

INDUSTRIAL ZONES – EVALUATION OF SUCCESS AND DEVELOPMENT FACTORS

A study of the significant investors in the industrial zones in Bulgaria is conducted. The results of already established and functioning industrial zones are analysed in parallel with an evaluation of investor expectations. The study is not strictly analytical but offers solutions and recommendations with potential to improve the functioning of the industrial zones in the country.

JEL: R12; R30; O1

Keywords: analysis; investments; investors; industrial zones; economic development

Almost all of the larger municipalities in the country are trying to develop their own industrial zones, thereby promoting sustainable growth and economic, as well as social development. The practice shows that only some of them are functioning and influence the economic life in the area. The good example of several well-functioning zones has resulted in an initiative among the local and national authorities for the designation of plots for the construction of new industrial parks. The use of the mechanism provided by the industrial zones makes possible the elimination of various deficiencies brought about by the state interference in the market¹. Thus, without any dramatic interference on behalf of the public institutions, considerable investments can be made that have the potential of reshaping entire regions².

This is happening in the background of an on-going transformation of the Bulgarian industry. The employment rate in employment-intense branches is going down and branches with a high level of automation are developing. "After the crisis, traditional sectors of the Bulgarian industry such as the clothes manufacturing industry have been losing their strength, both as a proportion of the country's total exports and in terms of the number of their employees, at the expense of productions that are characterized by higher added value, such as manufacturers

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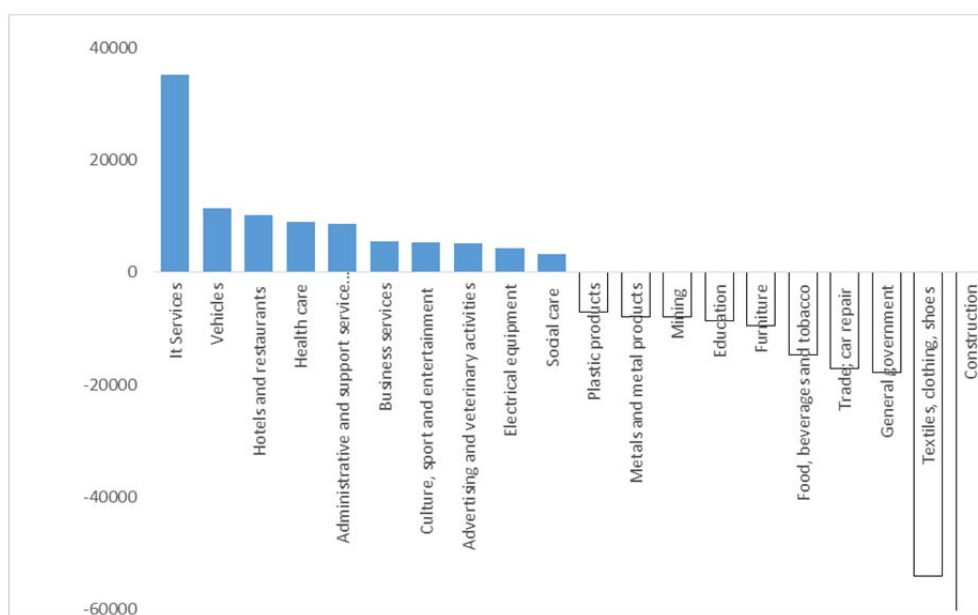
¹ These effects are described in detail in Brown and Jackson, 1998, p. 77-79. Such state interference in the market processes, not related to its regulatory and controlling function, can cause various defects – lack of balance on the market, pushing private investments away, ineffective use of public funds, inflation, corruption and forming political instead of economic criteria for the assessment of the expenses. The negative effects will be especially dangerous, if the invested public funds have formed a budget deficit.

² The Trakia Economic Zone has become a driver of growth and employment for Plovdiv and the entire region. The GDP growth in the region is 10% for 2016 and 16% for 2017 (Sokolova, 2018).

of electronic installations, automobile parts, machines and equipment” (Ganev, 2019). These investments are particularly attractive, but they are also accompanied by numerous challenges to the zone operator and the municipal leadership on whose territory the industrial zone is located. Evidence of this transformation can be found in the data on the changes in employment per branches of the economy in a timeline comparison for the period 2008-2017.

Figure 1

Changes in the number of employees in selected branches; 2017 versus 2008



Source: Institute for Market Economics (IME), 2019.

The present study is interested in researching industrial zones because of the difficulties encountered during the development of the existing terrains into effective industrial zones. The allocating and leasing of municipal plots to varied organisations is not a good enough recipe for transforming the land into an industrial zone. What turns a plot of land into an economic zone are several key factors.

The necessary conditions for the creation of an economic zone can be summarized, as follows:

- Location – proximity to a big city able to provide a workforce and specialists;
- Infrastructure – good connectivity to main roads, highways and other transport infrastructures;
- Free, unusable and designated municipal or state land – sufficient free terrains on which to build the zone;

- The support of the local/state authorities – how active the local/state authorities are and whether they are ready to support the investor's intentions.
- Presence of an engaged operator of the designated terrains who communicates with potential investors, builds and maintains the infrastructure, assists the solution of existing problems and maintains communication with the state and municipal authorities and the public institutions.
- Appropriate size of the designated terrains – planning and analysis of possible investors to enable the creation of terrains of proper size in order to meet the needs of possible investments.
- Structure of the realized investments – not every investment in an industrial zone originates from an industrial enterprise. Part of them come from logistic and trade companies but the effect of their investments is not the same as the effect of investments by industrial enterprises. A proper mix of industrial and other economic sector enterprises is necessary to create a synergic effect from their location on a single territory.

The organized industrial zone allows the companies to choose their proper plots, discover new investment opportunities and build competitive capacity. In most municipalities across the country there are free public terrains that can be defined as industrial zones or parks. A good part of them only have the "industrial zone" label attached to them, often with the local authorities' hopes to develop industrial production on their territories in an attempt to reverse the negative demographic trends. Others work actively and are changing the economy and demography of the entire region.

The present paper explores the possible factors that can amplify the effect of partially (publicly) subsidized investment efforts and how they can turn an industrial zone into a driver of growth for the (regional) economy.

A survey was held for the purpose of summarizing and evaluating the individual factors of the environment which influence the development of the industrial zones. The main aim of this survey was to make a reliable assessment of the factors for and limitations to the development and investment in the industrial zones of the National Company Industrial Zones EAD (NCIZ). Data were accumulated on the profile of the industrial zones, the significance of the regional economy and the assessment of factors, influencing the investors' decisions. The possible problems that investors could encounter in the industrial zones were also analysed from various perspectives.

The survey was held in the period January – March 2019 among the investors in three industrial zones – in Sofia, Burgas and Pleven.³ The surveyed companies are

³ The sent out questionnaires were 25 – to 40% of the interviewed investors. Currently, the best developing industrial zones are the Economic Zone Sofia-Bozhurishte and the Industrial and Logistic Park Burgas. The park in Burgas, which is a joint stock company with the municipality's participation, is already full. The Economic Zone Sofia-Bozhurishte has 31 fulfilled contracts (27 definitive and 4 preliminary) and six completed investments in the production sector. Industrial Zone Burgas has 35 finalized agreements and a total of 29 investors. The difference comes from the fact that some investors signed new contracts

different in size – micro, small, medium and large enterprises. The questions included in the questionnaire were verified using the Upsala model, which provides a theoretical template for establishing oneself on a foreign market. The survey administered questionnaires and the included information is compliant with the normative arrangements for access to data. The answers were processed with the help of the <https://docs.google.com/forms> Google app and docs.google.com/spreadsheets was used for the data analysis. Only investors with operational economic activities were included in the survey.

Investor profiles

In terms of the investor profiles, the survey established that the majority of the companies established in industrial zones are in the production sector (64%), 24% are engaged in high-tech activities, 12% are in the service sector, 9% operate in the transport sector, and 3% are engaged in trade. Of all the interviewed entities, 40% are companies with foreign ownership and the remaining 60% have Bulgarian capitals only.

64% (16 investor responses) come from manufacturers, 32% (8 responses) from transport/logistic enterprises and 4% (1 response) are classified as “others”. The obvious conclusion is that the reviewed locations attract predominantly production enterprises. There are no service providers among the respondent investors (design and engineering companies, advertising and financial companies). Among those production enterprises, 37.5% have foreign co-ownership and 62.5% have Bulgarian capital only. This shows an interesting trend: the Bulgarian companies have accumulated sufficient experience, financial resources and business perspective to develop their own production activity. In terms of the amount of capital investment and the number of employees, the companies with foreign ownership have made larger investments. Another possible conclusion is that despite the enhanced interest of Bulgarian companies in investments in production, they still lack the capacity, investment reliability and experience to make or manage investments exceeding BGN 20 million. Of course, this can be attributed to various factors and more in-depth research will be necessary before any general conclusions can be drawn.

It is noticeable that no investment exists below BGN 500 thousand, which can be interpreted as unpreparedness in terms of resources, qualified personnel, investment availability, or alternatively as non-profitability of a (relatively) small investment project. This size of an investment does not suggest any large production, warehouse activities or any other type of activity requiring expensive fixed assets.

The presence or absence of a concentration of investments by the participating companies (investment in just one location or in more than one location) has been explored. All companies with foreign ownership with only one exception (in the

for new investment projects or for an enlargement of the existing ones. The Tesh Zone in Pleven is among the developing zones in Bulgaria.

transport sector) invested in one location only. This means that companies involved in production are looking for additional incentives and are not inclined to make their investment without additional support. The companies with Bulgarian capital tend to enlarge their activities and achieve greater effectiveness of their investments (which is due in large to the lower cost of the legalization and administration of their activity).

Therefore, the following summaries can be made:

1. The production companies are usually the “wooded” ones and they will only invest their resources, if properly stimulated. The state should therefore make every effort to propose a set of targeted incentives, developed especially for them. Examples would be a proper sewerage infrastructure (sewerage, drainage, water treatment plants), energy infrastructure (available energy network with the respective stations, tailored to the development forecasts), and information infrastructure. The problem with the extended public procurement procedure for the construction of such infrastructure can, however, make an investment pointless.

2. The natural way of expansion of companies with local capital increases the investments in individual industrial zones. It will be useful for the state to make a periodical screening of the small production companies and combine it with the encouragement of their development in order to stimulate follow-up investments in the same industrial zone.

The present paper examines the dynamics and trends in the number of employees of individual companies, as well as what proportion of their employees are local people. It also analyses the ratio of local to foreign employees and the positions which they occupy.

It was determined that a large portion of the employees are local but foreign specialists have also been attracted. The latter are mostly engaged in the upper and middle management level. This demonstrates that either there is a deficit of sufficiently qualified managers in the country (that would be the first interpretation of this result), or that the qualified senior managers already have other stable engagements, or that they are incapable of sufficiently utilizing the “signalling” method (presentation of one’s own abilities, certificates, qualifications, knowledge and skills) in order to properly feature their capabilities and satisfy the principal’s requirements.

The first general part of this survey produced the following conclusions:

- The larger investments originated from companies with foreign ownership, which is not surprising taken the experience and the financial and organizational capacity of the foreign companies. More interesting is the number of Bulgarian companies – 15 out of 25, or 60% of the interviewed entities, who understand the benefits of investing in an industrial zone and are ready to direct their investment there.

- There is an absence of well-prepared upper management staff, particularly for positions in large companies. All the companies with more than 100 employees employ foreign specialists in their senior management. As pointed out earlier, this can be the result of insufficient self-presentation abilities, distrust on the part of the principal or unfamiliarity with the need to present one’s skills.

•The investments in industrial zones are not below BGN 1 million. This is a clear signal to the industrial zone operators about where they should focus their efforts – namely, in attracting medium and large enterprises.

The statement can be made that production companies get greater benefits from their investments in industrial zones. In reality, companies that are active in the indirect service sector have not invested in industrial zones until now.

The Bulgarian production companies understand the benefit of making their investment in the industrial zone.

As a result of monitoring the size of the capital investments, two observations can be made. The Bulgarian companies lack abilities (financial, marketing, distribution and production) to make a market presentation in the style of the foreign companies. No Bulgarian company has invested more than BGN 10 million in its production. On occasion, the companies manage greater volumes of own production, but they lack sufficient capacity (most likely financial) to be able to attract sufficient financial resource and enlarge their activity. Therefore, the Development Bank or other financial institutions who can potentially work in a team with them can play an important role.

Reasons for investing in industrial zones

This part explores and analyses the factors of the environment that attract the individual investors to one location or another. It is very important for every host country to be aware of the reason for the choice of a specific investment location. The survey produced the following results:

Investors have the highest appreciation for factors of the environment, including “proper infrastructure”, a “good investment climate” and “appropriate geographic location” (68%). Answers to the question about the meaning of “good normative environment and an effective legal system” are interesting to interpret. The investors have not defined this as an important factor. The reasons for this could be varied, for instance some investors are not interested in the normative environment and the legal system when investing their resources (less probable option); while others do not rely on the Bulgarian legal system and normative framework for solving emerging legal disputes. Investors did not mark the “taxation” factor as particularly important either (5 of the interviewed companies have partial foreign ownership).

The results are quite diverse when it comes to ranking the importance of various factors. The factor that stands out as the most interesting to comment on with the largest number of maximum points in the assessment (5) is “access to qualified and educated staff”. The answer to this question contradicts to a certain extent the answers concerning the importance of “access to unique knowledge and skills” of the previous group. A more attentive analysis of the answers in this group, combined with the answers of the previous panel, however, shows that the investors do not rely very much on any of the creative or interpretative skills of the employed local staff, but rather prefer their own. Those among them, who are able to attract foreign experts for the positions requiring analytical and interpretative capabilities (top management, engineering experts) opt for that option and do not rely on the local labour market. It will be interesting to mention that the respondents

were both companies with foreign ownership and companies with entirely Bulgarian capital (one of the foreign ones has invested over BGN 100 million, has 500 employees and has increased its investments in Bulgaria numerous times). It is hard to make a straightforward assessment without further research but the possible interpretation is that, after a certain period of adaptation to the local market, the investors with foreign ownership manage to reach not only workers and employees with basic knowledge, but also ones with interpretative and analytical skills at the desired level, and they have an appreciation for their qualifications.

Regarding the risks and their subjective assessment by the investors, the results are quite interesting. None of the proposed risks has been given a categorical score of 5, including the “risk of unfamiliarity with the local mentality, customs and traditions”. We can conclude that our country is a familiar destination with an expected and predictable mentality and traditions that are not difficult to master and do not impede the work of the foreign investors. The foreign respondents have pointed out as relatively important the security risks, the political situation, and the risks of a non-functional infrastructure (two companies operating in the transport sector and one in the production sector). The foreign investors have marked the political risks (unstable and unpredictable political situation) as relatively high (three have listed the maximum rank of 5). It should be mentioned, however, that some of the respondents are relatively new investors (of 3 years ago) despite their awareness of this risk.

The risk of “loss of qualified staff” was assessed as medium (rank 3). The investors (mostly with local capital) do not consider the loss of an expert as their greatest threat. Similarly, the “risk of administrative arbitrariness – unclear, incomplete or confusing administrative guidelines” and “administrative risk – unresponsive administrations” are not seen as being high.

The companies have ranked their major problems in investing in the industrial zone, as follows:

- A long investment period – 41.7%;
- An incomplete regulatory framework – 20.8%;
- Missing personnel training and qualification opportunities – 12.5%;
- Lack of prior contact with local people and unwillingness of the administration to comply with the legal provisions 8.3%.

However, the largest investors have pointed out illegitimate state interference and the administration’s unwillingness to comply with the legal provisions as a significant barrier.

The results for this group of questions lead to the following conclusions:

1. The engagement of the zone’s operator and his/her proactive behaviour beyond the usual cooperation provided to investors is a way of attracting investors. A representative, explanatory and promotional role abroad will be necessary. One possible communication channel for potential investors would be all commercial exhibitions, fairs, specialized seminars and conferences. Despite the negligent commercial effect of such manifestations, the promotion of the destination will be an effective method of attracting investors in the mid- and long-term perspective.

2. The small investors in industrial zones have different problems. What medium-sized companies find attractive or unacceptable in a destination has a different impact on a large investor.

3. The opportunity to build long-term partnerships in an industrial zone framework is a high-potential factor for attracting investors. If there is already a broad palette of established investors in the zone, attracting a new one will be a relatively easier task.

4. The familiar and close cultural, religious and social location is always preferred by the investors as opposed to unfamiliar locations. Any communication and prior presentation of the industrial zone and location would have a positive effect on future investments.

Significance of the regional economy

The third part of the survey examines the investors' need for specialists in a given industrial zone and the extent to which they are familiar with the destination they are bound to.

It becomes clear from the answers to the first question that 45.8% of the interviewed recruited their staff at the local labour market, 33.3% did so on the regional level and 20.8% did it nationally. The remaining part of the workforce was attracted from abroad. The attracted foreign experts, as already mentioned, occupy mostly top management or creative positions in the enterprise.

There are two reasons for recruiting experts from abroad – “the necessary specialists cannot be found locally” (three answers) and “the available experts are not sufficiently qualified to fulfil their tasks with the expected quality” (five answers). Part of the reasons for this situation could be explained, as follows:

- The experts with an economic background are not qualified enough and/or lack experience in the management of large enterprises. Companies with more than 500 employees are not numerous in the country and are often managed by foreign managers; furthermore, there is an absence of large national companies (part of the existing ones were closed or unsuccessfully privatized, and the newly emerged ones are predominantly small and medium in size).

- The existing specialists in the management field cannot handle the “signalling” process very well. “Signalling” requires initiative on the part of the agent, with the accompanying expenses. The agent's purpose is to present his merits/qualities even before signing a contract at the recruitment stage. In the “principal-agent” relationship, signals⁴ on the part of the agent level the information asymmetry between the parties and make the principal's assessment of the agent's qualities more precise.

⁴ The signal should meet certain criteria in order to be able to fulfil its informational function: (1) Agents with good characteristics should have an interest in giving a signal out. The costs of acquiring the good characteristics and of sending a signal should be covered by the increased benefits envisaged in the agreements with the principal; (2) For agents with bad characteristics, sending a signal will be either impossible or very expensive.

- Adequate specialized training, offered by the universities, is also missing.

The study examines the significance of the choice of location and to what extent it was a factor; whether there were factors that were not subject to a rational evaluation, such as how important are the close environment (cultural, social, religious) and the recognizable destination. It was established that all the investors with foreign ownership had previous contacts with local officials.

The Upsala model explains this type of behaviour. When making an investment, every investor follows a set model and undertakes certain steps before launching the investment process. The previous commercial contacts with local partners can be very helpful in accumulating knowledge of the market and can lead to the next step, the decision to choose a specific location. According to this model the closer (culturally, ethnically, religiously) the new location is, the easier the decision to invest becomes.

The answers in this panel lead to the following conclusions:

- The country is perceived as culturally and socially close by investors, which favours the investment decisions;

- The country's demographic situation is a serious problem and can impede an investment decision. There are however certain opportunities, having in mind an investor's profile and the character of his production function. If a company intends to build an enterprise in a high-automation sector, the region's demography will not present a very significant impediment. If the investment requires a considerable workforce, however, the administrator should be flexible enough and propose a location that could meet the investor's requirements;

- The administrator's behaviour is important for the long-term development of the industrial zones. He/she can attract a variety of investors, both Bulgarian and foreign. This process should be combined with an analysis of the needs of the main investors in order to also attract smaller ones, who are capable of acting as subcontractors (of materials, services, semi-products) or as partners that customize the product/service of the main investor;

- The country cannot offer (sufficient) employees with proper research and development or management qualifications, corresponding to the requirements of the large investors. The lack of skills for developing projects among the available engineering experts leaves the country in the periphery when it comes to investors wishing to build R&D facilities. If financial and administrative actions can encourage foreign investments (according to the European legislation constraints), the training and qualification of the necessary officers is not a fast option. It would take up to several years, depending on the technological field. In a situation of increased demand, the available experts can benefit from the "quasi-rent" effect⁵ and direct investments in the specific field in the long-term, yet there is no short-term solution.

⁵ The difference between the received income from the production factor, when used in a given field/location, and the income from its best alternative use.

Assessment of the factors influencing the investors' decisions

The last part of the survey summarizes the factors of the environment with the greatest influence on the investment decision. Some of them directly depend on the zone administrator while others are under the powers of the state/municipal authorities.

The analysis of the answers in this part of the survey demonstrates that the following factors are the most significant for the investors: “the quality of the infrastructure”, “the convenient location of the industrial zone”, “the location’s taxation” and “the stable legal framework”. Factors like “administrative support”, “regional employment” and “presence of training institutions” matter but are not of primary importance for the investors. Factors like “social environment” and “existing contacts with local partners” are not a priority for the investors.

This prioritization of the factors which influence the decision-making process is easy to explain – without a well-developed and maintained infrastructure (road, energy, water, information, telecommunication), industrial production or supplementary activities will not be possible. The “industrial zone location” is important because it suggests decreasing costs and acceptable work conditions such as access to one or more highways, proximity to a railway terminal, airport or waterway (harbour) and to main markets and suppliers.

The financial framework in which the investors operate is also a significant factor. In addition to the direct investments, the tax burden applied in the country has very good characteristics, which makes it competitive. The value added tax proportion is practically insignificant for export-oriented companies. The only factors of significance are the profit tax, the tax on dividends and the presence of double taxation avoidance. The social security contributions burden is not unusually high or unbearable for any foreign company.

Most investors ranked the “stable legal framework” high as a factor. The possibility for the economic agents to conduct and terminate employment agreements with their workforce without the coercion of paying huge exit compensations has a positive influence. Countries with a legislation that is focused on the excessive protection of hired labour (for example Spain⁶) is a limitation to investors and ultimately makes an investment location less preferable.

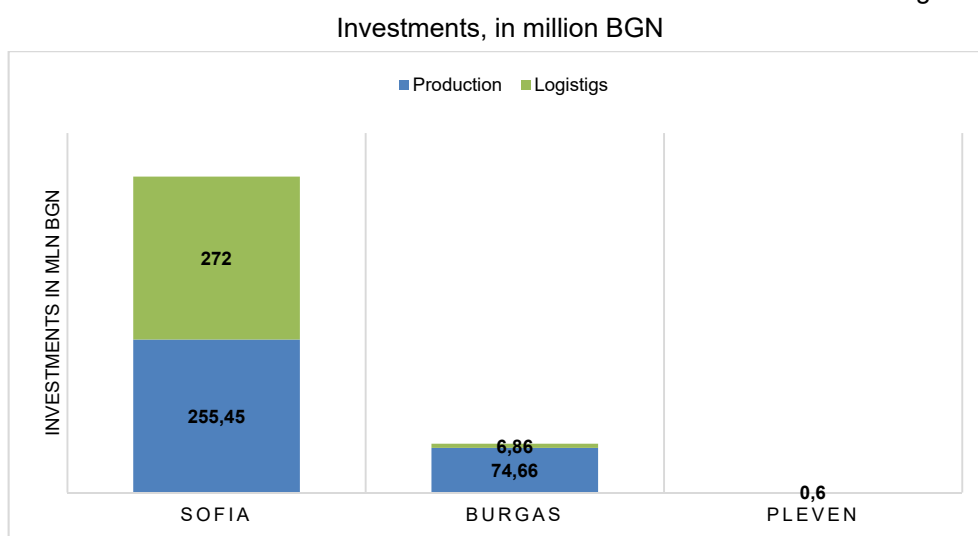
Any unplanned changes are undesirable for investment decisions and can influence future investment enlargement decisions. Frequent amendments to the existing legislation in the form of updates and additions, as well as the adoption of

⁶ “A major reason are the huge compensations that the employees get if dismissed – a 45-day salary for each year of work in the company. This means that if an employee has worked in the company for 20 years and gets dismissed, they will receive the equivalent of almost three years’ worth of salaries from their employer. In such situations companies will simply not hire young employees or will prefer to dismiss them rather than the old ones. This creates a vacuum on the labour market, where the young people often get discouraged to look for a job. On top of that, the taxes for the employers are very high – at least 50% of the annual salary of every employee. This leads to the companies’ unwillingness to hire workers and increases the level of unemployment” (see <https://www.dnevnik.bg>).

new normative acts is not a step in the right direction⁷. No impact assessment is made for many of the draft laws and when they get adopted, they immediately start being amended. This is also true of the core normative acts⁸, regulating the financial relationships. This practice creates uncertainty, be it temporary, for any investor, Bulgarian or foreign.

The three studied zones are compared using a set of parameters and the comparison shows that the interest in the individual zones differs radically. The difference emerges on various levels – investments made, guaranteed jobs and the national-foreign capital ratio (see Figures 2, 3 and 4).

Figure 2

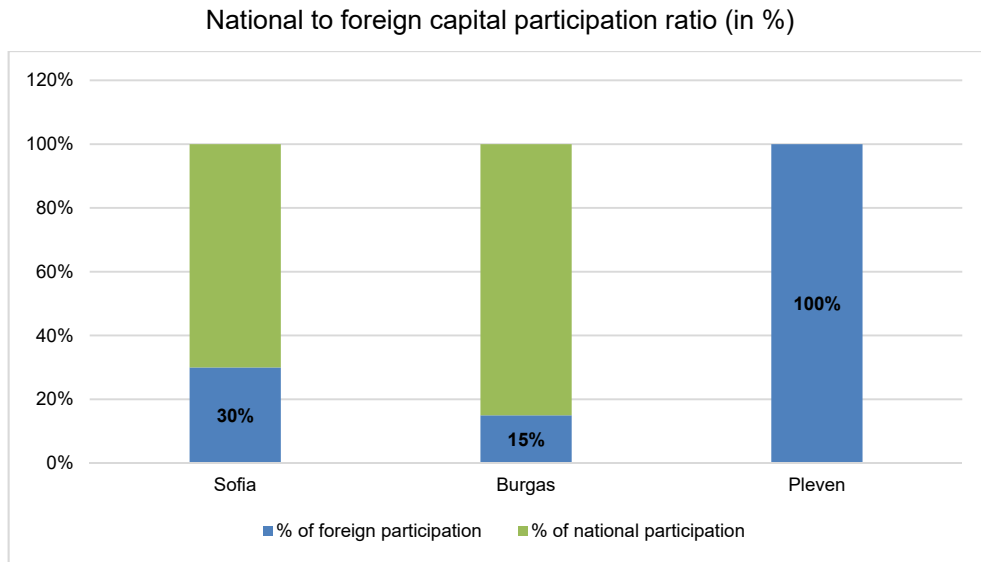


Source. Author's calculations.

⁷ “The normative act with the greatest number of amendments in the period 2010-2015 was the Law on Energy for which 12 amendment laws were adopted. The Labour Code was amended 10 times and the Public Procurement Act was amended 9 times. This was the conclusion of a study by the Bulgarian Chamber of Commerce and the Center of Legislative Assessments and Legislative Initiatives on the National Assembly’s performance in the period 2010-2015, which was presented to the media today. Other items in the group of frequently amended normative acts are the Penal Code, the Penal Procedure Code, the Tax and Social Security Procedure Code, the Electoral Code, the Social Insurance Code, the Insurance Code, the Civil Code of Procedure, the Administrative Procedure Code, the taxation laws (on VAT, excise duties, taxation of physical persons income, local taxes and fees), the Trade Register Law, the Traffic Law, the laws on Mol and SANS, the Medical Institutions Law etc.” (see www.economic.bg).

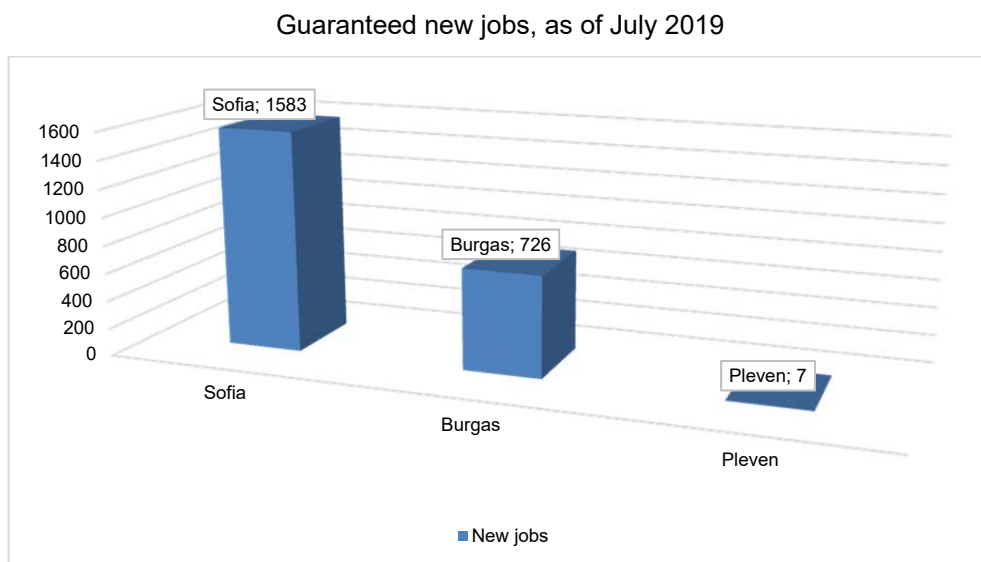
⁸ The Social Insurance Code is the record winner in terms of the number of amendments – during the period 2010-2015 it was amended 45 times. This means that the act which should guarantee security to the people by regulating their pension, maternity, unemployment insurance etc. is being amended some 8 times per year. This is demonstrated in the “Analysis of the legislative activity of the National Assembly over the period 2010-2015”, which was conducted by the Bulgarian Chamber of Commerce and the Center of Legislative Assessments and Legislative Initiatives (Yordanova, 2016)

Figure 3



Source. Author's calculations.

Figure 4



Source. Author's calculations.

The zone in Sofia is in close proximity to the city and has excellent transport communication. It currently hosts 25 foreign investors and is negotiating with more than 20 new ones. Of the 2,700 decares of the zone's total size, one-third has already been constructed. The zone in Burgas is 240 decares in size and is located next to the largest cargo harbour in Bulgaria. It has its own railway line at a distance of 3 km from the Trakia motorway and 10 km away from Burgas Airport. More than 80% of the zone's area is already occupied; agreements have been signed with over 35 companies that are interested in developing their business projects on the territory of the park. Their investments exceed BGN 74 million. Since 2016, the industrial zone was enlarged by 600 new decares. The government agreed for seven plots of private state property located in the Southern industrial zone of Burgas to be incorporated as a non-monetary contribution to the capital of the National Company Industrial Zones EAD. NCIZ will in turn apportion these assets in the capital of Industrial and Logistic Park Burgas AD. The zone in Telish (Pleven) is located close to an international and main road. The zone borders directly with the Telish railway station. The total size of the zone is 2,036,638 sq. m. and a large part of it is arable land. The industrial purpose terrain stretches on 436 decares. The zone has a good number of production and warehouse facilities with sizes varying between 100 and 2,300 sq. m. There are eight garages, two repositories and two airplane hangars built on its territory. Clearly, the zone will attract interest for these parameters alone.

An assessment of the investments made in each zone so far shows that two of them (in Sofia and Burgas) have filled their capacity, one has enlarged its size (in Burgas) and a one is in the process of development (the zone in Telish - Pleven).

This comparison is conditional, and the fact should be kept in mind that there are other factors influencing the locations. Sofia attracts the largest number of investors as the largest administrative and economic centre in the country, while Burgas hosts the only petrol refinery in the country and has made large-scale investments in fixed assets in the past few years.

Sofia and Burgas enjoy the regional authorities' support, which definitely has a favourable impact on attracting foreign investments. We should also consider the factor of the presence of multiple academic units in these two locations, while in Pleven there is just one functioning university, which is not specialised in the technology sector.

This influences the investor interest in the individual locations, as is evident from the data in Figure 4. The data on the guaranteed jobs in the three locations are telling.

Conclusions

The conducted survey allows conclusions to be made in two dimensions: with regard to the investors and with regard to the industrial zone operator.

Regarding the investors in the industrial zone, the following conclusions can be drawn:

1. When making an investment decision, the most influential factors appear to be the proper location of the industrial zone and the presence of functional infrastructure. This is certainly a sign for each industrial zone administrator to align their expectations of success with the (initial) investments in good quality, reliable and development-enabling infrastructure. The global competitive environment includes competition between individual locations in terms of size of the provided terrains and the ready-made infrastructure (road, energy, information). These conclusions are supported by the transport infrastructure statistics of the three districts. The Pleven district has no connection to a highway, unlike the districts of Burgas and Sofia (see Annex 1).

2. The second significant factor that influences the investment process is the taxation, together with the social security burden and the financial framework. Without ranking among the most attractive international locations, our country has a suitable legislative framework, corresponding to the requirements of investors in various branches. The frequent amendment of the laws and normative acts presents a significant disadvantage.

3. The demographic structure and the availability of qualified workers and employees is the third significant factor of success for an industrial zone. The presence of a workforce with the suitable age structure, qualification and re-qualification opportunities is important for the investors, even if they can afford to attract specialists from other countries. The statistics shows a decreasing population in the Pleven and Burgas districts (especially in the Pleven district). The population decrease of the Burgas district is minimal. The Sofia district (Bozhurishte Industrial Zone) demonstrates a population increase.

4. The “social environment” factor also has an influence on the investment decision. An interpretation of the Upsala model of investment internationalization allows the assumption that investors search for a familiar and comprehensible public environment where they (or their workers and employees) can integrate easily. Therefore, where such conditions are missing, enterprises offering social services (entertainment, cultural, sport) should be attracted to the territory of the zone. To an extent, such an approach is very similar to the dual market theory where the subsidized access to one market changes the number of users on another market.

5. The presence of research and development units in an industrial zone is a good opportunity for the future of the zone in the long-term perspective because in their absence only production and service sector companies, which do not rely on highly qualified staff or highly innovative production, will be present in the zone.

6. Previous contacts with local partners matter and it is recommendable to develop a bonus system for the local legal entities that have foreign company partners.

7. The mandatory assessment that investors are subject to should include the criterion of “what other investors they can attract to the industrial zone territory”. Every additional investment, no matter whether it is a continuation of the production chain or an enlargement of the product range, is a source of knowledge, skills and competences for all engaged. This immaterial asset is hard to assess but generates durable knowledge among the employees and changes the location’s appearance.

Regarding the Industrial Zone operator, the following conclusions can be drawn:

1. The zone operator should offer a completed and functioning basic infrastructure and not a project of what this infrastructure will look like in some period of time.

2. An infrastructure that would be attractive to potential investors does not just boil down to the presence of transport connections. The transport connection should be to a highway or some other way of transportation such as air or water. The survey did not make a direct reference to this conclusion but the level of employment and interest in one of the zones (the Telish industrial zone in Pleven), when compared with the other two zones (of Bozhurishte and Burgas), clearly validates this conclusion. The presence of only a republican road and a railway connection are not enough to generate high investor interest.

3. The zone operator should have high operational freedom and guaranteed financial resource in order to be able to attract outside members to the management team engaged with the operational management of the industrial zone. It will be neither realistic, nor logical to attract a highly qualified management team without allocating adequate funds and incentives for the purpose. Professional management teams of this type can achieve better financial results and higher quality use of the public assets. This conclusion is based on the “principal-agent” concept applied to the industrial zones. The principal (the state/municipality) provides its asset (industrial zone) to be managed by professional managers (agents) and sets a certain rate of return on the invested capital. Part of this capital can be transferred to the management team in the form of incentives for their efforts.

4. The building of “social” infrastructure on the territory of the industrial zones increases the general potential of the location. Attracting enterprises that deliver “social” services (cultural, sport, entertainment, etc.) on the territory of the industrial zone would boost the total employment on its territory, it would diversify the operator’s income and build a positive social environment in the location.

5. As a priority, the industrial zone operator should create and develop locations with developed infrastructure, equipped with workforce resources. The development of industrial zones in geographical areas lacking basic conditions (infrastructure, qualified labour resources) is a waste of funds and effort and cannot return the investments in a short and medium-term perspective.

6. Based on his work experience with investors and developed industrial zones, the zone operator should write a manual with the basic requirements of the

investors. This manual will help him focus his efforts and resources in those zones that have the greatest investment potential.

The changed economic environment after the country's accession to the European Union had two major consequences – the intensified integration of the local business in international value-added chains through increased export, and a gradual shrinking of production that relies excessively on manual labour with low productivity at the expense of the growth of higher added value activities. This change is not surprising, and it is a desirable one. It changes the income and standard of living of the population but is also a serious challenge to both the workforce and the local and state authorities. When it comes to the labour market, the requirements on the level of qualification and education are increasing, and in terms of the public authorities, the requirements for cooperation, flexibility and effectiveness are increasing.

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Transport connections and logistics – summarized data

Sofia

		2013	2014	2015	2016	2017
Transport for Sofia and the Sofia district	Length of the highways (km)	137	137	137	145	138
	Length of first-class roads (km)	357	357	357	373	317
	Length of railway lines (km)	478	467	467	467	467
Investments	Foreign direct investments in non-financial enterprises with accumulation by 31.12. (in thousand EUR)	12,074,015.9	11,675,226.7	12,111,789.8	12,211,561.8	12,310,741.0
	Costs of fixed assets acquisition (in thousand BGN)	7,141,450	8,186,075	7,999,484	7,365,956	6,800,190
Demographic statistics	Population by 31.12. - total (number)	1,309,634	1,316,557	1,319,804	1,323,637	1,325,429

Pleven

		2013	2014	2015	2016	2017
Transport	Length of the highways (km)	-	-	-	-	-
	Length of first-class roads (km)	96	97	97	97	97
	Length of railway lines (km)	206	206	206	206	206
Investments	Foreign direct investments in non-financial enterprises with accumulation by 31.12. (in thousand EUR)	311,089.3	306,765.2	282,478.7	187,587.9	226,473.3
	Costs of fixed assets acquisition (in thousand BGN)	422,544	379,410	498,247	309,507	341,706
Demographic statistics	Population by 31.12. - total (number)	259,363	255,749	251,986	248,138	244,209

Burgas

		2013	2014	2015	2016	2017
Transport	Length of the highways (km)	51	52	52	51	51
	Length of first-class roads (km)	249	249	252	252	252
	Length of railway lines (km)	175	175	175	175	178
Investments	Foreign direct investments in non-financial enterprises with accumulation by 31.12. (in thousand EUR)	2,438,309.0	937,226.7	1,704,391.8	1,746,015.0	1,887,318.4
	Costs of fixed assets acquisition (in thousand BGN)	1,886,262	1,852,643	1,478,832	973,382	1,237,318
Demographic statistics	Population by 31.12. - total (number)	414,485	414,184	413,884	412,684	411,579

Source. www.nsi.bg

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