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Reports on major Polish cities

Białystok

2011

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Białystok

After a number of difficult decades, Polish cities have now set themselves on a path of rapid development that offers them the opportunity to catch up with other Western European cities and greatly enhance the quality of life of their residents. It is doubtful whether Polish cities have ever before had such a tremendous opportunity.

Despite many difficult years of transition in Poland, sound market-based economic, democratic and socio-political institutions have been built, enabling civic activity to flourish. Cities have taken more and more responsibility for their own strategic decision-making, and for delivering ever greater affluence and quality of life for their residents. The European Union's "Leipzig Charter" sets out urban development principles, stating that development should strive to be sustainable, to satisfy economic prosperity, social equilibrium, environmental, cultural and health goals, and to deliver effective democratic institutions. Poland's membership of the European Union has meant that Polish cities have had unprecedented access to development funds to help them to reach these goals.

In the previous version of this report published in 2006, we principally tried to estimate where cities were at in terms of their access to \ development capital at the point where their growth was just taking off. In accordance with a methodology developed by PwC (formerly PricewaterhouseCoopers) we identified "seven capitals", each of which relates to a crucial area of development, and then estimated each from number of selected indicators.

We have now repeated this process, with a number of key enhancements. We increased the number of cities analyzed from 7 to 11, added a number of indicators that were not available in 2006, and have also been able to assess the rate of change evident between 2006 and 2010 on the basis of the differences between the two reports.

The level of development capital in Polish cities today is a legacy of past events in the region. Polish cities suffered many years of slow growth, followed by a transformation during which a great deal of painful economic restructuring was necessary. It experienced rapid, sustainable growth between 2005 and 2008, only to find itself hit by the global financial crisis. The accompanying radical increase in funds from the European Union budget for regional development offered Polish cities the opportunity to markedly improve development capital in the seven key areas. However, the accumulation of development capital is necessarily a long-term process, and it is often only after years that the payoffs for residents, in terms of increased income, economic activity and quality of life, are evident.

Witold Orłowski

PwC's Chief Economic Advisor

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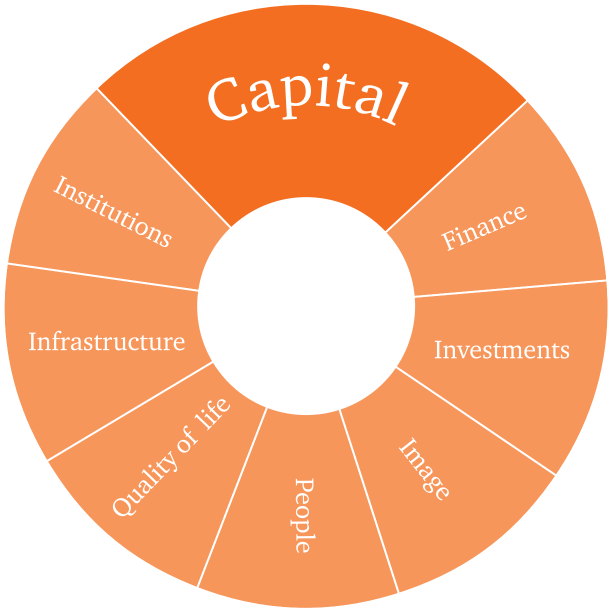
Over the past few years, Polish cities have substantially increased their capital. However in many ways, they still find themselves lagging behind the cities of western Europe that they seek to compete with and be compared to.

There are likely to be large amounts of development funds available to Polish cities in the coming years. The purpose of this report is to evaluate the level of development capital of Polish cities now. In doing so, it offers a perspective on the major strengths and weaknesses of Polish cities that will support the development of clear strategies and priorities to enable Polish cities to make the best use of those funds to achieve their goal: to transform themselves into modern, flourishing vibrant population centres.

The measurement of the growth potential of Polish cities is based on a methodology developed by PwC (formerly PricewaterhouseCoopers). It is based on the principle that solid development requires a number of different resources, termed the city's "capitals", to be present at the same time.

We mostly commonly think of the term "capital" in a financial sense. However, modern economics uses and understands the term much more extensively, as applying not only to money but also to resources like the qualifications, knowledge and experience of a population (human capital), the number and quality of their interactions (social capital), and even the value attributable to the way a city is perceived (image capital). These each represent necessary resources for development, and only with skilful investment over years will they mature.



A city with high development potential is a city with all 7 capitals well and evenly developed.

Methodology

Seven development capitals

In analysing the development potential of Polish cities, we use the concept of 7 capitals, each of which is important for the city's development:

- ***Human and Social Capital (HSC)*** defines the quality of human resources at a city's disposal. This includes the knowledge and qualifications of its workers, the demographic structure (cities with an ageing population are less dynamic than 'young' cities) and the social activity of the inhabitants.
- ***Culture and Image Capital (CIC)*** relates to how a city is perceived: as an interesting and attractive place, or a cultural desert, for example. The better the image, the easier it is to attract investors to the city and boost the economic and social activity of its residents.
- ***Quality of Life Capital (QLC)*** reflects the living and working conditions the city offers. It consists of such ingredients as the state of the natural environment, level of health care, quality of educational institutions and people's sense of security
- ***Technical and Infrastructure Capital (TIC)*** relates to the infrastructure, as broadly defined, of a city: its housing stock, roads, transport systems, as well as shopping centres, ATMs and internet access.
- ***Institutional and Democratic Capital (IDC)*** reflects the efficiency of the municipal institutions (government and administration) and the level of civil society activity.
- ***Investment Attractiveness Capital (IAC)*** tells us how strong a magnet the city is for investors, both foreign and domestic.
- ***Sources of Finance Capital (SFC)*** specifies the extent to which the city is able to obtain cash to finance development.

A city with high development potential is a city with all 7 capitals well and evenly developed. If one of the capitals is less developed, this suggests weakness – and indicates a direction for strategic remedial action.

All of the indicators are defined and calculated in such a way that a higher value indicates that the capital is of a higher quality. It is always measured relative to the average for the 11 cities surveyed, which is 100.

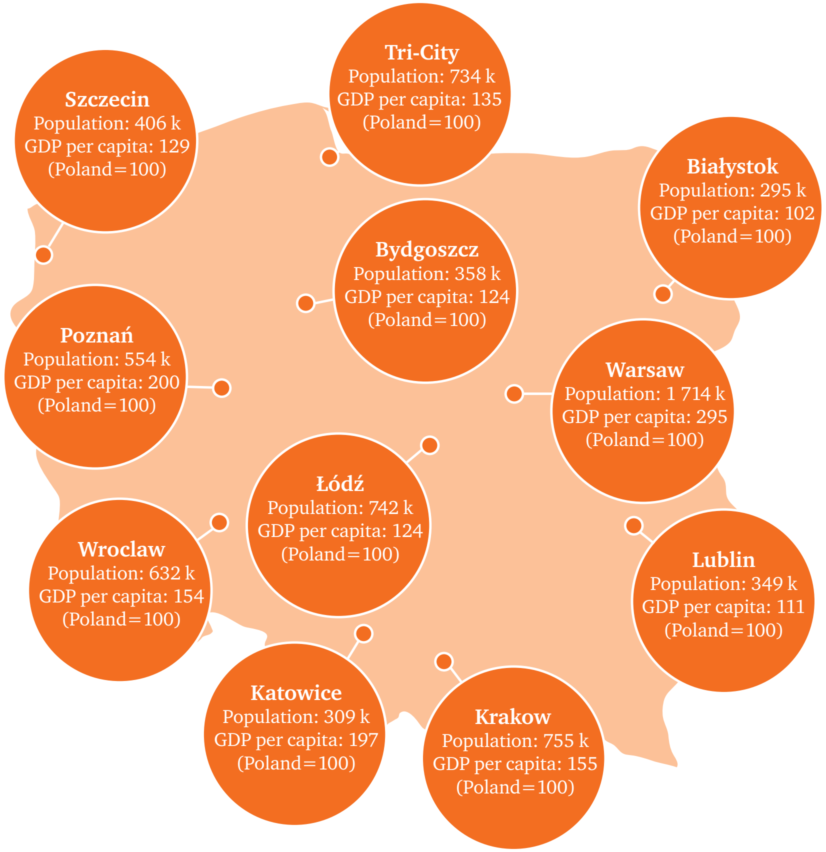
The report's authors have made every effort to source comparable data, and have used the most recent available data (generally from 2009-2010).

Apart from measuring the level of development of the 7 individual capitals in the 11 cities in 2010, the study also tries to measure the change in the capitals that took place between the last and present editions of the report, i.e. 2006-2010 (noting that the previous edition covered only seven Polish cities.)

Due to methodological differences, a direct comparison of the changes between 2006 and 2010 cannot be made; therefore, capital change is measured using a simplified methodology. As such this results in an estimate, and caution should be exercised in its use.

It should also be noted that, where growth rates are concerned, a lower starting point offers greater scope for growth than does a higher starting point. This should be factored in when considering the estimates of growth provided here.

General data on the cities included in the study



Data on the population from the end of 2009, GDP from 2008 (the latest available CSO data).
Source: CSO, PwC

How to read the radar charts in the report?

A radar chart allows us to analyse the city's capital in several areas at the same time: the more indicators being considered, the greater the number of axes on which we place values.

When connected, the points on the axes form a shape (triangle, square, pentagon) where the number of vertices is equal to the number of axes. These diagrams depict a given city's capital development (in red) against the average for the 11 major cities surveyed (in grey).

When analysing the chart, attention should be paid to:

- The size of the image area – the larger the area, the greater the capital.
- The shape of the figure – the more proportional it is, the more balanced is the development of the individual capitals. "Pulling" of the shape in any direction suggests that the capital in that area is more developed than the average, while "recession" along any of the vertices indicates relative underdevelopment.

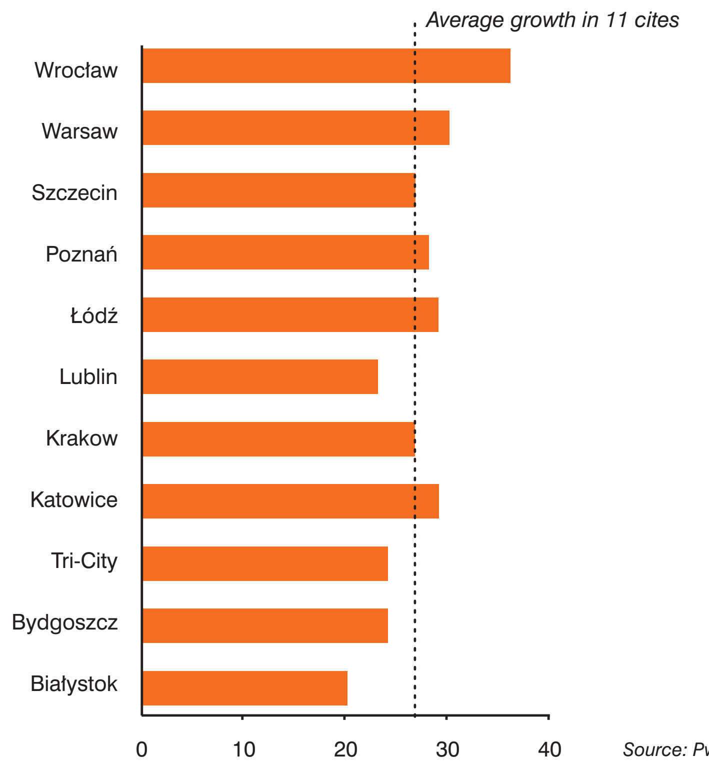
Study results
General observations

A good five years

The past five years (2006-2010) have proven very positive for Polish cities. The country's development accelerated after Poland's accession to the European Union, partly due to the enormous opportunities created by unprecedented increases in regional development funds. Importantly, this has shown clear results in terms of increases in income and quality of life, improved infrastructure, and more efficient public institutions.
The index of economic development* measured for the 11 Polish cities covered by the survey shows a marked improvement in all the cities – its value has increased on average by 27%.

The fastest economic development over the period 2006-2010 was recorded by Wrocław and Warsaw, followed closely by Poznań, Krakow, Katowice and Łódź. A slightly slower than average rate of development was observed in Szczecin, the Tri-City area and Bydgoszcz. However, the main regional metropolitan centres of the "eastern wall", Lublin and Białystok, developed somewhat more slowly, despite additional special development resources being targeted at these regions from European Union funds. This suggests that serious structural problems continue to hamper market-driven economic growth efforts there.

Growth index of the economic development of Polish cities, 2006-2010



Source: PwC

* *representing the weighted average of GDP growth per capita (real) from 2005-2007, growth in real incomes 2006-2010, and reduced unemployment.*

Study results
Growth of 7 capitals

Development capital increased everywhere

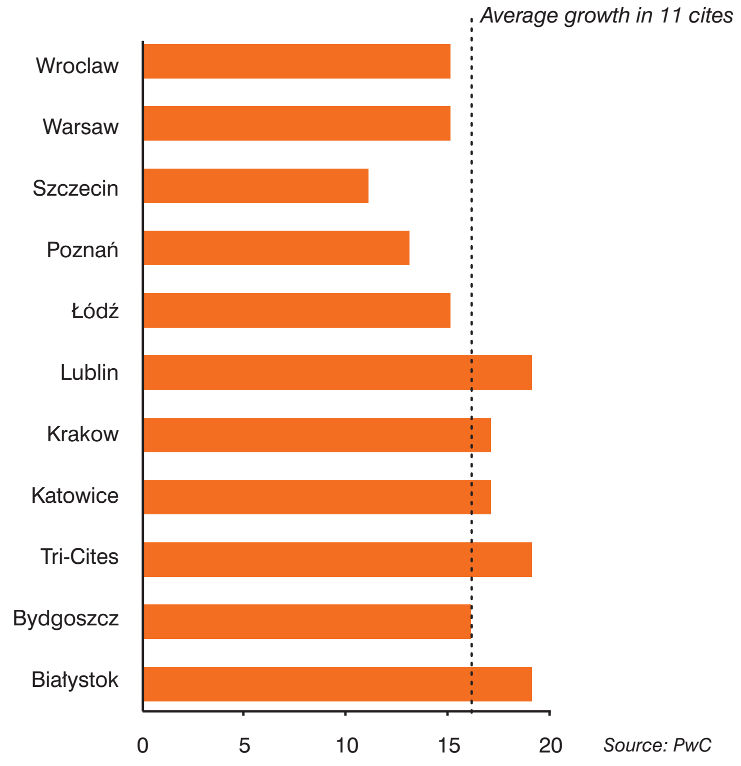
Polish cities took advantage of good development conditions in 2006-2010 to significantly increase their development capital. We estimate this growth to be 16% on average, meaning that each type of capital increased, on average, by this amount in each of the cities studied.

However, development has not been uniform. The greatest successes were achieved in the areas of Investment Attractiveness Capital and Culture and Image Capital, whereas the slowest progress was made in the areas of Technical and Infrastructure Capital and Quality of Life Capital. This is not surprising, as infrastructure is built up over many years while quality of life only increases as a consequence of sustained successes in other areas.

Of the cities studied, the fastest average growth of the 7 capitals was recorded in Lublin, Białystok and the Tri-City area. To a large extent, this is the result of the large amounts of development funding, mainly from the EU, that have been directed to Poland's eastern cities. However, this increase has not yet translated into accelerated economic growth among other "eastern wall" cities.

Capital grew at a rate that was slightly above average in Kraków and Katowice, and slightly below in Bydgoszcz, Łódź, Wrocław and Warsaw. However, the development capital of Poznań and Szczecin increased noticeably more slowly. It is worth re-stating, at this point, that a lower initial level offers greater scope for growth than does a higher starting point, and that this factor may be influencing these results.

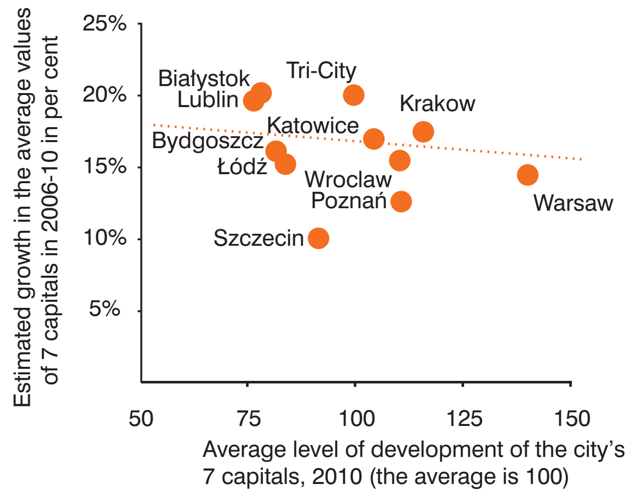
Estimated growth of the average value of 7 capitals of Polish cities, 2006-2010



Source: PwC

Study results
Comparison of capital growth

The level and growth of 7 capitals of Polish cities



Source: PwC

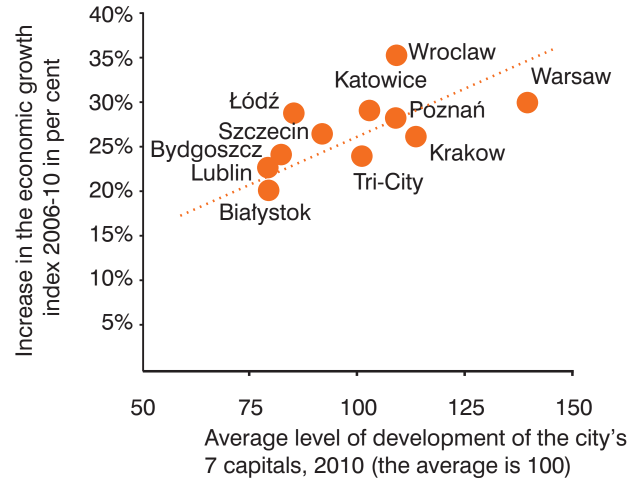
Disparities are slowly declining

Generally speaking, over the period 2006-2010, the lower the starting level in a given city, the faster was its average increase in capital, leading to reduced inter-city disparities. This trend is so far relatively weak, but it should strengthen with the adoption of appropriate strategies for city development and the effective utilisation of development resources. However, we note that in the case of Szczecin and to a lesser extent Poznań, the estimated average capital growth was markedly slower than might have been expected.

Relationship between economic development and the capitals

A high level of development of all 7 capitals indicates favourable economic development conditions, and consequently better quality of life for a population. An analysis of the data on the average level of the 7 capitals recorded in the 11 cities studied, paired with economic development index data for the period 2006-2010, does indeed suggest a close relationship between the 7 capitals and economic growth. In the case of Wrocław, the results on economic growth are slightly better than would be expected given its 7 capital resources.

Level of 7 capitals and economic success of Polish cities



Source: PwC

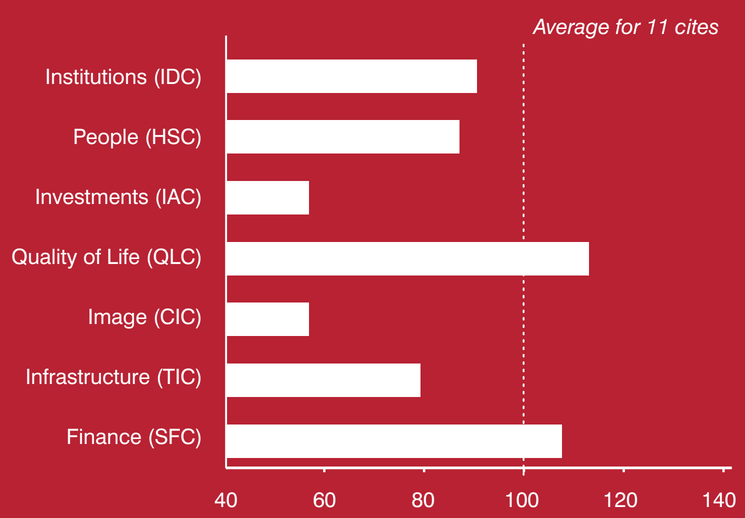
Białystok
Key conclusions and recommendations

Białystok
Key conclusions and recommendations

An emergent city needs to be more visible

Białystok is on track to become the centre of development for north-eastern Poland. Of the cities studied, the fastest average increase in capital we saw was in Białystok, Lublin and the Tri-City. However, the maintenance of this growth still requires a major effort from the city and further actions to improve the image and investment attractiveness. The slogan "Emerging Białystok" clearly reflects the existing opportunities and the work performed by the city, although, in many respects, it remains largely in the sphere of wishful thinking.

Białystok – overall assessment of the development of 7 capitals



Source: PwC

Białystok
Key conclusions and recommendations

Compared with other Polish cities, the values corresponding to the development of the seven capitals are not very advantageous for Białystok. However, at this point, it should be emphasised that the city is starting from a completely different position to the largest of the seven centres analysed. The city requires more rapid changes and further development of its image. Particular attention is especially required with respect to the conditions for investment, human capital development, the quality of education and further development of the infrastructure.

Białystok has a number of strengths on which it can build its potential. The highest indicator of the quality of life among the cities studied is a result of not only the good condition of the environment, but also a high sense of security in the city. Białystok has a large supply of workers, while pay levels are relatively low, which could be an incentive for investors. The city's geographical location, under the assumption of the development of the transport infrastructure, can prove to be an advantage. The advantage is also the city's well-managed finances.

Over the past two years, Białystok has taken steps to overcome its image to date. A long-term strategy has been developed to promote the city under the theme of "Emerging Białystok". The priority for the city authorities should be to increase accessibility to Białystok, improve its image and improve investment conditions.

The city's main strengths:

- The high quality of life and sense of security
- The condition of the city's finances
- The use of EU Funds

Main challenges:

- Further development of the city's image
- Improvement of the conditions for investment
- Further development of the transport infrastructure and public transport

People are the most important and the most valuable resource determining a city's chances for development. There is no substitute for people's skills, their willingness to work, and the business and social activity they engage in.

People

Why do we measure Human and Social Capital?

People are the most important and the most valuable resource determining a city's chances for development. In the modern world, it is possible to buy almost anything. You can rent an advertising agency to promote a city, find investors to provide funds for infrastructure development, and build efficient administration and online systems for providing services to inhabitants. But there is no substitute for people's skills, their willingness to work, and the business and social activity they engage in. In the longer term, it is the people – the Human and Social Capital, being a set of characteristics describing the human resources – that determine a city's economic development and its success. Human Capital is typically associated with intellectual resources while Social Capital describes the quality of the civil society. It is easy to imagine that the level of Human Capital – people's intellectual capabilities and skills – translate directly into economic development.

However the reality is a little more complicated. Human Capital influences the community's economic development and improves its quality of life in less obvious ways, such as reducing corruption, fostering long-term investment and disseminating knowledge, preventing abuse of common goods, speeding the investment process (by reducing the probability that administrative decisions will be appealed). In addition, through development of the third sector, it is conducive to greater social control over actions taken by authorities. *(Source: Social Diagnosis 2009.)*

The value of Human and Social Capital depends on many factors. Some of them can be influenced only to a relatively small degree (e.g. demographic structure). It is also not possible to force people to conduct business or social activity – although attempts may be made to encourage them to do so and facilitate any initiatives to that effect. However, in certain areas e.g. in education or on the labour market, the potential for action on the part of municipal authorities is quite high.

Measuring Human and Social Capital (HSC)

The Human and Social Capital score constitutes an aggregate measurement of the value of a city's human resources, taking into account the following five characteristics: demographics, education, and citizen's attitudes towards the free market, labour market activity and civil society engagement.

HSC: demographics

The demographic make-up of a city is one of the most important determinants of its Human and Social Capital and is, in the first instance, defined by its age structure and the number of very young children. The basic demographic criteria used to measure HSC include the demographic burden ratio, the share of elderly in the city's population, and the number of births per 1000 inhabitants.

Białystok's demographic situation is very good. The percentage of people in post-productive age is among the lowest in the country, amounting to 16.3% (the average for the cities studied is 19%). The city's age dependency ratio is the lowest recorded among the cities studied and amounts to 0.50. This means that it has 2 people of working age for every younger or older person. The birth coefficient is equal to the national average, 10 children are born per 1000 inhabitants in Białystok.

HSC regarding demographics for the 11 cities compared of 100, we estimate Białystok in this respect as being at 107,6.

In a modern economy, the quality of the human resources of a population is determined largely by its skills.

People

HSC: education

In a modern economy, the quality of the human resources of a population is determined largely by its skills. Measuring this therefore involves measuring the average education of the inhabitants: the better their education, the higher the city's attractiveness in terms of investing and conducting business activity.

With the importance of the information society and the knowledge-based economy, it is impossible to ignore such aspects of education as knowledge of information and communication technologies, knowledge of foreign languages, and access to education and training in these areas when discussing Human Capital attainment. However, in order to avoid the repetition of similar indicators for the individual Capitals, these aspects have been taken into consideration in the Investment Attractiveness Capital and Technical and Infrastructural Capital.

Here, HSC is measured in terms of share of persons with university and high school educations, the number of high school and university students per 1000 inhabitants, and newspaper readership (the percentage of people who regularly read one of the three main national dailies). These last two were introduced in this year's survey, which reduces the direct comparability of HSC with earlier reports.

The analysis shows that, in terms of the qualifications of the population, Białystok's situation needs to be improved in comparison with the other agglomerations studied. The percentage of the population with higher education is 17.5% and is below the average for the cities studied (this amounts to 18.6%), although it is higher than in Łódź and Bydgoszcz. The secondary education indicator was more favourable for Białystok. The ratio of students to the number of the city's inhabitants is one of the lowest in the group studied, just as the proportion of young people in secondary schools, which affects the overall result to a large extent. The rate of newspaper readership is better.

With an average level of the HSC regarding qualifications for the 11 cities of 100, we estimate Białystok as being at a level of 92.1.

People

HSC: attitudes towards the free market economy

Development is also affected by the attitude of citizens towards the market. In locations where people are more pro-market, they adapt more easily to the demands of the market and are more economically active and successful.

HSC in this area is measured by the proportion of persons engaged in business activity.

The results of the measurement indicate that the situation in terms of Białystok's market-oriented attitudes is less favourable than in the other cities studied. The percentage of people engaged in business activities is the lowest among the 11 major cities and amounts to 10.2%.

Białystok's HSC regarding market orientation is 72.5, while the average level for 11 cities being 100.

HSC: labour market

The labour market conditions, from a Human Capital perspective, principally relates to the availability of employees with skills sought by employers. In a city with high Human Capital, there should be low unemployment.

As such, the HSC indicator regarding the labour market is measured by the unemployment rate, both overall and that specifically for youth.

The situation on the labour market is a challenge for Białystok.
The unemployment rate is highest among the cities studied and amounts to 10%. Likewise, youth unemployment is significantly above average.

The overall HSC rating of the labour market is detrimental for Białystok. With an average level of 100 for the 11 cities, Investment Attractiveness Capital in Białystok is 59.3.

People

HSC: *civil society engagement*

A high level of engagement in civil society indicates high Social Capital – people are involved in common interest activities .

HSC with regard to civil society engagement is measured by access to Internet resources and average voter turnout (parliamentary elections in 2007, presidential and local government elections in 2010).

Civil society activity in Białystok is at a moderate level. Both the average turnout in the elections (54.2% compared with 56%) and the observed online activity of NGOs are slightly below average.

With an average level of the HSC regarding civil society activity for the 11 cities of 100, we estimate Białystok as being at a level of 93.4.

People
Summary

Białystok's Human and Social Capital

The demographic situation is certainly favourable for the city. Civil society activity and the level of education are at a moderate level.

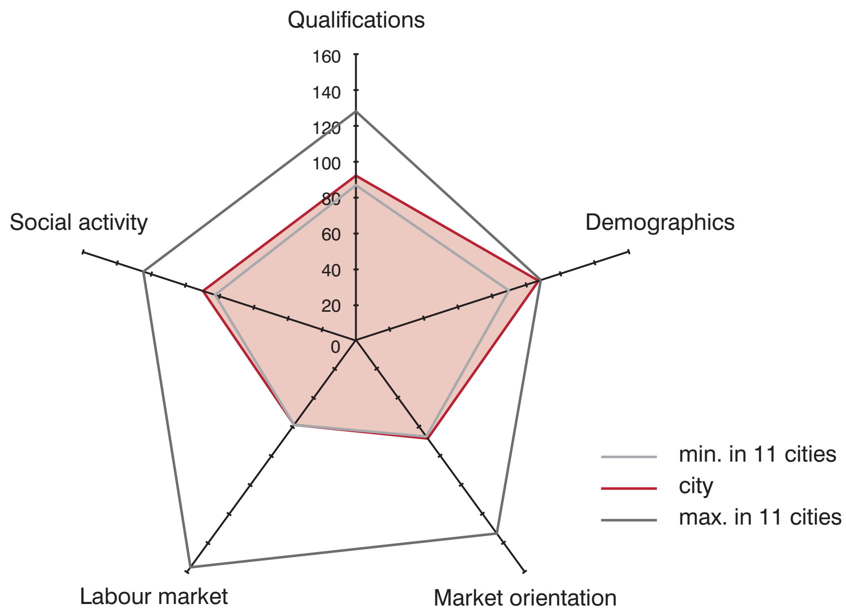
Primarily, it is the situation on the labour market that requires improvement. Unemployment in Białystok is the highest among the cities studied.

The city should take steps to promote entrepreneurship among the inhabitants, support existing companies and attract investors.

An important policy direction of the city authorities should be to support civil society initiatives. The long-term strategy of building a high level of human and social capital in the city should also take into account support for education, in particular, technical education and the natural sciences.

With an average level for the 11 cities of 100, we estimate Białystok's Human and Social Capital, at 85.1.

People – Białystok



Quality of Life

Why do we measure Quality of Life Capital?

If a city wants to succeed economically in the long term, it must provide good living conditions for its inhabitants. A high quality of life in a city will cause people to decide to live and work there, including those who will reject offers to move to different domestic or foreign cities, and investors will be more inclined to relocate business activities. A high quality of life also leads to pride and satisfaction with one's own city, while a low quality of life yields disillusionment and frustration.

The quality of life in the city is made up of many factors. The condition of the natural environment is one important aspect, as are access to good quality medical and educational services. A sense of security is of tremendous importance. The best entertainment centres and services cannot guarantee that inhabitants and guests will feel comfortable in the city if a sense of security is lacking.

Measuring Quality of Life Capital (QLC)

Quality of Life Capital largely determines the extent to which the city is considered a good place to live and work. It is the most debatable capital (besides Culture and Image Capital). It is also the most difficult to present as a single ratio. In the Polish market there are several indicators that pertain to various aspects of the function of a metropolitan area. These include for example the number of cultural events or hotels of a given standard.

In our reports, these are covered in the Culture and Image Capital or the Investment Attractiveness Capital.

However, considering the importance of healthcare and sense of security to the overall quality of life, we decided to stay with the definition that was adopted four years ago, which is also consistent with PwC's global methodology. This also allows direct comparability with the previous edition of these reports.

Hence, when measuring QLC, we take into account four aspects of quality of life: the condition of the natural environment, level of medical services, level of educational services and sense of security.

Cities with a good natural environment give their inhabitants a much greater sense of comfort and satisfaction with life.

Quality of Life

QLC: ***condition of natural environment***

Cities with a good natural environment give their inhabitants a much greater sense of comfort and satisfaction with life. It should be remembered that in the field of environmental protection – as in many other fields – commonplace opinions are difficult to overcome, and spectacular failures or successes (such as appearance of fish or bird species which have not been seen for many years) very frequently have greater impact than technical measurements of environmental pollution.

The selected indicators that we use to measure QLC in terms of the condition of the natural environment include air pollution measurements (emission indices for various types of gaseous and dust pollutants), number of cars per km^2 in the city limits, capital expenditures on environmental protection and percentage of treated sewage.

In terms of the state of Białystok's environment, the situation is very good. Expenditure per capita on environmental protection is among the highest in Poland, the city also copes well with sewage treatment (95% of sewage is treated). Air pollution in Białystok is much lower than the average. The road traffic density index is at an average level (1,148 vehicles per km^2, compared with the average for the 11 cities of 1,199 vehicles per km^2.

With an average level of QLC regarding the natural environment for the 11 cities at 100, we estimate Białystok in this area as being at *114.4.*

QLC: ***healthcare quality***

The availability of medical services of adequate quality is one of the factors that exerts considerable influence on the assessment of living conditions in the city. While certain problems in this area are common to all Polish cities, individual cities also fare very differently.

The basic ratios selected for measurement of QLC in the area of medical services include the number of physicians per 1000 inhabitants, infant mortality rates, and the ranking of healthcare centres (by the Centre for Monitoring Quality in Healthcare and "Rzeczpospolita"), as well as the average waiting time for an appointment with a given specialist physician. The last two ratios were not available when the previous edition of this survey was carried out.

The results of the measurement indicate that the situation regarding the availability of good quality medical services in Białystok is complex. The number of physicians per 1,000 inhabitants is close to the average for cities studied. The infant mortality rate, considered the most synthetic indicator of population health and the functioning of the health service is quite high and amounts to 7.1 deaths per 1,000 live births (the average for the 11 cities is 6.0). In turn, the estimated waiting time for an appointment with a specialist is the shortest here (apart from Bydgoszcz) of the 11 major cities. Białystok is slightly worse in terms of number of points scored by Białystok health centres in the ranking of hospitals.

With an average level of the QLC in this respect for the 11 cities of 100, we estimate Białystok as being at a level of *111.3.*

Quality of Life

QLC: education quality

The quality of educational services is usually one of the first issues considered when assessing the overall quality of life in a city. Good schools and highly ranked universities attract new inhabitants and are important when making the decision to move, either temporarily or permanently (which results in greater availability of highly skilled employees). Good education also facilitates the city's social and economic progress due to the fact that it positively influences its development prospects. Active innovation and education policy is one of the main priorities for sustainable development specified by the EU document referred to as the Leipzig Charter. According to this document, cities are centres for the creation and transfer of knowledge, and the sustainable development of metropolitan areas should take into account the need to continuously increase the level of education. The indicators used for measuring QLC include scores recorded by the city's most important universities in the university rankings (in "Perspektywy" magazine), the success rate of high school-leavers in 2009, and results recorded on 6th grade exams and junior high school-leaving exams in 2008. This indicator is new in this edition of the survey.

The quality of educational services in Białystok is at a relatively low level, mainly because of higher education. In the ranking of universities and colleges, Białystok's higher education institutions fared significantly worse than colleges and universities in the other cities studied, the majority of cases having a longer university traditions. The assessment is improved slightly by the baccalaureate pass rate (84% compared with 83.4% on average in the 11 cities). The results of examinations in primary and secondary schools are similar to the average for the 11 major cities.

With an average level of the HSC regarding quality of education for the 11 cities of 100, we estimate Białystok as being at a level of 81.2.

QLC: sense of security

Sense of security encompasses many dimensions: physical security of the inhabitants (the crime rate and road traffic safety), protection from natural disasters and accidents, and a sense of security in terms of access to healthcare and job opportunities are all equally important.

While measuring QLC for sense of security we limited ourselves to the area of physical security and used the following indicators: number of recorded crimes and number of traffic accidents per inhabitant.

In terms of sense of security, Białystok is unrivalled in comparison with the other cities. The number of reported crimes is in the January-June 2009 is at the lowest level here, while the number of collisions and road accidents is slightly higher than the average for the 11 cities analysed.

With an average level of the HSC regarding security for the 11 cities of 100, we estimate Białystok as being at a level of 140.1.

Quality of Life
Summary

Białystok's Quality of Life Capital

The city has a high Quality of Life Capital and, in this respect, is very favourable in comparison with the other Polish cities. It copes excellently with regard to the state of the natural environment and the assurance of safety of the inhabitants and visitors.

The improvement of the quality of education seems to be of key importance to Białystok's future development. Likewise, the improvement of the quality of medical services could contribute to further improvements in Quality of Life Capital for Białystok.

With an average level of 100 for the 11 cities, Quality of Life Capital in Białystok was estimated at a level of 111.8.

Quality of life – Białystok

Image

Why do we measure Culture and Image Capital?

In the modern world and in the modern economy, decisions to purchase goods and services are made not only on the basis of actual values, but also on the basis of our opinions about a product. A product's brand is an important aspect of this: its prestige, quality and the trust we have in it. A similar principle holds true for cities. In addition to the things that a city offers its inhabitants and companies, our opinion of it, i.e. its image, is very important. A city that enjoys the image of a robust, friendly and interesting place with a good standard of living will attract both tourists and investors.

The image of the city depends on many factors. Since the previous edition of "Reports on major Polish cities", we have seen tremendously positive changes in Culture and Image Capital at the strategic and qualitative level. In most of the cities, image is no longer shaped by accident but is, to much greater extent, the result of more or less consistently executed promotional strategies. Positive results for cities that started regular promotional activities early can be clearly seen throughout Poland and Europe. For the others, changing the image among inhabitants, investors and tourists will necessarily involve long-term efforts. In this report we decided to avoid a detailed analysis of the quality, effectiveness and consistency of activities conducted by individual cities in the image-building area, as such processes are to great extent evaluated subjectively. For the purposes of this publication, we limit ourselves to indicators which are objective and measurable.

As this report is being prepared, some of the cities being analyzed are facing tremendous opportunities to shape their image in Europe.

Firstly, Poland will have the presidency of the European Union in the second half of 2011, and subsequently host Euro 2012. In addition, these reports were being compiled, it become known that five Polish cities have qualified to compete further for the title of European Capital of Culture. For Gdańsk, Katowice, Lublin, Warsaw and Wrocław this means very intensive activities in the area of Culture and Image Capital.

However, we see participation in the qualifying round itself as important – it has the potential to start a debate on the how the candidate cities should promote their cultural attributes and may result in several new initiatives and a comprehensive approach to development in this area.

As part of city strategies for development and promotion, Polish cities have been increasingly considering the sustainability of their development strategies. This is of key importance to the cities' development, their image, and the quality of life they will be able to offer in the longer term. Polish cities are increasingly beginning to consider sustainable development issues in a comprehensive and long term manner; this applies to both larger cities and smaller townships. The tasks related to implementation of principles and strategies for sustainable development are also increasingly frequently reflected in lists of duties and tasks for the individual departments of local government bodies.

In sustainability terms, Polish cities are also active internationally: 10 cities signed the mayors' agreement declaring limits on CO2 emissions, and 12 cities (all those covered by this analysis plus Rzeszów) belong to the EuroCity network which includes the largest European cities and focuses on challenges facing the European Union, including climate change and social exclusion.

Culture and Image Capital is a measure of how the city is perceived – by its inhabitants as well as outsiders.

Image

Measurement of Culture and Image Capital (CIC)

Culture and Image Capital is a measure of how the city is perceived – by its inhabitants as well as outsiders. Like many of the capitals, it can give rise to lively debates and strong emotions, and the range of potential indicators that can be used to attain it is very broad.

What is important is the fact that even a broad selection of available indicators does not always mean a the value obtained is precise, making the analysis extra difficult. We preserve the methodology adopted four years ago and, in measuring CIC, take into account three characteristics: general opinions of the city, high culture, and the culture of daily life.

CIC: general image of the city

General image consists of the city's overall recognisability, its generally recognized attractiveness, as well as the perception of its values by its inhabitants (e.g. traditions of honesty and hard work).

The basic indicators we have used to measure CIC as regards general image are: the number of "good associations" with the city on the Internet (e.g. number of websites with the city's name and the word "culture" in them), number of tourists visiting the city, the number of words a city warrants in a typical tourist guide to Poland and tourist opinions expressed on online travel sites, and the observed rate of entrepreneurship (a new indicator for this edition of the survey).

The analysis shows that, in terms of the general image of Białystok's situation, dynamic action is still required.

The city attracts relatively few tourists, is less visible on the Internet, and also receives the smallest amount of space in popular guides to Poland (compared with the other cities studied).
The percentage of people conducting business is among the lowest.

With an average level of CIC regarding the overall image for the 11 cities at 100, we estimate CIC regarding the overall image at 51.7.

Image

CIC: high culture

A city's image largely consists of its activity in the area of so-called high culture. Although a relatively small percentage of inhabitants and guests use such services, these are significant cultural events that are more likely to be publicized in the opinion-making media and shape the city's image as an interesting, attractive and appealing place.

The basic indicators selected for measuring CIC with regard to high culture include the city's culture budget, the number of concerts, film festivals, theatre festivals and classical music festivals, as well as concert attendances (all per number of inhabitants).

Białystok's position in the area of high culture requires further action. The results of the measurement show that, in this respect, Białystok is weaker than the other cities studied. In per capita terms, the number of theatre and classical music festivals, as well as the number of concerts remains considerably below the average. However, it is worth noting that, because of the "Positive Vibrations" *[Pozytywne Wibracje]* festival, Białystok appears on the map of mass cultural events. In the period under review, the resources assigned to culture constituted a small percentage of the city's budget and are among the lowest for the cities studied.

With an average level of the CIC for the 11 cities of 100, the indicator for Białystok regarding high culture is 44.7.

CIC: daily cultural life

A city's inhabitants and guests form an impression of a city on the basis of the daily cultural life: the selection of restaurants, hotels, number of cinemas, number and quality of parks, and number of popular mass events.

The indicators used to measure this aspect of CIC include: the number of cinema seats, number of restaurants, number of sport stadium seats (including those under construction, including planned Euro 2012 facilities) and the green areas within the city's administrative boundaries (all per number of inhabitants).

In the area of culture of everyday life, there is still much to be done in Białystok. Equally, the number of seats in cinemas, the percentage of areas of greenery and the number of restaurants are below average for the cities studied. The number of seats at stadiums per capital has remained at the average level (the situation in this area will be improved by the City's Football Stadium).

With an average level of the CIC for the 11 cities of 100, the indicator for Białystok regarding culture of everyday life is 75.4.

Image Summary

Białystok's Culture and Image Capital

This means that the city has much to do to improve the Culture and Image Capital. Białystok – a city with a great deal of tradition related to cultural diversity – in principle, is not recognisable in the world and yet has much to offer visitors. Changes are also needed in the area of high culture and the culture of everyday life.

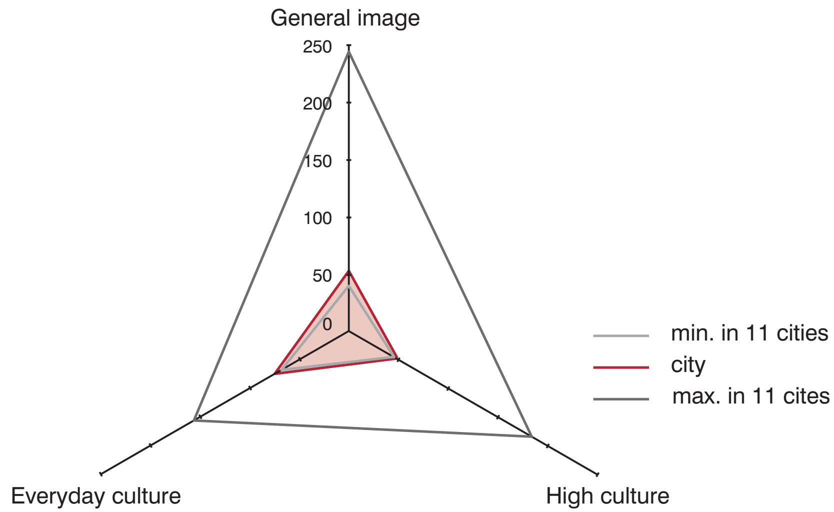
It is recommended that efforts to improve the image and promote Białystok more extensively continue for the city's further successful development.

The objective of the promotional campaign held in 2010 was to present the city as one which breaks the stereotype of Poland B, being attractive to investors and tourists, as well as an inhabitant-friendly place. However, time and further actions are needed for this strategy to bring results in the form of changing the city's image.

The support of creative environments, the support and initiation of cultural projects, as well as investment in high culture and the culture of everyday life can make a positive contribution to the improvement of Białystok's situation in the area of culture. It should be noted that the city may require appropriate infrastructural facilities for organising mass events.

With an average level of 100 for the 11 cities, Culture and Image Capital in Białystok is 57.3.

Image – Białystok



Institutions

Why do we measure Institutional and Democratic Capital?

Institutional and Democratic capital determines the degree to which institutions which manage the city function effectively, e.g. city authorities, public administration and maintenance services. It also reflects the level of civic activity of inhabitants and effectiveness of democratic mechanisms, as well as the level and effectiveness of communication between the authorities and the society.

In cities with high Institutional and Democratic Capital, it is easier to develop and exercise a consistent development strategy. Authorities which are controlled democratically can perform their duties more effectively and have a stronger social mandate for managing the city, while the activities of the citizens supports them on the road to achieving common goals. This facilitates the achievement of success in terms of economic and social development.

Measuring Institutional and Democratic Capital (IDC)

The Institutional and Democratic Capital of a city is made up of the quality of the authorities' actions, the activities of the inhabitants, and communication between the authorities and the people.

IDC is measured in three areas: the effectiveness of municipal institutions (authorities and public administration), their performance of the basic function of ensuring public safety, and non-governmental organization activity.

Institutions

IDC: administrative effectiveness

Opinions regarding the city's authorities and administration are based on the experiences of inhabitants and visitors. These judgments are influenced by the way the authorities communicate with the society: whether citizens are included in strategy development, and whether explanations of the problems and goals of various activities is provided. A constructive dialog with inhabitants contributes to both a streamlined process of strategy development as well enhanced performance, since a document developed in a such a manner will better take into consideration the problems facing inhabitants and offer solutions.

The primary indicators used to measure IDC in terms of the effectiveness of municipal institutions are: administration expenses (compared to the population), indicators of the effectiveness and availability of offices indicated by waiting times for entry in the economic activity register, office opening hours that reflect citizens' needs, and opportunities to use online office services (new in this edition), and the percentage of votes received by the incumbent president in the local government elections of 2010 (also new in this edition).

Expenditure on public administration per capita is lower in Białystok than the average. The waiting time for entry in the register of sole proprietorships is one of the longest among the cities studied, which can impede the development of entrepreneurship. Likewise, in terms of settling official matters through the Internet, Białystok performs worse than the other cities. Access to the municipal authority is at a satisfactory level in the study. A very high percentage of votes for the current president in the 2010 local elections suggests that people appreciate the efficiency of the municipal institutions and the changes taking place in the city recently.

With an average level of IDC regarding efficiency of administration for the 11 cities compared of 100, we estimate Białystok as being at **86.6.**

Institutions

***IDC:* public safety expenditure**

Assessment of municipal institutions is largely based on their actions in the crucial area of safety: expenditure on law and order services, and the extent to which people trust these services. It is worth noting that citizens' assessments of authorities' efforts in this area can be separate from their actual perception of security (taken into consideration in the Quality of Life Capital) – in other words, there are cities with a high crime-rate despite the considerable efforts of the authorities, as well as cities where both expenditure on safety and crime-rates are low.

In measuring IDC in terms of public safety, the following indicators were used: the city's expenditure on safety, the number of police and city guards (all per 1,000 inhabitants) and the crime detection rate.

In terms of public safety, Białystok is close to the average for the cities studied. Crime detection is at an average level, which can be achieved at a lower level of spending and a smaller number of police officers and city wardens (with respect to the population) in comparison with other cities.

With an average level of the IDC in terms of spending on security for the 11 cities of 100, Białystok is at a level of 97.3.

***IDC:* non-government organization activity**

A high level of non-government organization activity contributes to the better operation of democratic mechanisms, increased scrutiny of authorities' actions on the part of citizens, fostering of partnerships between the city's inhabitants and its authorities, as well as the increased involvement of citizens in working out and implementing a city's development strategy.

IDC in terms of non-government organization activity is measured by analysing Internet sources to ascertain the number and level of activity of non-government organizations registered in the city.

There is no doubt that significant progress is possible in the activities of NGOs in Białystok. 4.1 organisations have been registered per 1,000 inhabitants, while the average in the other cities studied is approximately 5. Likewise, the observed online activity of the organisation is at a below average level.

With an average level for the 11 cities of 100, Białystok's result in this respect is 86.2.

Institutions
Summary

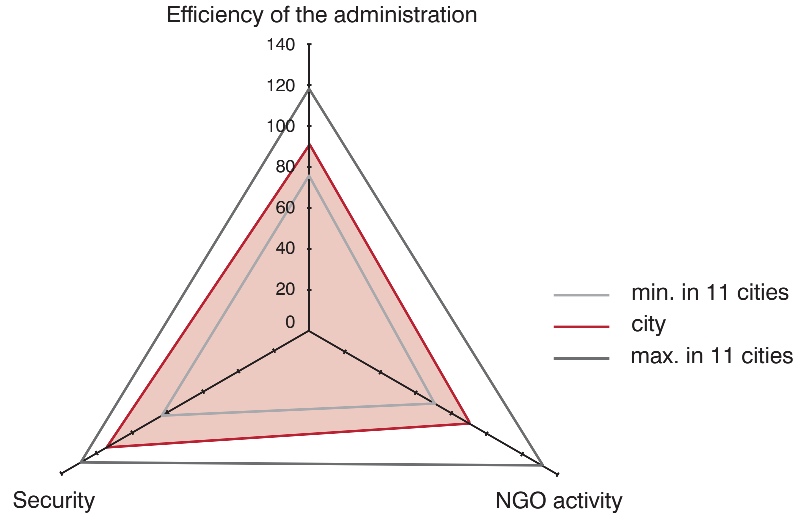
Białystok's Institutional and Democratic Capital

The evaluation of Institutional and Democratic Capital for Białystok is complex. The efficiency of the functioning of municipal institutions measured with accepted indicators does not give the best results; likewise, the activity of non-governmental organisations is at a moderate level.

On the other hand, the votes of the inhabitants in the recent local government elections clearly confirm the local community's support of the chosen direction of development. Clearly the functioning of the administration needs to be improved, which may require additional funding. Białystok should also support the increasing social activity of the inhabitants.

With an average level of 100 for the 11 cities, Institutional and Democratic Capital in Białystok is 90.1.

Institutions – Białystok



Infrastructure

Why do we measure Technical and Infrastructural Capital?

Effective infrastructure – including efficient transport, housing resources, services infrastructure, media and utilities (both more traditional such as power and water, and modern such as telecommunication and the Internet) is a prerequisite for creating an efficiently functioning metropolis where people can live and do business. The advantages that flow from well-developed Technical and Infrastructural Capital directly influence the other Capitals, in particular Quality of Life, Human and Social, and Investment Attractiveness. Without sufficient, or sufficiently developed, Technical and Infrastructural Capital, progress in the other areas will be considerably slower than in cities with well developed infrastructure, and people's quality of life deteriorates, the city's image worsens, and its attractiveness as a place for locating investments diminishes.

For these reasons, we regard Technical and Infrastructural Capital as warranting special attention.

It is important to remember that to have effective infrastructure in place requires not only the presence of concrete resources such as transport systems, buildings, equipment and installations, but also a level of organizational efficiency in management and administration that allows these to be fully utilized.
The actual Technical and Infrastructural Capital level often depends also on the efficient operation of the markets for services, media and utilities and housing. Renting or buying appropriate housing is as difficult as in a city with no housing resources available as it is in a city with extensive housing resources but an inefficient market .

Measuring Technical and Infrastructural Capital (TIC)

The city's Technical and Infrastructural Capital has a strong impact on the city's attractiveness as a place to live and do business. The TIC assessment is usually based on the experiences and observations of the city's inhabitants and visitors. Negative opinions that gain traction can destroy a city's image, even it does well in other areas.

In our opinion, there are four kinds of infrastructure crucial for successful development: transport infrastructure, energy and IT infrastructure, housing infrastructure, and trade and services infrastructure.

The availability of low-priced apartments or houses in the city depends both on the number and quality of housing resources in the city and on the efficiency of the real estate market.

Infrastructure

***TIC:* transport**

A general assessment of the efficiency of the transport network in the city needs several factors to be taken into consideration: road infrastructure, alternative forms of transport, the quality of public transport and the quality of the city's connections to the outside world.

The indicators used to measure TIC for transport are: density of the road network, number of bicycle lanes, number of public transport seats in relation to the population, as well as the number and quality of the city's connections to the outside world: the number of direct flights (airports within a 100 km radius), time taken (by train) to reach the five largest Polish cities (a new indicator in this edition of the survey), access to the European motorway network (a new indicator in this edition of the survey). In combination, these indicators give us a general idea of the quality and development of the city's transport infrastructure.

The development of the transport infrastructure in Białystok still needs considerable improvement, while the city requires for further investments in this area.

The density of the road network is below average, just like the density of the network of cycle paths. The number of seats in public transport per 1,000 inhabitants is among the lowest in the group of cities. There is no airport near the city, there are no direct foreign flight connections and no access to motorways. According to the methodology accepted, there are also doubts as to the quality of rail connections with other Polish cities, although these are areas which are outside the ability of the municipal authorities to have a direct effect.

With an average level of 100 for the 11 cities, TIC regarding transportation in Białystok is 56.5.

***TIC:* apartments**

The availability of low-priced apartments or houses in the city depends both on the number and quality of housing resources in the city and on the efficiency of the real estate market. A more efficient market will facilitate the attraction and retention of highly-qualified workers in the city, and draw new investors to the city.

The primary indicators used to measure TIC in terms of housing are: number of housing units per 1,000 inhabitants, quality of the housing resources (measured as percentage of units with bathrooms), the growth rate of housing resources and average rents on the secondary market.

The assessment of the housing stock in Białystok is positive. The rate of growth in the quantity of new housing in 2004-2008 is higher than the average for the cities studied (5.6% vs. 5.1%). However, the quantity of housing per 1,000 inhabitants is below average, amounting to 391, while the average f or 11 cities is the 413. Attention should be drawn to the fact that the proportion of housing lacking the basic amenities in Białystok is lower than the average. Relatively low prices compared with other cities studied are also positive.

With an average level of 100 for the 11 cities, TIC regarding housing resources in Białystok is 107.4.

Infrastructure

***TIC:* media and utilities**

Without efficiently and reliably supplied media and utilities, it is difficult for a city to establish an image as a good place to live, and above all, a good place to do business. This is true both for the traditional utilities (power, gas, water) as well as modern media mechanisms (telecommunication, internet), which afford innovative growth opportunities and make it possible for citizens to make full use of their knowledge and skills.

The following indicators were used to measure TIC in this respect: the percentage of people using the water supply and sewage networks, power consumption by households (which is associated with the number of durable goods in a household), the estimated number of Internet users (per 1,000 inhabitants), and the percentage of the city area covered by free access to wireless Internet (the last two indicators are new in this edition of the survey).

In terms of utilities, the situation in Białystok needs to be improved, especially in the area of Internet access. The number of network users is the lowest in the group of cities, the lowest percentage of the area of the city should also be covered with access to free wireless Internet. Electricity consumption is at a level below the average, while the percentage of the population having access to the sewage network is positive.

With an average level of the TIC for the 11 cities of 100, the indicator for Białystok regarding utilities is 69.6.

***TIC:* trade and services**

Market services, especially trade, financial, hotel and catering services, create the market infrastructure necessary for ensuring a well functioning economy. These services are usually highly correlated: cities which offer e.g. large, modern shopping spaces also typically offer other services of high quality.

When measuring TIC for trades and services, we used the following indicators: area of modern shopping space, number of ATMs, and number of shops, hotels and restaurants per 1,000 inhabitants.

In retailing and services, Białystok achieved a below-average result in the group studied. The index of retailing space, amounting to an average of the cities studied of 657 m² per 1,000 inhabitants, is 590 m².in Białystok. The number of ATMs per capita is at a moderate level. Saturation with retail outlets, such as shops, hotels and restaurants is the lowest in the group studied.

With an average level of the IDC for the 11 cities of 100, Białystok is at the lowest level for retailing and services of 81.3.

Infrastructure
Summary

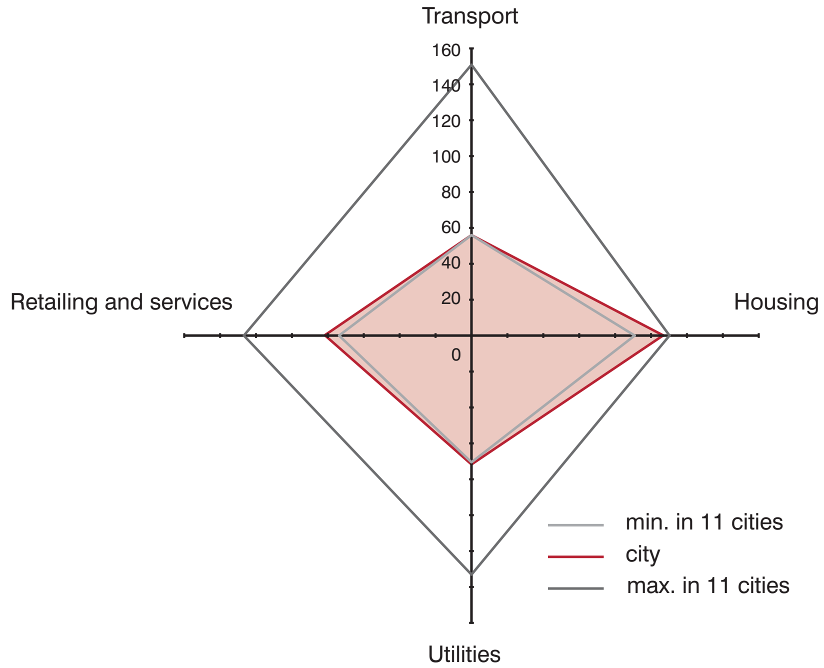
Białystok's Technical and Infrastructure Capital

The analysis of the data shows that Białystok's Technical and Infrastructure Capital needs to be developed. The development of the transport infrastructure requires most work – further investments are needed in this area. The assessment of the city in terms of retailing and service facilities, as well as in the area of utilities places Białystok below the average in the group studied. However, positive results are achieved in the area of housing stock.

The challenge for Białystok is to obtain a better quality of transport connections with the rest of Polish and abroad. The construction of an airport is planned near the city, which can significantly improve the city's transport situation, just as the planned road investments in the region. Simultaneously, it would be necessary to make efforts to promote the use of the Internet by the inhabitants.

With an average level of 100 for the 11 cities, Technical and Infrastructure Capital in Białystok is 78.7.

Infrastructure – Białystok



Finance

Why do we measure Sources of Finance Capital?

Sources of Finance Capital refers to the ability of a city to access the funds necessary for financing its own development. Such funds can come from various sources: tax revenues, government subsidies, EU funding, revenues from issuing securities or contracting loans. They may also include private sector funds that are used for financing undertakings necessary for the city's development.

To develop successfully, present-day cities need to make investments that deliver efficient infrastructure, desired quality of life, and effective operation of public institutions. A good development strategy is not enough – sufficient funding is required to achieve the goals. This second edition of the "Reports on major Polish cities" is being published at a time when the world economy is still in crisis, and as Poland is struggling with an economic slow-down resulting in decreased budget revenue.

While investment is a desirable goal, it's also a particularly difficult one to achieve nowadays. Admittedly, we do have access to considerable financial resources from the European Union budget. However, to be able to take full advantage of these, we need to find considerable funding of our own for co-financing. Taking a long-term view, city development requires us to urgently modernise infrastructure and improve public services, despite the current economic downturn. At the same time, however, increased risk aversion among financial institutions has caused them to view large investment projects with a new caution and distrust. Such a complex economic situation makes acquiring the necessary funding for city investment difficult. Costs are also increasing, as a result of the imposition of higher margins by financing institutions, as well requirements for additional guarantees. A limited budget and continuously rising costs will mean that there simply might not be sufficient funds for some investments.

Cities with high SFC value are those that are able to source the necessary amounts of funding, drawing on various sources, so as to achieve the best results with as low funding acquisition costs as possible. In an environment as complex as the current one, Sources of Finance Capital becomes particularly important; maintaining it at a high level is decidedly more challenging than during the boom times. That is why in this edition of the reports we decided to focus on this Capital, and pay more attention to the methods of finance acquisition that are less onerous to the local government budget.

Measurement of the Sources of Finance Capital (SFC).

SFC should be understood as the ability of cities to finance projects essential to their growth. Well developed SFC shows that a city is able to acquire sufficient funds for such purposes, from diverse sources.

The following four aspects are analysed for the SFC assessment: tax base (the city's GDP), budget financing, funds from the financial market (loans), and EU funds. We would like to emphasize that, in the long term, Polish cities should aim at engaging more private sector funds, mainly in the form of public-private partnerships.

Finance

SFC: revenue base

The principal revenue base of a city consists of the income obtained by its residents. Local taxes may be levied on such income in varying degrees, depending on the policies adopted. In general, the higher the economic activity of the city, the higher the current and future revenue of the city's budget, which allows for financing various investment projects.

SFC assessment in terms of the revenue base is done based on GDP per capita.

In 2008 (latest data available in the CSO), GDP per capita in Białystok amounted to 102% of the average GDP per capita in Poland and was the lowest in the group of the 11 cities studied.

With an average level of the SFC regarding the income base for the 11 cities of 100, we estimate Białystok as being at a level of 64.9.

SFC: budget financing

Budget financing comprises the funds that a city has in its own budget (the sum of its own funds, and the subsidies and funding received by the city from the central budget). The main benefit of financing development from the budget is that it does not involve any increase in the city's debt. There are, however, also certain drawbacks resulting from such financing. Budget funds are always limited to some extent. Moreover, in the long run, providing extensive funding from the city's own budget can only be done through applying high local charges and taxes. This in turn may negatively influence the economic climate of the city.

The SFC for budget financing comprises the total revenue of the city's budget (including subsidies from the central budget), its own revenue (in both cases per capita) and the share of capital expenditures in the city's budget.

In 2009, Białystok's total budget revenues exceeded PLN 1.1 billion, while the average for the cities studied was PLN 2.6 billion (significantly increased by Warsaw's revenues).

Both total revenues and revenues per capita were below the average. The share of investment in the city's expenditure is 26.2%, exceeding the average for the 11 cities.

With an average level of the SFC regarding the budget funding for the 11 cities of 100, we estimate Białystok as being at a level of 95.4.

Financing development with funds from the financial market is beneficial, as it provides the opportunity for investments that could not be covered from budget funds to be carried out.

Finance

SFC: market financing

Funds originating from the financial market may be acquired by contracting loans from banks or issuing municipal bonds. Financing development with funds from the financial market is beneficial, as it provides the opportunity for investments that could not be covered from budget funds to be carried out. The negative to this is increasing city debt. However, when analysing Polish city debt levels, it should be noted that debt and investment are usually correlated. This means that low debt levels may reflect a low level of investment.

High debt levels are negative if the funds acquired through loans are for current expenditure or investment projects with no economic justification. Using loans to finance projects that help economic development may be correct in the long-term; however, in the initial analysis phase, cities should consider all the forms of financing available.

SFC measurement in terms of market financing includes: the city's debt to revenue ratio for 2009, i.e. the latest audited data available (pursuant to the Public Finance Law, the proportion should not be higher than 60%) and the city's credit rating.

Białystok's situation regarding market financing looks favourable. The total debt is only 25% of budget revenues, which, according to the methodology used, should be considered relatively low. The rating assigned by Fitch is at a level of BBB, which means full ability to pay instalments and interest, with possible problems in the case of an economic downturn.

With an average level of the SFC regarding market financing for the 11 cities of 100, we estimate Białystok as being at a level of 130.4.

Cities can use development funds as structural resources thanks to Poland's membership of the European Union.

Finance

***SFC:* EU funds**

Cities can use development funds as structural resources thanks to Poland's membership of the European Union. These are non-refundable grants covering the major part of project costs serving the goals of regional development and quality of life improvement. Access to such funds is very beneficial for the city (although finding the city's own share for co-financing may pose a problem). Acquisition of EU funds is, however, a fairly complex process and the procedures related to correct use of such funds tend to be burdensome.

The SFC related to EU funds is based on the total amount of money from EU funds used for co-financing current and planned projects (in the budgets of 2007-2013, on the basis of data from the Ministry of Regional Development, correct as of June 2010, including projects for which contracts have been signed with the Municipal Offices and municipal companies), on a per capita basis.

Białystok's effectiveness in the obtaining EU funds should be considered very good compared with the other major Polish cities. According to the methodology adopted, the funds per capita granted were decidedly above the average for the 11 cities.

With an average level of SFC regarding European funds for the 11 cities of 100, we estimate Białystok in this respect as being at 137.7.

Finance

SFC: public-private financing

Public-private funds are those that the city gains through contracts with private investors with, as a result, projects important for the city's development being financed by the private sector. The use of public-private financing should be treated as the reflection of skilfulness of a city in acquiring funds for development.

When preparing our reports four years ago, we hoped that this index would be included in the SFC assessment in this next edition. However, despite high hopes and the potential of PPP development in Poland, public procurement where a private partner is selected on the basis of principles set out in the Public-Private Partnership Act is still not carried out in numbers sufficient for making such an assessment. A high number of tender announcements for private partner selection (PPP or concessions) published recently (on average 40 announcements per year were published in 2009-2010) constitute proof that this form of project execution is more often being considered.

A significant increase in the interest shown by private entities in projects in the form of PPP or concessions has also been noticeable in the last two years. Regrettably, in only a few cases was the public contract award procedure and selection of the private partner successful (e.g. construction of underground car park in Wrocław and Kraków, construction of indoor swimming pool in Oława, development of the lakefront in Chełm). The majority of tender procedures are cancelled due to lack of interest among private partners. This lack of interest results from poor project preparation and a tendency of the public sector to transfer most of the risk to the private partners. In practice, it is hard to talk about the PPP projects that are already underway, and we decided not to include public-private financing in the SFC assessment.

At the same time, we would like to emphasise the importance of the future development potential of Polish cities and in the appropriate parts of the reports we indicate how individual cities are approaching forms of infrastructure project financing that are still fairly new to our market.

Finance
Summary

Białystok's Sources of Finance Capital

The overall evaluation of SFC for Białystok is positive. The city has a relatively low income base, which is a result of relatively low GDP per capita. Given the economic situation of Białystok, this state of affairs can continue for many years. The fact that the city copes well with budget financing and is successful in obtaining EU funds is some consolation.

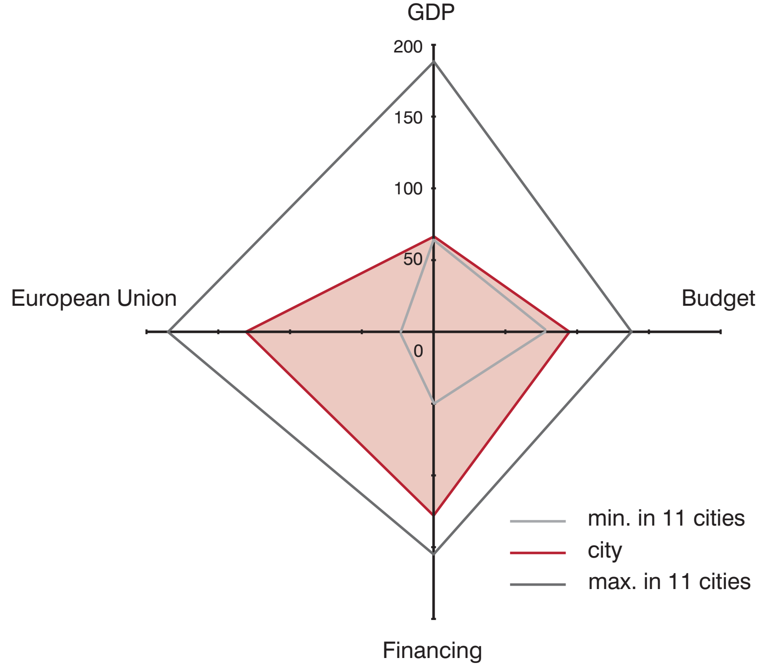
The city's situation regarding debt is also positive – it is still able to draw loans, from which it is possible to finance investments in Białystok's development.

In our opinion, in its long-term strategy, the city should strengthen its income base, by maintaining and increasing its investment attractiveness.

The opportunity for Białystok could be the even more extensive use of EU funds.

With an average level for the 11 cities of 100, Białystok's SFC has been estimated at a level of 107.1.

Finance – Białystok



Investment Attractiveness Capital is essential for the city's future development.

Investments

Why do we measure Investment Attractiveness Capital?

Investment Attractiveness Capital reflects a given city's attractiveness as a location for business activity, and thus its capacity to attract investors. Perception is crucial; this capital is not always directly connected with the city's actual strengths and weaknesses. Cities providing very good investment conditions sometimes are regularly ignored by investors, while other cities actually offering worse conditions are popular.

Very often investors do not act rationally. They tend to make new investments where they have invested in the past, even if the conditions offered by other cities may be better. Subjective and secondary factors may also influence decisions about where to launch investment: the city's accessibility for travelling businessmen, the goodwill of local administrative bodies and the first impressions from the visit. A city that is not perceived as a good investment location should strive to change this by any means possible. Investment Attractiveness Capital is essential for future development.

Measuring Investment Attractiveness Capital

Investment Attractiveness Capital has a strong influence on a city's development opportunities. As evaluation of investment attractiveness is not always entirely rational, cities can only patiently strive to promote a positive image. Awareness of the business potential of a city, and identifying the sectors that the city is best suited to meeting the needs of, are pre-conditions. Therefore, drawing up a clear and transparent planning policy and strategies for its effective implementation is critically important.

Investment Attractiveness Capital is measured above all by analysing a given city's success in attracting investors, both foreign and domestic. We also take into account investment conditions, that is those factors that may enhance the image of the city as a good business location.

Investments

IAC: attractiveness to foreign investors

To evaluate a city's level of perceived investment attractiveness to foreign companies, we analysed the level of existing investment and data concerning the availability of skilled employees.

The indicators used to measure IAC for attractiveness to foreign investors include: number of foreign companies that have invested in the city in the last three years, and the number of graduates from technical and scientific universities located in the city or in its vicinity (distance of up to 50 km) who completed their education in the last three years.

The analysis conducted shows that Białystok's situation regarding attractiveness for foreign investors is still difficult and requires further action. The number of active foreign investors in relation to the number of inhabitants is among the lowest in the group studied (alongside Lublin and Bydgoszcz). It is worth drawing attention to the number of technical and science graduates, who left university in the past 3 years (7.8 k in Białystok compared with an average of 20 k in the 11 cities), which is an important factor when deciding on the placement of investments.

With an average level of 100 for the 11 cities, IAC regarding attractiveness to foreign investors in Białystok is estimated at 37.6.

Investments

***IAC:* attractiveness for domestic investors**

Domestic companies are usually more aware than foreign companies of the strengths and weaknesses of given cities as investment locations, and their decision-making can therefore be more rational. This is true particularly for large domestic companies, which very often have significant freedom in choosing the most suitable investment location for the long term.

The basic indicators used to measure IAC for domestic investors in this respect are: the total value of the companies' capital expenditures per capita (demonstrating their investment in a given location), relationship between capital expenditures and fixed assets (indicating growth of or reduction in business engagement in a given location), number of innovative companies operating in the city (as per the INE PAN, BRE Bank and Gazeta Prawna ranking) and wage levels (as relatively low wage levels should attract investors).

Compared with other cities analysed, Białystok's investment attractiveness from the point of view of domestic companies is still below the average. Capital expenditure per capita is the lowest observed in the 11 cities; the ratio of capital expenditure to fixed assets is also relatively low. The presence of Białystok-based companies in the rankings of innovative firms is also mediocre. However, Białystok's positive side may be the relatively low level of salaries.

With an average level of 100 for the 11 cities, IAC regarding Białystok's attractiveness to domestic firms is 79.3.

Investments

***IAC:* investment conditions**

When considering, for instance, the level of human capital or infrastructure in a city, subjective assessments of its suitability for investment and business activity may hold more sway than its actual advantages. This analysis takes into account factors that may encourage or discourage companies, especially foreign ones, from investing.

The indicators used to measure IAC for investment conditions include: the percentage of a city's area covered by spatial development plans, the number of language and international schools, and the number of beds in 4- or 5-star hotels (compared to the city's population).

Compared with the other cities, in terms of investment conditions, the situation is difficult and Białystok still requires decisive action. The percentage of the area of the city encompassed by land use plans is approximately 25%, while the average for the 11 cities studied is approximately 31%. The availability of hotels of a higher standard and the number of international schools requires improvement. Likewise, the number of language schools is lower than the average for the cities studied.

With an average level of the IDC regarding investment conditions for the 11 cities of 100, IAC for Białystok is at a level of 71.7.

Investments
Summary

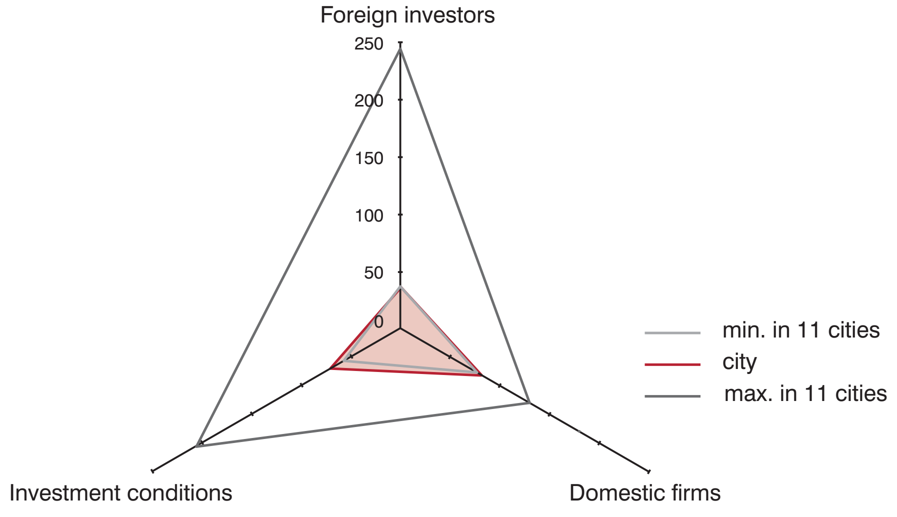
Białystok's Investment Attractiveness Capital

The overall assessment of Białystok's Investment Attractiveness Capital is reasonably detrimental compared with the other cities studied. In order for the city to be able to attract business, the investment conditions need to be improved, and the city's image in this respect should also be developed. Białystok still needs to make a great deal of effort to be seen as a favourable location for conducting business.

Although investors can be encouraged by relatively low labour costs, there is no doubt that there is still a need to promote the city, highlighting its actual investment attributes. The key issue in the coming years should also be the improvement of the terms of investment. The city should support the development of services which influence investors' perceptions of the city, as well as improving transport connections with Poland and abroad.

With an average level for the 11 cities of 100, Białystok's Investment Attractiveness Capital is 56.6.

Investments – Białystok



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