CzechIndustry.

### **3.3.2. Organisational Structure of CzechInvest**

CzechInvest operates under the Ministry of Industry and Trade of the Czech Republic. The connection between CzechInvest and the ministry is provided by the Deputy of the Ministry of Industry and Trade and the Chief Executive Officer (CEO) of CzechInvest. CzechInvest has also a Secretariat of the CEO, a Deputy CEO and an Internal Audit Department.

It has five divisions: Regions Division, Structural Funds Division, Investments Divisions, Finance Section and Internal Service Section. The most important for the development of industrial zones and for regeneration of brownfields is the Division of Investments, which is consequently divided into: Department of Investment Project Planning, Investment Project Management Department, Department of Investment Project Support and Industrial Zone Coordination Department. In association with the competent state administration authorities, the whole Investment Incentives Department seeks to improve the investment incentives scheme and to define efficient support for strategic services and technology centres.

Another part is a Steering Committee, which is an advisory body of the agency's CEO and is chaired by the First Deputy Minister of Industry and Trade. The main task is to cultivate conditions conducive to the fulfilment of CzechInvest's mission, to assist the agency's activities in the scope of its competence and to put forward recommendations on how to make the agency's operation more effective.

In 1994, a network of international offices was built up and recently CzechInvest has offices in London, Paris, Chicago, Yokohama, Cologne, Munich, Hong Kong and Brussels, where are two (one for Benelux and the second one for European Affairs).

There are also 13 regional offices in the Czech Republic at the regional level (i.e. NUTS III). They serve entrepreneurs as centres for basic information and consulting on state and EU business support programmes in manufacturing.

## **3.4. Investment Incentives**

### **3.4.1. Investment Incentives Development**

“The Investment Incentive Act governs general conditions for providing investment incentives, a procedure of investment incentives providing and a connected performance of state administration with the purpose of supporting economic development and creating job opportunities in the Czech Republic.”<sup>13</sup>

The process of support for investments was started by the passing of Resolution of the Government of the Czech Republic No 298 on proposed investment incentives for investors in the Czech Republic in 1998. Thanks to this, basic conditions for investors were created.

“Applicants were required to make a greenfield investment of at least USD 25 million. This limit was lowered to USD 10 million by the follow-up Government Resolution No 844/98 so that top major Czech investors could also benefit from investment incentives.”<sup>14</sup>

On 1 May 2000, the Incentive Investment Act (Act No 72/2000 Sb) entered into force. This was the most important turning point in business conditions and in the investment environment and the Czech Republic became the first state in Central and Eastern Europe that has investment incentive scheme embodied in its legislation. “Investment incentives were a form of State aid and as such were also governed by Act No 59/2000 on State aid, under which the Office for the Protection of Competition granted exemptions from the ban on State aid.”<sup>15</sup> The Act No 72/2000 was amended by Act No 453/2001, effective as of 30 January 2002. Then, the investment incentive scheme was extended by Government Resolution No 573 of 5 June 2002 in order to include strategic services and technology centres. The main aim of this was to let companies concentrate on their core business.

After joining the EU, the Czech Republic had to warrant an access to the financial resources of EU Structural Funds for business and to harmonize the investment incentives scheme. Due to that, a favourable investment climate and

---

<sup>13</sup> Act No. 72/2000 Coll. [online] [2008-12-31]

[http://portal.gov.cz/wps/portal/\\_s.155/701?number1=72%2F2000&number2=&name=&text=](http://portal.gov.cz/wps/portal/_s.155/701?number1=72%2F2000&number2=&name=&text=)

<sup>14</sup> <http://www.mpo.cz/dokument12478-strana1.html> [2008-12-31]

<sup>15</sup> <http://www.mpo.cz/dokument12478-strana1.html> [2008-12-31]

professionalism of the individual agencies would be even more important. In 2003, the “Euro-amendment” to the Investment Incentives Act No 19/2004 Coll. was prepared. By this amendment, the institutional framework for granting investment incentives was changed and since that, the Ministry of Industry and Trade shall determine the state aid intensity in collaboration with the Anti-Monopoly Office. Other changes were: to shorten the approval process; to state the permissible aid intensity and the sectors eligible for such aid; to reduce the minimum amount of investment; and to extend the tax relief period for companies that are expanding or modernising their production capacity.

### **3.4.2. Investment Incentives Conditions**

“The system of investment incentives is regulated by Act No 19/2004, amending Act No 72/2000 on investment incentives and amending certain laws (the Investment Incentives Act), as amended, and some other laws. (Available in the Collection of Laws).

Investment incentives are:

- **corporation tax concessions** for 10 years for newly established or existing corporations;
- **transfers of infrastructured land at preferential prices;**
- **job creation grants** (up to 200,000 CZK per employee);
- **training and retraining grants** (up to 35% of training costs);
- **transfers of land** classified in the Land Registry as agricultural land **under special provisions**, and transfers of other types of land, at prices determined according to special provisions effective as of the day when the transfer agreement is signed. Special laws restricting transfers of land owned by the Czech Republic are not affected by this.

Conditions for granting an investment incentive:

- 1) The **investment** must be made **in a manufacturing sector**, either one of the High-Tech sectors listed in the Act or another manufacturing sector, provided at least 50% of the price of the production line comprises costs to acquire machinery feature in the government-approved list of High-Tech machinery.

- 2) The investor must go into **new production, expand** existing production, or **modernize** it to make significant changes to a product or production process.
- 3) The investor must **invest at least 200 million CZK** (before the amendment 350 million CZK). In areas where unemployment is at least 25% higher than the average unemployment rate in the Czech Republic, this limit is reduced to 150 million CZK, and in areas where unemployment is at least 50% higher than the average unemployment rate in the Czech Republic the investment limit is lowered to 100 million CZK.
- 4) An investment amounting at least 100 million CZK (before the amendment 145 million CZK), or 50 million CZK if the investment is located in a region with high unemployment, must be financed from the investor's resources.
- 5) The investor must acquire machinery listed in Chapters 84, 85 and 90 of the Customs Tariff worth at least 40% of the total value of the tangible and intangible fixed assets acquired.
- 6) The proposed production must comply with all Czech legislative requirements on environmental protection.”<sup>16</sup>

### **3.4.3. Procedure When Applying for Investment Incentives**

“Investor (Applicant) presents CzechInvest (Department of Investment Incentives) with a plan for investment incentives, which must contain all the relevant particulars (the company may begin investing as of the submission date). CzechInvest prepares an expert opinion on the applicant's investment project and passes it on to the Ministry of Industry and Trade.

Ministry of Industry and Trade (Department of Investment Support) assesses the plan in cooperation with other central institutions:

- Ministry of Finance (Department of Enterprise Support) if an application is submitted for a tax concession;
- Ministry of Labour and Social Affairs (Department of the Labour Market) if an application is submitted for a job creation grant or training and retraining grant;
- Ministry of the Environment (Department of Strategies);

---

<sup>16</sup> <http://www.mpo.cz/dokument12478-strana2.html> [2008-12-31]



- in cooperation with the Office for the Protection of Competition (Department of State Aid), it sets the maximum amount of State aid.

Investor (Prospective) applies for a pledge of investment incentives through the agency CzechInvest; CzechInvest forwards this application to the Ministry of Industry and Trade; the Ministry of Industry and Trade issues a decision to grant investment incentives.

Investor (Prospective) signs a grant agreement with the Ministry of Labour and Social Affairs; the Ministry of Labour and Social Affairs remits funds to the investor's account in accordance with the terms of the agreement.

On fulfilment of the legal criteria the investment incentives can be applied.”<sup>17</sup>

The State started to systematically support the construction and development of industrial zones in the second half of the 1990s. Since that, many programmes have been introduced.

#### **3.4.4. Types of Investment Incentives**

The National Investment Incentives Scheme determines three types of investment incentives:

- tax incentive,
- job creation and training grants, and
- site support.

“The **tax incentive** has two forms. If a new company (legal entity) is established for the investment project, the new company is eligible for corporate tax relief for up to ten years. If the investment is made as an expansion or modernization project within an existing Czech company (legal entity), the company is eligible for partial tax relief for up to 10 years. The tax relief is terminated when the company has exceeded the maximum level of eligible state aid – see the section on compatibility of incentives with the European Union regulations.”<sup>18</sup>

“The size of the **job creation grant** depends on the unemployment rate in the district where the investment is made, and ranges from zero in areas with unemployment below the national average to a maximum of CZK 200,000 per

---

<sup>17</sup> <http://www.mpo.cz/dokument12478-strana3.html> [2008-12-31]

<sup>18</sup> <http://www.businessinfo.cz/en/section/investment-incentives/1001090/> [2009-02-11]

employee in districts with unemployment more than 50% higher than the average. The same applies to training and retraining grants, which range from zero to maximum of 35% of total training and retraining costs.”<sup>19</sup>

“The **site support incentive** is available on a national basis subject to availability of suitable sites, and the site should be selected before the application for investment incentives is submitted. The incentive is granted by the government to the municipality and/or the private developer in the form of subsidies for development of site infrastructure and the transfer of land from state ownership to the municipality at an advantageous price.”<sup>20</sup>

Among these types of incentives, there exist also subsidies which are assumed to strengthen the Czech Republic’s position in the Central European region. There are mainly two types:

- subsidy for business activity, and
- subsidy for training and re-training.

#### **3.4.5. Supportive Programme for Industrial Zones Development**

The Supportive Programme for Industrial Zones Development with special emphasis on preparing strategic industrial zones was approved by the Government in 1998. It consisted of four sub-programmes:

- Preparation of Industrial Zones
- Regeneration of Industrial Zones
- Construction and Reconstruction of Lease Facilities (production halls and buildings for business support services and technology centres)
- Accreditation of Industrial Zones

Under this programme, a region or municipality may request to transfer land owned by the State or administered by the Land Fund of the Czech Republic under favourable conditions.

---

<sup>19</sup> <http://www.businessinfo.cz/en/section/investment-incentives/1001090/> [2009-02-11]

<sup>20</sup> <http://www.businessinfo.cz/en/section/investment-incentives/1001090/> [2009-02-11]

The support provided by this program is:

- in a form of a **grant** to prepare new industrial zones, regeneration of impaired zones and development of already existing industrial zones,
- provided in the form of **transfer** of land from the Land Fund of the Czech Republic under favourable conditions,
- provision of **funds** to acquire equipment, training and accreditation of industrial zone managers.

The main aims of the programme are: to prepare the conditions to develop investment projects in the processing industry, business support services and technology centres; to contribute to the restructuring of industry by opening modern production plants with low raw material and energy dependence, high added value and large export potential; and to create the conditions for new job creation.

One of the priorities from the outset of the programme was to support construction of strategic industrial zones, which was managed (e.g. Kolín – Ovčáry, Brno – Černovická terasa, Holešov, Mošnov, Nošovice, Žatec – Triangle, Most – Havraň, Solnice - Kvasiny).

In April 2003, the programme was updated for the purpose of increasing involvement of the private sector in industrial zone preparation due to that the developer (= a company whose major activity is investment into construction real estate operations) was able to get support under the same conditions as organisations in the public sector.

#### **3.4.6. Operational Programmes**

The first period when CzechInvest assisted Czech companies in obtaining financing from the European Union structural funds was between 2004 and 2006. The funds were the European Regional Development Fund and the European Social Fund.

**Operational Programme Industry and Enterprises** was intended to support small and medium-sized enterprises and was focused on the support of: “building and development of industrial research and development infrastructure and supporting its linking to the tertiary sector, business real estates, training centres for professional

education, development of the production base of small and medium-sized enterprises, usage of the non-traditional energy sources by small and medium-sized enterprises”<sup>21</sup>.

Operational Programme Industry and Enterprises contained 12 programmes:

- **Prosperity** (its aim was to support infrastructure for industrial research and development, innovation, and the improvement of the environment for technology oriented companies with special attention to the establishment and development of business incubators and science and technology parks);
- **Real Estates** (its aim is to support municipalities, associations of local authorities, regions, development companies, and SMEs in modern production operations via the construction of essential infrastructure or the regeneration of brownfields and construction on greenfields);
- **Training Centres** (its aim is to improve conditions in the individual regions for human resources development by supplying the infrastructure needed for the training and education of workers at various levels of enterprise management that will help them to acquire new key skills);
- **Clusters** (its aim is to initiate infrastructure for entities which group together in order to generate the competitiveness they need in the form of a cluster);
- **Marketing Programme** (the programme was valid for the 2004 – 2006 period and its aim was to promote the competitiveness of SMEs from the Czech Republic on foreign markets);
- **Start** (its aim was to facilitate the implementation of the business plans of citizens who had started up business for the first time or who were entering into business after a longer interval by providing support in the form of interest – free loans, but the receipt of application was closed on 1 October 2006);
- **Credit** (its aim is to facilitate – through soft investment loans – the implementation of development business projects by small young enterprises, for whom their lower capital base or limited opportunity of providing security for credit is a barrier hampering the acquisition of external financing);

---

<sup>21</sup> <http://www.mpo.cz/dokument13816.html> [2008-12-31]

- **Development** (its aim was to support the development of the competitiveness of SMEs in their growth phase, but due to insufficient funds in 2006, the programme is not and will not be reopened);
- **Innovation I** (its aim was to support innovation of products, services and processes, but the receipt of applications was closed on 1 October 2006);
- **Innovation II** (the programme was focused on the support of development of entrepreneurial projects by implementing technical innovation in the area of industry and industrial services, but applications were accepted only from 3 to 28 April 2006);
- **Energy Savings** (its aim is to contribute to reduce energy consumption in the Czech industry by providing a financial assistance to energy reduction investment projects);
- **Renewable Sources of Energy** (its aim was to support projects for the generation of heat and electricity from renewable energy sources, but it was closed on 1 October 2006).

The **Operational Programme Enterprise and Innovation** has been prepared by the Ministry of Industry and Trade for the period 2007 – 2013 and was approved on 15 November 2006. “The global objective of the Operational Programme Enterprise and Innovation (OPEI) is by the end of the programming period to increase the competitiveness of the Czech economy and bring the innovational performance of the sector of industry and services closer to the level of leading industrial European countries. The OPEI is aimed at increasing the competitiveness of the industry and enterprise, keeping the attractiveness of the Czech Republic, its regions and cities for investors, supporting innovations, speeding up the implementation of the R&D results into the production sector namely due to the stimulation of the demand for the R&D results and commercialisation of the results, supporting the entrepreneurial spirit and economic growth based on knowledge, increasing the use of new technologies, innovative products and ICT.”<sup>22</sup>

6 programmes, which started in the first period, have continued also under the OPEI. The continuous programmes are: Start, Development, Innovation, Prosperity,

---

<sup>22</sup> <http://www.mpo.cz/dokument24442.html> [2009-01-11]

Real Estates and Training Centres, but all have time limited call for proposals. Other programmes are:

- **Progress** (programme should enable the realisation of larger entrepreneurial projects for the development of SMEs with a lower capital background or with limited possibilities of obtaining a loan representing a barrier in the access to external financing);
- **Guarantee** (its aim is to facilitate the realisation of entrepreneurial projects of SMEs focused on investments and increasing competitiveness in the form of guarantees and soft guarantees with financial contributions);
- **ICT and Strategic Services, ICT in Enterprises** (their aim is to improve information and communication technologies, they were partially incorporated already into OPEI);
- **Eco-Energy** (renamed programme Energy Savings continues in its aim);
- **Potential** (it is focused particularly on strengthening research capacities in the SMEs already engaged in research and development and on the deepening of collaboration of SMEs with research and development institutions);
- **Cooperation** (this programme is a successor of the Cluster programme, but dealing also with technological platforms); and
- **Advisory services** (its aim is to provide information).

### **3.5. Investment Opportunities**

#### **3.5.1. Investment Climate in the Czech Republic**

If investors (foreign or domestic) want to put their investment in any project, they are very careful about their money and want to know the probability of returning the investment, the profit they make by investing into individual projects, and risk connected with this action of providing capital. In order to know all these information, they are interested in investment climate of an individual region (town, region, country). Because of that, many analysis like SWOT analysis, PEST (or PESTLE) analysis, socio-economic analysis, geographical preconditions and infrastructure analysis are done. We can say that each analysis describes advantages and disadvantages of a phenomenon but from different perspectives. SWOT analysis

evaluates the Strengths, Weaknesses, Opportunities, and Threats of an individual project, action, state in order to ease decision-making process. PEST analysis has many modifications according to the use but the core remains unchanged. The analysis describes Political, Economic, Social, and Technological factors of a region, which is examined.

The investment climate of particular regions and towns in individual countries are influenced by a national foreign and economic policy of the country. In order to inform you about the climate of the Czech Republic, which will be useful even for the case study of Kladno in the second part of the thesis, I can briefly introduce the Czech Republic.

### **3.5.2. PEST Analysis of the Czech Republic**

The Czech Republic is placed in the middle of the Europe with total are of 78,865 square kilometres and the population over 10.3 million. Czech is an official language in this landlocked country with a capital city Prague. Climate is mild continental.

#### **Political factors**

The Czech Republic is a parliamentary democracy with separate legislative, executive, and judicial powers. The Parliament has two chambers – the Chamber of Deputies with 200 seats and the Senate with 81 seats. The country is a member of many international organisations such as the World Trade Organisation, the International Monetary Fund, the North Atlantic Treaty Organisation, the European Bank for Reconstruction and Development, and especially the European Union. On 21 December 2007, the Czech Republic became an integral part of the Schengen area, which provides perfect conditions to make full use of the country's ideal geographical location.

“Under the Czech law foreign and domestic entities are treated identically in all areas, from protection of property rights to investment incentives”.<sup>23</sup>

Among others, the Czech Republic is also a member of the Multilateral Investment Guarantee Agency, which is “an international organisation for protection

---

<sup>23</sup> <http://www.businessinfo.cz/en/section/investment-climate/1001089/> [2009-02-11]

of investment belonging to the World Bank-IMF group”<sup>24</sup>. It means that the Czech Republic has signed many bilateral international treaties with countries and due to that their foreign investments are supported and protected. An international investment risk evaluation is also very good.

The economic policy is consistent and predictable and currency stability has been maintained by a strong and independent Central Bank since 1991. The Czech crown is fully convertible.

### **Economic factors**

The Gross Domestic Product (GDP) is increasing since 1995. In 2007 it was 3,530 billion CZK in current prices. GDP per capita is also still increasing and reached 341,959 CZK in current prices in 2007. Registered unemployment rate was 6.6% in average in 2007 and decreased from 10.2% since 2004. Inflation during 2003 – 2006 was under 2.8% in the year-on-year comparison, but in 2007 grew to 5.4%, in the first quarter of 2008 was 5.0% and reached 5.9% in January 2009. State debt represented 25.1% of GDP in 2007 and since 2003 was increasing almost at constant rate. Exchange rates of koruna to euro and dollar are fluctuating, but on the base of year average they are decreasing (euro fell from 31.90 in 2004 to 27.60 in 2007 and in February 2009 was 28.81, dollar constantly fell from 28.23 in 2003 to 20.3 in 2007 and in February 2009 was 22.88).

Export and import are almost equal (export usually slightly exceeds import). Trade balance of the Czech Republic is usually positive. The main export partners of the country are: Germany, Slovakia, Austria, Italy, and France. Apart from Austria, all countries are also main import partners.

The country is very successful in acquiring foreign direct investment and grants from structural funds of EU. “Measured on a per-capita basis the Czech Republic has become by far the most successful country in attracting FDI in Central Europe in recent years. According to recent estimates, from 3 to 5 billion dollars on average should annually flow into our country up until the year 2010.”<sup>25</sup>

---

<sup>24</sup> <http://www.businessinfo.cz/en/section/investment-climate/1001089/> [2009-02-11]

<sup>25</sup> CzechInvest, Investment climate.pdf



The tax system of the Czech Republic is similar to the other EU countries. The personal income tax has rate of 15% and the rate for corporate income tax is 21% (but for investment companies and investment and pension funds are the rates lower). The rate of value added tax is 19% (reduced 9%).

### **Social factors**

The population of the Czech Republic remains almost constant (10,446,157 as of 30 September 2008<sup>26</sup>). More than 71% of the population is between 15 – 64 years, the rest is almost evenly spread between the age groups of 0 – 14 years and older than 64 years. The life expectancy among total population is 76.73 years, but it is higher among females (79.9 years) and lower among males (73.7 years). The natural increase was negative between 1994 and 2005, but it is positive since 2006. In recent years, we can notice that the number of immigrants highly exceeds the number of emigrants, which very significantly raises the total increase. There are more than 50,000 marriages each year (except 2003) and divorces do not fall under 30,000.

The structure of population is almost equally divided into males and females. The average age is 48 years. The number of single males exceeds the number of single females by 400,000, but also more males are married than females. The number of divorced females is about 100,000 higher than of males and the number of widowed females exceeds the number of widowed males by more than 500,000.<sup>27</sup>

Since 2012, the official working age will be 15-63 years for men and women without any child. The number of economically active population still grows and the percentage of people working past retirement age is among the highest in the world.

Education system is divided into 3 levels – basic, secondary, tertiary. 9-year school attendance on the basic level is compulsory. Almost 12% of population has tertiary education. More than 94% of population are Czech (Czech 81.1%, Moravian 13.2%, Silesian 0.4%). Roman Catholic is the religion which is confessed by 39% of the Czech population, but the same portion is represented by atheists and non-believers.<sup>28</sup>

---

<sup>26</sup> <http://www.czso.cz/eng/csu.nsf/informace/aoby121108.doc> [2009-02-23]

<sup>27</sup> [http://www.czso.cz/csu/2008edicniplan.nsf/t/2D0028704A/\\$File/400308004.pdf](http://www.czso.cz/csu/2008edicniplan.nsf/t/2D0028704A/$File/400308004.pdf) [2009-02-23]

<sup>28</sup> <http://www.businessinfo.cz/en/section/basic-data/1001061/> [2009-02-23]

## **Technological factors**

Long tradition of the Czech industry and Czech technical universities are core advantages of the Czech Republic concerning technological factors. More than 38% of the Czech population is educated in engineering, manufacturing and construction (and more than one fourth has tertiary education). In connection with investment incentives and very good attitude to foreign direct investments, the Czech Republic is one of the most favourable countries for investments.

But not only place to run your business is provided by the Czech government. There are also Strategic Services and Technological Centres, which are designed in order to strengthen the Czech Republic's position as an information and technology hub in the Central European region. The services centres are supported in fields like shared services, software development, export solution for information and telecommunication technologies, and high-tech repair. On the other hand, technology centres are focused on innovation activities that are closely related to manufacturing.

## **Summary of PEST analysis**

The Czech Republic is one of the most highly-developed post-communist countries with many advantages. After joining the European Union (1 May 2004), the country profit from the cooperation of EU members and the EU Structural Funds and since 21 December 2007, when the Czech Republic became a part of the Schengen area, it benefits from its advantageous location in the centre of Europe. A stable economic and political environment, educated workforce, and developed infrastructure are core factors which are vital for attracting foreign direct investment. Among these facts, a highly skilled labour force, favourable costs and price stability, a safe investment environment with a codified system of investment incentives, a highly developed property market, a responsible attitude and approach by government, mentality, culture and attitude close to western countries, and a strong focus on research and development also speak in a favour of the Czech Republic.

### **3.5.3. Investment Opportunities in the Czech Republic**

Thanks to its advantageous location, stable economic performance, educated workforce, competitive infrastructure, investment incentives, supplier base and developed real estate market, the Czech Republic became one of the most successful transition economies in terms of attracting foreign direct investment. An Economist Intelligence Unit study says that: “the Czech Republic’s potential stems from a combination of relatively low labour costs, an attractive regulatory environment, and close proximity to Western Europe, with which it also shares close cultural and historical ties. The country’s relatively well-educated workforce broadens its attractiveness as an off-shoring location beyond those of regional competitors such as Poland and Slovakia.”<sup>29</sup>

Since 1990, a large amount of foreign direct investment has flown into the Czech Republic and this amount became even higher after 1998, when the investment incentives were introduced, and after 2004, when the country became a member of the European Union. Investors are attracted from all countries no matter in which sector do they invest and without any restriction on the level of investment or ownership. The location in Central Europe enables exceptional access to other European markets, which is also supported by skilled and disciplined Czech workforce.

There are many investment opportunities in the Czech Republic and for better understanding; they could be divided into separate fields:

- Real Estate Investments,
- Joint Ventures, Long-term Cooperation and Suppliers,
- Acquisition of Private Companies, and
- Investment Opportunities in Specific Sectors.

#### **3.5.3.1. Real Estate Investment**

The Czech property market is growing as well as the demand for office and industrial and residential spaces. This area has many investment opportunities which are promoted by CzechInvest which also provides financial aid and consulting services for developers and investors. The main focus is put on industrial properties and facilities suitable for business support services or research and development.

---

<sup>29</sup> <http://www.czechinvest.org/en/it-and-software-development> [2009-02-18]

For better orientation, CzechInvest maintains its own national business-properties database which includes information about suitable industrial sites and buildings around the country that have clear title, industrial zoning permission and developed technical infrastructure. The conditions of the Czech Republic allow to make good greenfield and even brownfield investment. Investors, who locate operations in municipal industrial zones, will receive fully serviced land at favourable prices and projects, which meet the eligibility criteria, can receive investment incentives including tax relief, job-creation grants, training grants and other forms of aid. In the case of brownfield projects, there is an opportunity to receive additional financial assistance (particularly from EU Structural Funds).

### **3.5.3.2. Joint Ventures, Long-term Cooperation and Suppliers**

For them, who are considering looking for a joint-venture partner in the Czech Republic, there is a possibility to accept recommendations from CzechInvest. One of the free of charge services is to propose suitable companies through its database of manufacturing firms, in which it is possible to filter companies according to their interest in forming a joint venture. CzechInvest can also offer an arrangement of meetings with potential partners and organisation of visits to their product facilities and to arrange contacts to law offices and consulting firms that assist investors with the actual establishment of joint ventures (mainly thanks to cooperation with the Association for Foreign Investment).

Usually, Czech partners are suitable for joint ventures because of their flexibility, an innovative approach, and knowledge specific to the local environment. On the other hand, small and medium-sized Czech suppliers are looking for stronger partners with the aim of gaining access to distribution networks, specialist knowledge, and financial resources.

For the purpose of matching partners, a Supplier Development Project is implemented. It was designed to boost the number of foreign investors that are increasing their use of Czech-based suppliers. A database of Czech companies was developed under the project and offers information about Czech suppliers interested in long-term cooperation with foreign partners.

### 3.5.3.3. Acquisition of Private Companies

This is the only field of investment where CzechInvest plays only a passive role in identifying local companies as potential acquisition targets. But still, it can provide general information on the investment and business climate. In general, the Czech Republic offers good opportunities in either privatised companies or start-ups acquisition.

### 3.5.3.4. Investment Opportunities in Specific Sectors

The areas, where it is a good opportunity to invest in, are Automotive, Aerospace, Electrical Engineering and Electronics, High-Tech Engineering, Life Sciences, Medical Devices, IT and Software Development, Business Support Services, and Research and Development.

The **Automotive** sector is the main sector of Czech industry. It benefits from its technical tradition and engineering education. But nowadays, the sector itself and its connected manufacturers are highly affected by financial crisis.

The main advantage of the Czech Republic's **Aerospace** sector is skills of aviation professionals employed in the sector. As the automotive sector, it also has a deep-rooted aerospace tradition. Among this, the other bonuses are academic interface, certification track record, skills availability, comparatively low overheads, excellent infrastructure and business climate conducive to profitability.

If automotive and aerospace sectors are based on a long tradition and highly qualified employees, it is even truer in **Electrical Engineering and Electronics**. This industry is evenly spread around the country and employs nearly 190,000 people<sup>30</sup>. A high level of technical education together with research experience have created productive environment for manufacturing and even for research and development activities. This branch is connected with those well known names as Honeywell and Panasonic.

Other key sector of the Czech economy is the **High-Tech Engineering**, in which Czech companies reach continuously increasing competitiveness. It is caused due to an ability to cover a wide range of activities, which begins by construction and design and ends by production, and to the comprehensiveness of products and

---

<sup>30</sup> <http://www.czechinvest.org/en/electrical-engineering-and-electronics> [2009-02-17]

supplementary services. Main products of this sector are healthcare equipment, optical equipment, and manufacture of motor vehicles. The wide sector is divided into three minor ones: Instrumentation, Measuring and Control Equipment Devices sector with wide variety of products that are intended for direct use or in a complete range of applications, production lines, machines and equipment, Machine Tools with production of machines of almost every type and size, and Railway Industry now connected with the extensive modernization of the railway corridors.

The sector of **Life Sciences** is well known thanks to famous and important discoveries, such as the fourth blood type, polarography, soft contact lenses, the anti-AIDS drugs Vidtide and Truvada, the anti-hepatitis B drug Hepsera and the ELISA diagnostic kit, which increases the likelihood of successful artificial insemination. Several companies in the Czech Republic focus on waste management, decontamination, sanitation and re-cultivation of land and water, which are important aspects connected with brownfields revitalisation. A very important research institutes have achieved results in the areas of immunology, rheumatology and medicinal chemistry. Among those areas, current biotech research is focused on genome structure, molecular immunology and immunogenetics, and stem-cell research.

The sector of **Medical Devices** is based on meeting the most demanding EU standards and represents very profitable investment opportunities because it is driven by growing income, aging populations and proximity to the largest medical-devices markets in Europe. The sector is supported by science institutes and technical universities, whose departments or even whole faculties concentrate fully on research and education in the field of biomedical and clinical technology and related areas.

Microsoft, Skype, CSC Corporation, Deutsche Börse, RedHat, Sun Microsystems, Monster Technologies, LogicaCMG and Infoys, all these companies (or their development centres) are connected with **IT and Software Development** sector of the Czech Republic. Competitive costs play a substantial role in a location decision process, but still skills are the critical factor for success. The country has a strong skills factor even due to the fact that one-third of all university graduates have a degree in a technical field from 23 public and 37 private universities.

Thanks to a remarkable inflow of projects, the **Business Support Services** represents one of the most rapidly emerging sectors of the Czech economy. University cities, such as, Ostrava Olomouc and Plzeň, attract attention because of offering a good supply of high-quality labour, while at the same time the pressure of rival businesses remains very low. The rule about important location but critical skill factor is applied also in this sector as well as in the previous one. In order not to get confused, the projects that could be classified as business support services are: Shared Services Centres, Customer Contact Centres, ICT Expert Solution Centres, Software Development Centres, and High-Tech Repair Centres. Well known names connected with this sector are, for example, DHL, Exxon Mobil, GE Money Multiservis, IBM, Lufthansa, SAP, and TESCO Stores.

As it was mentioned several times before, skilled workforce is very important factor and it is completely vital for the **Research and Development** sector. Czech universities are also conscious of the importance of collaboration with the private sector and see it as a priority. The close cooperation between educational institutions and companies enables practical trainings of technical schools' students. Nearly 50 science and technology parks, innovation centres and business incubators present high-quality infrastructure for research and development. The Czech government understands that research and development projects are very important and support these activities with various tools, such as:

- deduction of all research and development costs from firm's tax base and at the same time include them in eligible costs;
- grants from the National Research Programm;
- investment incentives to support technology centres and centres for industrial research and development; and
- grants provided from EU structural funds.

## 4. Case Study of Kladno

### 4.1. Kladno

Kladno is a statutory town with almost 70,000 inhabitants. It is the seat of a district and the largest town in Central Bohemian Region. Its location is in the centre of the Czech Republic near an international airport Prague-Ruzyně (in a distance of 15 km), which is very convenient.

Among 15 elementary schools, there are 2 Grammar Schools, 8 High Technical Schools, and 3 Technical Colleges in Kladno. Also 3 Universities have their seat in Kladno – University of Finances and Administration, Central Bohemian University Institution, and Czech Technical University (Faculty of Biomedicine Engineering). Thanks to a good traffic connection with Prague, many students commute there.<sup>31</sup>

Structure of land types is formed mainly by arable land, which covers more than 43,000 ha from the total amount of 72,631 ha. Then, forests cover 14,514 ha. Over 4,500 ha are comprised by orchards, grasslands, hop gardens, and vineyards. 1880 ha is built up.<sup>32</sup>

Registered unemployment rate differs very significantly among males and females. It is 4.71% for males, but 7.51% for females.<sup>33</sup> So Kladno is a city with an average or slightly better than average rate of unemployment. It is also due to the fact, that many people have their job in Prague.

Kladno cooperates with The Regional Development Agency of Central Bohemia and with CzechInvest in order to attract investors. Kladno has an integrated development plan, which includes transformation from purely industrial city to a new city of services, a reconstruction of communications and infrastructure, and a revitalisation of brownfields and disused sites.

---

<sup>31</sup> Kladno Official Website [2009-03-08]

[http://www.mestokladno.cz/EN/vismo/dokumenty2.asp?id\\_org=100977&id=1019&p1=1011](http://www.mestokladno.cz/EN/vismo/dokumenty2.asp?id_org=100977&id=1019&p1=1011)

<sup>32</sup> Czech Statistical Office, Basic Characteristic of Districts – Tab. 1.1 Area – structure of land types [2009-03-08] <http://www.czso.cz/csu/2008edicniplan.nsf/engkapitola/1303-08-2007-100>

<sup>33</sup> Czech Statistical Office, Registered Unemployment Rate: males, females, [2009-03-08] <http://www.czso.cz/csu/2008edicniplan.nsf/engkapitola/1303-08-2007-300>



Another development plan was introduced in 1999. The City in cooperation with BermanGroup Company and the Regional Development Agency Central Bohemia started to implement The Strategic Plan of the Economic Development in Kladno. The document includes sets of programs dealing with the transportation, enterprise zones and investments, living standards, town image and human resources.

Kladno also joined the Local agenda 21, which is a project of a strategy of sustainable growth and development in the world at the local level.

## **4.2. History of Industry in Kladno**

In 1846, Jan Váňa discovered a rich coal deposit near Dříň. Kladno Coal-mining Company (Kladenské kamenouhelné těžářstvo) was founded two years later by the industrialist Vojtěch Lanna and Klein brothers. In 1854, Vojtech Ironworks (Vojtěšská huť, Adalberthütte) and in 1857, Prague Ironworks Company (Pražsko-železářská společnost) were established by the mentioned businessmen. The famous Poldi Ironworks (Poldihütte) was established in 1889 by the director of Prague Ironworks Company Karel Wittgenstein. This enterprise was called after the director's wife Leopoldina and adopted the logo (1893) – a head of a charming woman. The main production was focused on the world-famous first-class alloy steel. Then the post-war nationalization followed. Due to the mergence of nationalized subjects, the giant Poldi SONP (Spojené ocelárny národní podnik – United Steelworks National Company) Kladno was formed. In 1989, Poldi Kladno Iron and Steel Works were not successfully privatized and it bankrupted between 1996-1997 and the entire region was deeply harmed.

Why was Poldi Kladno famous? It was because of high quality steel which found its utility, among others, in aeronautics industry and automobile industry. The first supply of aeronautics crankshafts Poldi for Hans Grade (German airman and designer) was in 1907. Already since 1903, Poldi Steelworks supplied components and forged pieces to firms Daimler and Benz. Subsequently, their cars won Grand Prix France in 1908 and one year later, a car Blitzen Benz, which was constructed by using Poldi steel, set speed record 211.51 km/h. In 1914, Dr Hummelberger developed steel which was resistant to corrosion (Poldi Aks). In 1930, Poldi Maximum and Poldi

Tenax steel were used for Harbour Bridge construction in Sydney. These successes were followed by many others, but there is another one that is worth mentioning. In 1990, Poldi Kladno was awarded by Brussels Euréka gold medal for Poldi Atabor steel, which served to lodgement of nuclear waste.

Another company, which has been important for Kladno, was founded in 1865 and named NKT Cables (Kablo Kladno). It focused on cord production, because local coal mines were great customers. In 1918, the production was extended to manufacture cable and communication networks, line wires and cable systems. At present, after a German capital entry, the company keeps its position in the market and belongs among one of the corner-stones and securities of Kladno industries, especially when the quality and capacity of its production facilities rank among the top ones all over Europe.

Due to centrally planned economy in the time of communism reign, heavy industry developed there very quickly and Kladno was not attractive. It changed after 1989, when the privatization got started and after the bankruptcy of the largest enterprise in Central Bohemia (Poldi Kladno) in 1996-1997. This situation was followed by increasing unemployment rate from 6.5% in 1994 to 11% in 1999.

Steps for restructuring and transformation of industry and trade had to be taken. They included e. g. foundation of The Regional Development Agency Central Bohemia and supporting the representative of the Czechinvest in Kladno, investment incentives in the new industrial zone Kladno-south, investment in ecology, housing policy, promotion of sport, and many others.

### **4.3. The Enterprise Zone Kladno**

Kladno has two bigger industrial zones. The younger one has spread between Kladno and Velké Přítočno since 1998. It is called The Enterprise Zone Kladno-south and its area is more than 40 hectares. The new enterprise activities are placed there only in accordance to the building law and the law of the environmental protection, which is also important for future. Due to a big importance of creating new job opportunities for people who worked in Poldi Kladno, the town invested into the

infrastructure and into construction of retention tank for rain water sewerage and this location became very attractive for both the domestic and foreign investors.

There is congenial atmosphere. New pavements, roads, parking places, buildings in many colours, even grass between single buildings. It seems “clean” and “fresh”. But still, it is one box building next to other one. CzechInvest mediated the transfer of land from the National Land Fund.

The firms operating there are e.g. Dr Oetker, SHOWA Aluminium Czech (a Japanese company producing air conditioning units for cars), and TRANSITO PROPERTIES Czech (Dutch company dealing with production and assembly of electronics parts). Another firms starting their business in this area are Barco Group (Belgian company dealing with electronic units and processing) makes trial operation, SAGEM construction factory of a French company for mobile phone production and after-sale service is placed there, and Lego (Danish firm) built new production halls. We can see, that this industrial zone is quickly developing and it happens mainly thanks to the effort of the Kladno City Hall, which managed to attract this place for investors mainly by creating good conditions, such as good infrastructure in the area of Kladno-south.

Completely different is the other industrial zone, which history began 150 years ago. The area of more than 500 hectares among Kladno (Dřívň and Dubí), the area of the old industrial zone, the place where Kladno industry began is called The Enterprise Zone Kladno-east (sometimes The Industrial Zone Kladno-east). Due to a restructuring and placing new enterprise activities, the former industry presents just 10-25% of the area utilization.

The zone is full of contrast, like two completely different worlds. There are three big successors of the old Poldi Kladno, newly established smaller companies, and big unused manufacturing halls. It is clear that this zone is much older and dirtier than the Enterprise Zone Kladno-south. A tooth of time has bitten to every building, road, and pipe. Everything is covered by light layer of fly ash. Big, ugly, and old buildings are arranged in rows. Some of them are still full of noise because of not stopping manufacturing. It is a wonder that 50 years old machines managed to grind with a thousandths of millimetres accuracy. On the other hand, the majority of halls

keep in silent, sleep in piece. But not each of them is let in its calm. Some people have stolen iron frames and a part of the hall fell down on them. This incident started a debate about future utilisation of this area, but without any clear solution yet.

Nowadays, forges are utilized by a German company Scholz Stahlzentrum – OST, Ltd., Třinec Ironworks operate in the modern metallurgical complex Poldi in Kladno – Dříň, Kablo Kladno has worked there successfully since it was founded. Due to the privatization, there appeared new independent enterprise subjects, e.g. Poldi Machine Works (Strojírny Poldi), První železářská společnost Kladno, s.r.o., Beznoska Company (instruments of health services), VP Trend firm (bathroom facilities and plastic windows), Rekol Company (oil regeneration), Noval Metallurgical firm (a rolling-mill), Bodring (logistics) and many others. The major investor in this area is an American company NRG.

#### **4.4. Kladno and Brownfields**

Because Kladno has rich industrial history, which is highly connected with mining, there are big areas of disused industrial zones and brownfields. As I mentioned, the Enterprise Zone Kladno-east is from the bigger part unused. The City tries to solve this situation and reconstructs communications and infrastructure, cooperates with CzechInvest, makes many types of analysis, especially about environmental burden.

The biggest brownfield in this region is Kladno-Libušín (former coal mine Schoeller). It spreads on the area of 19 ha. The land owner ship is both, private and public (Palivový kombinát Ústí, s.p., Karbonia Kladno, a.s., and Czech Union of Gardeners). The areas for future expansion are industry, business, and services. There are currently 30 structures and two former hoisting shafts in which are expected to be covered in the future. The area is fenced and guarded. The transport infrastructure includes an express way (R6, Praha – Karlovy Vary), which is in the distance of 6 km, an international airport (22 km, Praha – Ruzyně), and a railway (2 km, Kačice). A railway siding is present on site. Infrastructure is also developed, electricity, sewage, and drinking water (pipe diameter 110 mm) are on site, gas (300 kPa, pipe diameter

50 mm) 500 m from the site. Eventual limitations of utilization are two zones with building ban and possible ecological burdens, which is supposed to be on site.

#### **4.5. Important Companies in Kladno**

The biggest company in the District of Kladno, according to a number of employees, is Celestica Czech Republic, s.r.o. – enterprise Kladno. It has 1,600 employees and is placed in the Enterprise Zone Kladno-south. Its activity is manufacturing and installation of telephone and telephone equipment.

The second biggest company according to a number of employees is Energie – stavební a báňská a.s. It deals with industrial buildings and warehouses, has 900 employees and is placed on the north of Kladno.

The same number of employees has ESA s.r.o., which is a logistics company. Its services include transportation and shipping, goods storage, packaging and treatment, customs declaration and operation of distribution systems for dry and chilled goods. It is placed in the Enterprise Zone Kladno-south.

LEGO Production s.r.o. occupies the same industrial zone as ESA. It has 811 employees and focus on games, toys, and children's vehicles manufacturing.

Showa Aluminium Czech, s.r.o. also occupies the Enterprise Zone Kladno-south. It has 460 employees and this enterprise focus mainly on manufacturing of condensers for car air conditioning.

Strojírny Poldi, a.s. and Poldy Hütte s.r.o. are two biggest company occupying the Enterprise Zone Kladno-east and have rich history. Both of them used to be a part of old and famous Poldi Kladno and continue in crankshafts and tools and rolls manufacturing or steel production.

#### **4.6. CzechInvest and Kladno**

CzechInvest and the Statutory City of Kladno cooperated on many projects that should attract foreign direct investors. Thanks to their effort, the Enterprise Zone Kladno-south is fully engaged and the Enterprise Zone Kladno-east slowly begins to wake up from its serenity.

Showa was the first company, which was attracted. It has operated in the Enterprise Zone Kladno-south since 1998. It promised to make investment at least CZK 905 mill. and to create 197 job opportunities. One year later (in 1999), two other companies joined Showa and placed their investment in the same zone. Celestica wanted to invest CZK 310 mill. and to create 700 job opportunities. Barco pledged to invest CZK 422 mill. and to create 150 job opportunities. A year after (in 2000), Danish company Lego made its investment in this area too, but the company did not want to release the amount and the intended number of job opportunities was not known as well. In 2007, Strojírny Poldi, s.r.o. became a joint-stock company. The main investor is GATUFA, a.s. and place there CZK 135 mill., which enabled to create 57 new job opportunities.

As you can see, CzechInvest has been successful in the District of Kladno. It firstly focused on attracting investors to the new industrial area and then, it has tried to revitalise the old industrial area, but a lot of effort will have to be done.

## 5. SWOT Analysis

Is Kladno the right town for placing investment? There exist four key areas, which could be limiting factors. They are:

- industrial zones and investment attraction;
- transportation;
- human resources; and
- quality of life (image).

Their influence is not equal, but only concerning all of them, we could objectively say, if Kladno is good for investors or not.

### Strengths

Industrial zones and investment attraction

- foreign investments have already occurred in the city as a result of the state's investment incentives;
- strong technical tradition and skills, and associated schools;
- the headquarters of the Regional Development Agency, that was created to attract investment and secure funding from EU, is located in the city;
- the potential of local businesses to increase exports;
- 1/3 of the city is an old potentially usable industrial zone; and
- there is recreational potential on the outskirts of Kladno.

Transportation

- proximity and easy access to Prague;
- proximity and easy access to the international airport;
- headquarters of at least two important expedition companies;
- location between two highways, proximity to the Prague – Pilsen highway;
- railroad system in the city that is available for transport needs of businesses; and
- existing plans for transport connections to the industrial zones.

### Human resources

- demand of new businesses to employ technically skilled labour;
- cooperation of the School Authority and the Labour Office in addressing the parents about viable professions for their children;
- special requalification courses offered by the Labour Office in cooperation with the employers;
- level of existing job offers for women,
- relatively stabilized situation in unemployment (common trend as in the country); and
- proximity of Prague and the offer of high and qualification jobs.

### Quality of life (image)

- revitalization of the city centre has commenced;
- a reconstructed city centre with a pedestrian zone;
- green space in the city;
- green and wooded areas around the city offering the potential for recreation;
- sufficient capacity of sport facilities in Kladno with an established sports company (SAMK – leisure areas of Kladno);
- amateur cultural groups;
- Central Bohemian Theatre scene;
- State Scientific library;
- Lampion Theatre;
- accessibility of good quality medical services at Kladno Hospital and private facilities;
- good internet promotion;
- location of regional institutions (office of CzechInvest);
- the city has an established position as a regional centre; and
- famous top sportsmen and sportswomen with support from the public sector.



## **Weaknesses**

### Industrial zones and investment attraction

- there is no single serviced site available for new external investment;
- ecologic burdens and unclear future of the old industrial zone (former SONP site);
- lack of an environmental audit of the old industrial zone area;
- no clear responsibility for the removal of environmental burdens existing in the old industrial zone area;
- inadequate promotion of Kladno and its local economic development opportunities;
- inadequate quality of local workforce to accommodate high tech investment;
- nonexistent access to financing for local businesses;
- heavy traditional of local companies reliant on mine and steel mills; and
- nonexistent contact place for investors.

### Transportation

- nonexistent ring road, transit transportation goes through the city;
- there is no sufficient space in the inner city to accommodate transportation development;
- inadequate traffic control and transportation system in the city;
- the Physical master plan does not consider connections to the northern highway;
- poor state of transport planning, with inadequate system of internal communications in the city;
- insufficient capacity of city's access roads;
- nonexistent direct connection with the south-west part of Prague (Zličín);
- quality of public transportation between the Kladno-region and Kladno;
- inadequate operations of the customs office leading to the slow processing of trucks going abroad;

- inadequate capacity of inner-city roads serving the housing estates okresek 0 and okresek 2;
- security of freight on the railway;
- flexibility of the railways, with low quality services in the national transportation section;
- distance from the bus terminal to the railway station;
- low quality of public transportation in the city; and
- poor state of side-walks that limits the movement of pedestrians.

#### Human resources

- low educational level of Kladno's population, low proportion of university graduates, low qualification of the labour force;
- lack of sense for viable professions;
- lack of interest in technical fields, inadequately high interest in managerial professions with insufficient application potential;
- wrongly targeted demand for education;
- insufficient practical experience of graduates and school leavers and a lack of interest of businesses to enable practice for students and apprentices;
- lack of a university in the city;
- low level of motivation in the local labour force but high wage expectations;
- lack of varied job offers for women; and
- the illegal employment of foreign workers.

#### Quality of life (image)

- nonexistent positive association with the city;
- lack of nationally important events;
- tradition of a city dependent on heavy industries employing an unskilled work force;
- historically high levels of migration and employee turnover;

- lack of local identity within Kladno, low activity in cooperation with famous people born in Kladno;
- low external promotion of the city with low awareness outside of Kladno, missing positive utilization of mining tradition and promotion of historical parts of the city;
- poor state of some sports facilities, unclear responsibility for up keeping areas for mass sport, overuse by extensive usage;
- missing information system;
- lack of respect for the rule of law, poor ability of the municipal police to keep order;
- illegal waste dumps on the outskirts of the city;
- environmental burdens of the old industrial zone;
- high cost of operation the theatres and cinemas; and
- insufficient parking.

## **Opportunities**

### Industrial zones and investment attraction

- creation of industrial zone in Buštěhrad or any other neighbouring municipality;
- restructuring of the steel works area;
- allocation of EU resources for addressing issues in the old industrial zone;
- inclusion on the list of damaged regions with access to state support, interest state free loans;
- identification of ecologically undamaged sites in the old industrial zone;
- start of the Environmental Audit and allocation of resources from the EU programmes;
- tourism development in Kladno; and
- development of the Prague Ruzyně international airport, follow-up services and their attraction to Kladno and its surroundings.

## Transportation

- western ring road around Prague;
- completion of the R6 road as it connects to the North Bohemian highway;
- construction of the PRAK (Prague – Kladno) high speed train railway;
- second rail and electrification of the Prague – Kladno railway connection;
- construction of high capacity garage system in the city to address steady transportation issue;
- higher accessibility of highways;
- environmental improvements to the public transport system (important to remove environmental damage caused by public transport); and
- creation of logistics terminal and hub for combined transportation.

## Human resources

- the neighbouring municipalities may become residential areas for Prague.

## Quality of life (image)

- RDA as a liaison among institutions for information and data interchange.

## **Threats**

### Industrial zones and investment attraction

- unaddressed old environmental burdens;
- transfer of low-skill requirement production further to the East because of lower labour costs; and
- lack of interest in the neighbouring municipalities to build industrial zones to accommodate external investment.

### Transportation

- traffic overflow in the area delineated by Milady Horákové – Kociánova – Americká streets;
- declining implementation of the plan to construct a ring road around Kladno; and
- slow down in construction of connection roads to high speed routes.

#### Human resources

- proximity to Prague and the attraction of Kladno's qualifies labour force;
- selective decline in birth levels and a decline in Kladno's population;
- nationally insufficient supply of accessible housing, bad conditions for family start-ups;
- poor balance of the state's social support and minimum wages; and
- threat of migration out of the city.

#### Quality of life (image)

- proximity of Prague as a cultural competitor;
- social scene is in decline, continuing trend of social event places to close down; and
- reduction to the levels of financing allocated for the support of culture.

#### **Summary of Kladno SWOT analysis**

Kladno has different kinds of problems or disadvantages. But despite them, it ranks as a city with a high growth potential, and is attractive for investment in industrial and services sectors. The main strengths are a strong industrial tradition, technical skills of labour force, and its proximity to Prague.

An inability to utilize mentioned potential could be determined as the biggest weakness of Kladno. Other weakness is an incapability to attract investment because there is lack of serviced sites available to accommodate incoming investment.

## 6. Conclusions

The industrial zones in Kladno fulfil the main purposes, to employ people and to product many kinds of devices and other components, by which they contribute to the national economy.

The enterprise zone Kladno-south is quite new and it was built with a consideration of the building and the law of the environment protection. Kladno has been conscious of the importance of building a new industrial zone, which means many new job opportunities. Because of that, it cooperated, financed a construction of a needed new retention tank, and invested into infrastructure.

The enterprise zone Kladno-east represents an old industrial zone which was built during the communist regime. The huge area is occupied by few working companies but the majority of buildings decays and is slowly plundered. The surroundings environment suffers from burdens but no environmental analysis has been processed yet.

Many former coal mines have not been used for a long time and became brownfields.

Kladno cooperates with CzechInvest but the cooperation started recently. Outcomes could already be seen in building the new industrial zone and in attraction investors to the old industrial zone. If the collaboration would remain at least on the same level and if information regarding brownfields and disused industrial areas would be improved, Kladno has a real chance to attract many investors.

## 7. Bibliography

Act No. 72/2000 Coll. [online] [2008-12-31]

[http://portal.gov.cz/wps/portal/\\_s.155/701?number1=72%2F2000&number2=&name=&text=](http://portal.gov.cz/wps/portal/_s.155/701?number1=72%2F2000&number2=&name=&text=)

Brownfields Info [online]

<http://www.brownfieldsinfo.cz/souvisejici-clanky/> [cit. 2008-12-28]

<http://www.businessinfo.cz/en/section/basic-data/1001061/> 2009-02-23

Business Dictionary [online] [2008-12-31]

<http://www.businessdictionary.com/definition/investment-incentives.html>

Business Info [online] [2009-02-11]

<http://www.businessinfo.cz/en/section/investment-incentives/1001090/>

<http://www.businessinfo.cz/en/section/investment-climate/1001089/>

BURD, M., WYPLOSZ, Ch.: Macroeconomics. A European text. 4<sup>th</sup> edition. Oxford University Press 2005. ISBN 0199264961.

CzechInvest. Annual Report. 2002 – 2008 [online]

[cit. 2008-12-28 – 2009-02-18]

<http://www.czechinvest.org/en/annual-reports>

CzechInvest [online] [cit. 2008-12-28 – 2009-02-18]

[www.czechinvest.org/en](http://www.czechinvest.org/en)

<http://www.czechinvest.org/en/it-and-software-development> [cit. 2009-02-18]

<http://www.czechinvest.org/en/electrical-engineering-and-electronics>

[cit. 2009-02-17]

CzechInvest. Investment Climate [online] [cit. 2009-02-18]

<http://www.czechinvest.org/data/files/ic-en-53-en.pdf>

CzechInvest. Investment Opportunities [online]

<http://www.czechinvest.org/data/files/fs-01-investment-opportunities-65-en.pdf>

CzechInvest. Investment Projects of CzechInvest [online]

<http://www2.czechinvest.org/web/pwci.nsf/pages/8E110017BB8CEF41C1256EBD004D9917?OpenDocument>

Czech Statistical Office [online]

<http://www.czso.cz/eng/csu.nsf/informace/aoby121108.doc> [cit. 2009-02-23]

[http://www.czso.cz/csu/2008edicniplan.nsf/t/2D0028704A/\\$File/400308004.pdf](http://www.czso.cz/csu/2008edicniplan.nsf/t/2D0028704A/$File/400308004.pdf) [cit. 2009-02-23]

Czech Statistical Office, Basic Characteristic of Districts – Tab. 1.1 Area – Structure of Land Types [cit. 2009-03-08]

<http://www.czso.cz/csu/2008edicniplan.nsf/engkapitola/1303-08-2007-100>

Czech Statistical Office, Registered Unemployment Rate: males, females.

[cit. 2009-03-08]

<http://www.czso.cz/csu/2008edicniplan.nsf/engkapitola/1303-08-2007-300>

FRANK, R. H., BERNANKE, B. S.: *Ekonomie*. Praha, Garda Publishing 1997. ISBN 8071694800.

HALL, R. E., TAYLOR, J. B.: *Macroeconomics*. 4th edition. New York, W. W. Norton Company 1993. ISBN 0393963071.

HELÍSEK, M.: *Makroekonomie. Základní kurs. 2. přepracované vydání*. Slaný, Melandrium 2002. ISBN 8086754189.

Industrial Zones [online] [cit. 2008-12-28]

<http://www.prumyslove-zony.cz/blog/prumyslove-zony-53>

Investment Incentives [online] [2008-12-28]

<http://www.nasarawastate.org/incentives.htm>

Kladno Official Website [online] [cit. 2009-03-08]

[http://www.mestokladno.cz/EN/vismo/dokumenty2.asp?id\\_org=100977&id=1016&p1=1025](http://www.mestokladno.cz/EN/vismo/dokumenty2.asp?id_org=100977&id=1016&p1=1025)

[http://www.mestokladno.cz/EN/vismo/dokumenty2.asp?id\\_org=100977&id=1019&p1=1011](http://www.mestokladno.cz/EN/vismo/dokumenty2.asp?id_org=100977&id=1019&p1=1011)

Maps of World – Finance [online] [2008-12-29]

<http://finance.mapsofworld.com/investment/>

Ministry of Industry and Trade [online]

<http://www.mpo.cz/dokument12478-strana1.html> [cit. 2008-12-31]

<http://www.mpo.cz/dokument13816.html> [cit. 2008-12-31]

<http://www.mpo.cz/dokument24442.html> [cit. 2009-01-11]

PAVELKA T.: *Makroekonomie. Základní kurz. 2. vydání*. Slaný, Melandrium 2007. ISBN 9788086175522.

Profit. Number 8 (2009). Pages: 31 – 38

SAMSONOVÁ, L.: *Mrtvé průmyslové zóny lákají nové investice*. Published in *Devítka* Number 11(2002). Page: 3

SCHILLER, B. R.: *Makroekonomie dnes*. Brno. Computer Press 2004. ISBN 802510169X.

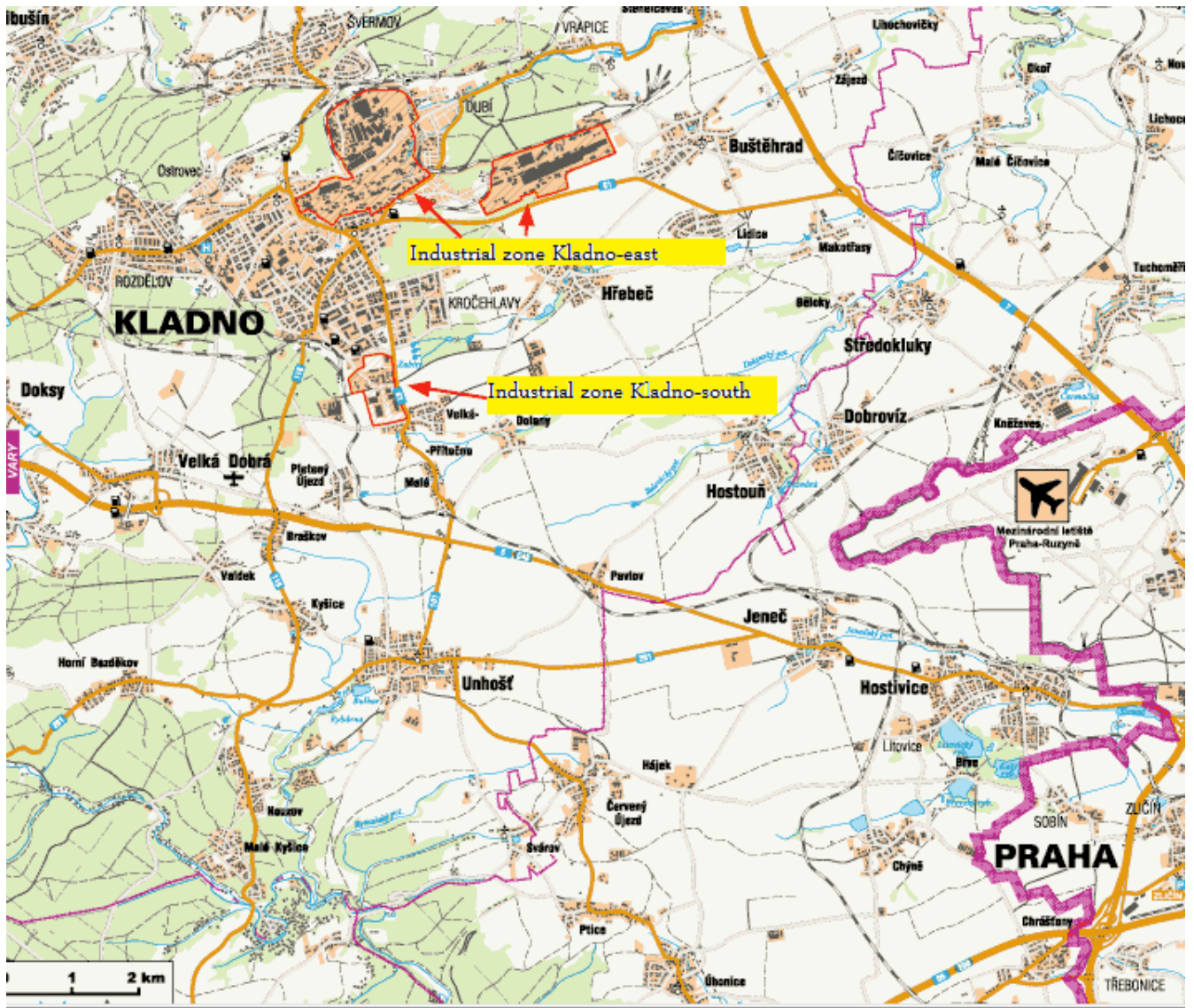


Tomšík, K. Business Economics. 2008

United Nations Conference on Trade and Development [online] [2008-12-29]  
<http://www.unctad.org/Templates/Page.asp?intItemID=3146&lang=1>

## 8. Supplements

Map 1 - Industrial zones in Kladno



Source: Město Kladno (available online [http://mestokladno.cz/html/mapa\\_zony.htm](http://mestokladno.cz/html/mapa_zony.htm))

Table 1  
Major Investors in the Czech Republic

Sector	Investor	Country of origin
Technology Centres	Panasonic	Japan
	Honeywell	USA/Germany
	Mercedes Benz Engineering	Germany
	Rieter	Switzerland
	Valeo	France
	Rockwell	USA
Business Support Services	DHL	Germany
	Accenture	USA
	IBM	USA
	Exxon Mobil	USA
	Siemens	Germany
	Tesco	UK
Electronics	Panasonic	Japan
	Siemens	Germany
	Hitachi	Japan
	Foxcon	Taiwan
	TYCO Electronics	USA
	Celestica	Canada
High-Tech Engineering	ABB	Sweden and Switzerland
	Parker Hannifin	USA
	Ingersoll Rand	USA
	Siemens	Germany
	Honeywell	USA
	Daikin	Japan
Life Science & Healthcare	Baxter	USA
	Lonza	Switzerland
	Arrow	USA
	Mölnycke	Sweden
	Kimberly-Clark	USA
	Procter&Gamble	USA
Automotive	Volkswagen	Germany
	Toyota/PSA	Japan/France
	Robert Bosch	Germany
	Denso	Japan
	TRW Automotive	USA
	Hyundai	Korea

Source: CzechInvest, Investment climate.pdf (online available on <http://www.czechinvest.org/data/files/ic-en-53-en.pdf>)