Warsaw
Table of Contents

3  Introduction
4  Methodology
7  Essential recommendations
10  People
14  Quality of life
18  Image
22  Institutions
26  Infrastructure
30  Finances
34  Investments
38  Contact
Throughout decades Polish cities struggled with the lack of financial means, unfavorable conditions for development, and legal regulations hampering local activity and people’s entrepreneurship. The cities’ inhabitants could only enviously watch the metropolises of the Western Europe, actively seeking solutions to their own problems and ways to improve quality of life of local communities. Until lately all initiatives taken by Polish cities had little chance of changing the appearance of the largest cities in our country.

Today we watch the situation change. In the last few years some events took place that created favorable conditions for breakthrough transformation in Polish cities: effective reforms that sparked off citizens’ vigor, new legal solutions which turned self-government authorities into true managers of their own establishments, and the accession to the European Union. But it is only the European Union funds available since 2007 that truly open a new chapter, because they eliminate the problem of the lack of funds as the main obstacle to Polish cities’ growth.

Meanwhile there is another challenge – to pinpoint strengths and weaknesses of the cities and to choose an optimal strategy aiming to make up for what was neglected in the past as quickly as possible. Such a well thought-out assessment is indispensable in order to forge the great opportunity facing Polish cities into a true success.

While analyzing the situation of major metropolitan centers in Poland on the threshold of breakthrough changes, one has to remember that the potential for growth with which cities enter the new stage of development derives from three elements:

- historical legacy,
- natural assets and weaknesses of a given city,
- quality of management in the last dozen years.

PricewaterhouseCoopers created reports on seven major cities of Poland to aid in the proper diagnosis of the situation. This is a kind of an “opening report” – the first general view of the potential for development of these cities, from which some preliminary observations and conclusions can be drawn. This is not a ranking of cities – there are too many differences between them in terms of their historical legacy and peculiar local strengths and weaknesses for such a comparison to be useful. Rankings and comparisons, especially in terms of quality of city management, will make sense in a few years’ time, when we are able to evaluate how cities planned their development and how they made use of the significant European Union funds available in 2007-2013.

The analysis is based on seven areas – “capitals”, which, in our opinion, determine the development potential of large cities. We believe that this analysis might help to put finishing touches on the existing strategies of cities – thus contributing to the success that major cities of Poland deserve.
Methodology

Seven capitals of Polish cities

While taking the path leading to great changes, Polish cities already have some development capital at their disposal. This capital is significant, even though there is hardly any field that is not suffering from serious neglect. To a large extent, development capital is a result of past events. The goal of this report is to analyze this capital – the peculiar dowry ready for use by Polish cities on the threshold of dynamic development.

Development potential of Polish cities is measured on the basis of a methodology developed by PricewaterhouseCoopers and used to evaluate the situation of large cities. This methodology is based on the belief that in order to ensure harmonious growth it is necessary to have some suitable assets, sometimes called “capitals” of cities.

By “Capital” we usually mean financial means that can be used to finance investments. Modern economy, however, uses the word in a much broader sense – it applies not only to money, but also to people’s qualifications (human capital) or their knowledge and experience. Broadly speaking, capital encompasses all resources that are essential for growth: financial, material, human, and even those that exist in people’s minds (after all, we even colloquially talk about “capital of trust”). The common characteristic of capitals is that in order to develop them, they need to be constantly invested in.
While analyzing the development potential of Polish cities, we use the concept of 7 capitals, each of which is important for the development of a large city:

- **Human and Social capital** determines the quality of human resources owned by the city. This includes, among other things, knowledge and experience of workers, population structure (cities with ageing population have less development dynamics than “young” cities), the job market situation, social activity of inhabitants.

- **Culture and Image Capital** shows how the city is perceived: whether as an interesting and attractive place, or perhaps a cultural desert. The better image, the easier it is to attract tourists and investors and to stimulate activity among the city’s inhabitants.

- **Quality of Life Capital** describes the living and working conditions offered by the city. This capital is comprised of, among other things, environmental conditions, quality of healthcare, quality of educational institutions, and sense of security.

- **Technical and Infrastructural Capital** describes the broadly understood infrastructure of the city: housing resources, transport, shopping centers, media (traditional ones such as power and water, but also phones and the Internet).

- **Institutional and Democratic Capital** shows the effectiveness of municipal institutions (authorities and administration) and the observed social activity.

- **Attractiveness for Investments Capital** indicates how attractive the city is for investors, both domestic and foreign.

- **Sources of Funding Capital** describes to what extent the city is able to find the money necessary for funding its development.

A city with high development capital is a city with all 7 capitals well-developed. If one of the capitals is lacking, this signals a weakness of the city and points in the direction of desired strategic actions to be taken.

During the research the report’s authors consulted the authorities of all examined cities, presenting them with preliminary results of the analysis. The observations gathered from particular cities allowed us to select the set of indicators in a more precise and correct way, eliminate errors in measurement and focus more on the peculiarities of specific cities. In case of two cities – Gdańsk and Katowice – while creating the measurement criteria, we attempted to take into consideration as much as possible the fact that these cities form a part of larger agglomeration organisms (the Tricity and the Silesian agglomeration).

The report is based on the analysis of comparable data. This data comes from 2005-2007, while the report’s authors did their best to include the latest data available for all 7 cities.
Methodology

Basic data concerning cities
Population data from late 2006, data on GDP from 2004. GDP values for Katowice are approximate.

How to read the spider diagram?
The spider diagram allows us to analyze the city’s capital in several areas at the same time: the more areas there are, the greater the number of axes on which we accumulate indicator values describing the size of the city’s capital.

The connected dots on axes form a shape – triangle, square, pentagon, or heptagon (the number of vertices of the shape is equal to the number of axes).

The diagram shows the development of the analyzed city’s capital (the red-marked field) and the development of capitals of all 7 major Polish cities (the grey-marked field).

While analyzing the diagram, we should take the following into account:

• Size of the marked area – the larger the area, the higher the capital level.

• Shape – the more even it is, the more evenly the particular measured capitals develop. „Elongation” of the shape in any direction suggests that this field of the capital is more developed than the average, “retraction” of vertices means that this field’s development is inadequate.
Warsaw: The heart of Poland seeks its place in Europe

Warsaw – overall evaluation of the development of 7 capitals

Where to find an example?

London
The city which made extensive use of private capital for funding its growth.

Madrid
The city whose growth is based on high human capital, advanced market-related services and attractive image.

Warsaw is the leader among the major cities of Poland in terms of the development of most of the 7 capitals. However, this might be insufficient for the capital of Poland: fast development largely depends on whether the city can achieve the status of a regional, and not only local, economic center, effectively competing with Budapest or Prague. This, however, needs a major increase in capital expenditure and a radical improvement of infrastructure, human capital and the quality of life - especially in terms of the environmental condition, everyday culture and the quality of educational services. This may be impeded by the limited sources of funding capital, mostly based on the city’s own resources and the city’s ignoring the major opportunities presented by mixed funding (public-private). Also, the effectiveness of municipal institutions can be a major obstacle - Warsaw’s public administration can be described as one of the least effective in Poland.

Greatest strengths:
- Good image and high attractiveness for investors
- High human capital
- High cultural, educational and social potential
- Good security condition

Problems to solve:
- Limited means for funding growth, the lack of proper interest in mixed funding
- Unsatisfactory functioning of municipal institutions
- Slightly disappointing quality of life
- High costs of labour
Warsaw
People

Why do we measure Human and Social Capital?

People are the most important and most precious resource, determining the development opportunities of the city. Today one can buy almost anything: hire an advertising agency that will promote the city, find investors who will pay for the development of infrastructure, build an efficient administration and develop an Internet system for dealing with the citizens’ needs. But people are irreplaceable: their skills, eagerness for work, and their social and economic activity. In the long run it is people – and more broadly speaking, Human and Social Capital, that is the set of characteristics which determine the value of the city’s human resources – that shape the economic development and the potential success of the city.

The value of human resources depends on numerous factors. Some of them can be only influenced to a minor extent (e.g. population structure). Neither can one force people into taking up economic and social activity – although people can be encouraged and any related initiatives can be facilitated. But in some areas – e.g. education or job market – the city’s authorities are capable of exerting a significant influence.

Measuring Human and Social Capital (HSC)

Human and Social Capital is a synthetic measure of the value of human resources owned by the city – citizens’ demographic characteristics, qualifications, activity and availability for potential employers. In our opinion there are five characteristics crucial for successful development: population, education, attitude towards market economy, functioning of the job market, and social and non-governmental activity.

HSC: population

The city’s population situation is primarily determined by the age structure and the number of births. A synthetic measure of the situation is the demographic load indicator, which shows the number of young and older people per 1 working-age person – in other words, how many people a single person has to support on average.

According to the assumed methodology, the basic indicators used for measuring HSC in terms of population are the following: demographic load indicator, share of older people in a city’s population and the number of births per 1000 inhabitants.

Warsaw’s demographic situation is relatively unfavorable. The demographic load indicator is 0.52 (which means that there is a little more than one younger or older person per 2 working-age persons), which is among the highest indicators for the examined cities. Similarly, the percentage of post-working age people is the highest among the examined cities (19.8%).

The birth rate is slightly higher than the average for all 7 examined cities and equals 9 children per 1000 inhabitants.

With the average HSC level of 100 in terms of population for the 7 compared cities, HSC in Warsaw is estimated at 98.
HSC: education

In modern economy it is qualifications that decide about the quality of human resources. In order to measure it, we need to analyze the average level of people’s education: the better education, the more attractive the city becomes for investing and running business.

In our methodology the indicators used for measuring HSC in terms of education include the following: the percentage of people with higher and secondary education and the number of students of universities per 1000 inhabitants.

Warsaw’s situation in terms of people’s education is the best among the 7 examined cities. The percentage of people with higher education is 25%, while the average for all the examined cities is slightly above 20%. Similarly, the secondary education indicators are the highest among all the examined cities. The proportion of the number of students to the number of inhabitants is not that good, however, and equals only 16% (compared to the average of 20% in the 7 cities).

With the average level of 100 for the 7 cities, HSC in Warsaw in terms of education equals 112.

HSC: attitude to market economy

The prospects for development are also influenced by the people’s attitude to market economy – in places where people accept the market rules to a greater extent, it is easier for them to adapt to the market, they are more active and achieve greater economic success.

The primary indicators used to measure HSC in this regard are the following: the support for Poland’s membership in the European Union expressed in the 2003 referendum and the registered percentage of people running businesses.

Warsaw is a city whose inhabitants’ acceptance of the rules of market economy is high. The support for Poland’s membership in the European Union was slightly lower than the average for the 7 cities and amounted to 83.6% (in the other examined cities this ranged from 81.5 to 87.8%). The percentage of people running their own businesses is 11.4% and is among the highest.

With the average level of 100 for the 7 cities, HSC in Warsaw in terms of pro-market attitude is 106.
HSC: job market

The job market situation, from the point of view of the city’s prospects for development translates into, first of all, the availability of workers possessing skills sought by employers.

HSC in terms of the job market is usually measured by looking at the pay level and unemployment rate (the higher, the easier it is to find employees). This measure, however, often fails in Poland, due to, among other things, the commonly functioning gray area. Due to the above, we made use of some auxiliary information: the nominal wages dynamics (higher dynamics means increased trouble with finding employees) and information about job offers. Moreover, we also took into account the availability of qualified workers, measured by the number of university graduates of technical and exact sciences.

The job market situation in Warsaw is still favorable for investors. The unemployment rate is the lowest in the country (4.7%), but the wages increase dynamic observed in 2003-2006 (8%) is also the lowest, which, considering that the number of job offers per 1000 inhabitants is also relatively low, suggests that companies can still easily find qualified workers. Although the pay level is relatively high, the availability of graduates with education in technical and exact sciences is among the best in the 7 cities.

The overall HSC assessment in terms of the job market is good. With the average level of 100 for the 7 cities, HSC in Warsaw is 106.

HSC: social activity

High social activity means that the given city has a large social capital – people are ready for doing things for a mutual benefit.

HSC in terms of the society’s activity is measured by analyzing online sources and the number of non-governmental organizations registered in the city, as well as the average election attendance (the 2005 parliamentary elections, the first round of the 2006 self-governmental elections and the first round of the 2006 presidential elections).

Social activity in Warsaw is high - there are nearly 7 organizations registered per 1000 inhabitants, while the average is less than 5. However, the online activity of these organizations is relatively low. The average attendance in the 2005/2006 elections was 57% and was the highest among the examined 7 cities.

With the average level of 100 for the 7 cities, HSC in Warsaw in this respect is 114.
Warsaw’s Human and Social Capital

With the average level of 100 for the 7 cities, Warsaw’s Human and Social capital amounts to 107.

Warsaw’s Human and Social Capital looks very good compared to the other examined cities. Compared to other major Polish cities, Warsaw’s only weakness is the population structure.

The acceptance for rules of market economy is among the highest in the country, which suggests that economic activity, innovativeness and entrepreneurship of Warsaw’s inhabitants constitute a significant development potential for the city. Despite the good results in terms of HSC, the city’s policy should focus on the further improvement of education and creation of effective incentives for taking up economic activity.

Where to find inspiration?

巴黎

巴黎以教育机会（索邦大学、法国大学、让·多米尼·狄德罗大学、政治科学学院、管理学院）以及合格劳动力著称。巴黎的学生数量略低于290万人。根据Cushman & Wakefield的排名，巴黎在拥有足够教育工作者和容易接近客户市场的城市中排名第二。巴黎也以在上述排名中商业吸引力排名第二。巴黎的商业吸引力意味着高机会找到工人。住房和社会医疗设施发展良好足以满足如此大都会的需求。
Quality of life

Why do we measure Quality of Life Capital?

A city that wants to achieve economic success has to create good living conditions for its citizens. A high quality of life results in people wanting to live and work there, sought-after specialists reject proposals to move to other domestic or foreign cities, and investors willingly locate their business in the city. A high quality of life gives people a sense of pride and satisfaction drawn from living in the city, while low quality of life breeds disappointment and frustration.

There are many factors influencing the assessment of quality of life in the city. An important thing is the condition of the environment; another is the availability of high-quality services, such as healthcare or education that the citizens can rely on. A crucial point is the sense of security – if people do not have it, even the most magnificent entertainment centers and the best services that can be offered cannot make people really happy.

Measuring Quality of Life Capital (QLC)

Quality of Life Capital to a large extent determines the city’s assessment as a good place for living and working.

As opposed to Culture and Image Capital (often based on commonplace, hard-to-verify opinions), the assessment of QLC is usually based on real experiences and observations of the city's inhabitants, as well as visitors.

While measuring QLC, we take the following four aspects of quality of life into account: the environmental condition, quality of healthcare, quality of educational services and sense of security.
Warsaw’s environmental condition is the worst among all the examined cities. This is primarily due to the very high vehicle traffic density (1724 vehicles per km², compared to the average of 1017 in the 7 cities). The overall air pollution condition is close to the average for the 7 cities, while the waste treatment level is very low (only 49%). The city has a good situation in terms of waste management - nearly 80% of waste is stored at dumps in Warsaw - but note that according to the EU standard the acceptable level will be 75% from 2010.

With the average HSC level of 100 in terms of environmental condition for the 7 compared cities, QLC in Warsaw is estimated at 82.

The availability of quality healthcare services in Warsaw is relatively high. Although the number of doctors per 1000 inhabitants is relatively low, the number of points awarded in the ranking to healthcare institutions is almost twice higher than the average for the 7 examined cities. Infant mortality - considered to be the most synthetic gauge of healthiness of people and good functioning of healthcare - amounts to 4.43 deaths per 1000 live births and is the lowest among the 7 cities (the average is 6.81).

With the average level of 100 for the 7 cities, QLC in Warsaw in terms of healthcare is 161.
Quality of life

QLC: quality of education
The quality of educational services is often one of the first questions asked when comparing the overall quality of life in the city. Firstly, good schools and highly-rated universities attract new people and encourage them to settle down – permanently or temporarily (which influences the availability of highly-qualified workers). Secondly, good education allows the city to progress in terms of civilization and economy, influencing opinions concerning its potential development.

The following are the indicators used to measure QLC: points awarded to major universities in the university ranking (conducted by “Rzeczpospolita” and “Perspektywy”) and the success rate for high school final exams in 2005.

The indicators for the quality of educational services in Warsaw are the best in Poland. The city is a clear winner of the university ranking, and the success rate for high school final exams is also the best (87.4% compared to the average of 84% in the 7 cities). In addition, the city offers a much higher number of schools with foreign language instruction.

With the average level of 100 for the 7 cities, QLC in Warsaw in terms of quality of education is 141.

QLC: sense of security
Sense of security has a lot of aspects: among important things are both physical safety among inhabitants (crime levels and road traffic safety), protection against accidents, as well as the sense of security in terms of health and job-finding opportunities. While measuring QLC in terms of security we focused entirely on the physical aspect and used the following as indicators: the number of recorded crimes and the number of road collisions and accidents (compared to the number of inhabitants).

The results suggest that Warsaw is a relatively safe metropolis. This is due to the number of recorded crimes being among the lowest among the examined cities, as well as the equally low number of road collisions and accidents.

With the average level of 100 for the 7 cities, QLC in Warsaw in terms of sense of security is 112.
Warsaw’s Quality of Life Capital

With the average level of 100 for the 7 cities, Warsaw’s Quality of Life Capital is 124.

The overall evaluation of Quality of Life Capital in Warsaw is definitely positive. The city has some environment-related problems, but its results are very good in terms of access to quality education, quality healthcare and in terms of security.

The situation in terms of the environment can be improved, provided that an effective and well-planned development strategy is implemented.

Also important are the currently realized projects, such as the waste management improvement plan and the considered strategy for the development of transport. Improvement is also desired in terms of security and functioning of healthcare.

Where to find inspiration?

Zurich

Zurich is a city which, despite the high urbanization level (industry, concentration of financial business), has become one of the cleanest cities in Europe, thanks to the implementation of proper proecological programs. Zurich has an extensive offer for tourists, as well as in terms of culture (50 museums, 100 galleries, numerous exhibitions, concerts etc.) The city’s inhabitants make use of a well-developed healthcare system (there is one doctor per 435 inhabitants). The city has 20 universities, and 30.1% of the citizens have higher education (the average for Switzerland is 21.5%). Life expectancy is very high: 83 years for women and 78.5 years for men. Zurich’s attractiveness is also underscored by its popularity among foreigners, whose number is as high as 22.8% of population. For several years Zurich has been one of leaders in the Cushman & Wakefield ranking in the best quality of life category.
Image

Why do we measure Culture and Image Capital?

In the modern world and the modern economy, decisions about buying goods and services are made not only on the basis of their actual worth, but also on the basis of what we imagine about the product. The important things are what we associate with a given brand: its prestige, quality, and the trust we place in it. This is also true about cities. In addition to what the city offers to its inhabitants, an extremely important thing is what we associate with the city. In other words, the city’s image. A city with an image of being dynamic, friendly, and interesting will attract both tourists and investors.

Measuring Culture and Image Capital (CIC)

Culture and Image Capital is the measure of how the city is perceived by both its citizens and outsiders. This capital includes both the real strengths and weaknesses of the city, as well as commonplace opinions which often differ from the reality – but are deeply entrenched in people’s minds.

A proper image, which underscores strengths and advantages of the city is necessary for a successful growth of the city. While measuring CIC we take the following three characteristics into consideration: general opinions about the city, high culture and everyday culture.
Warsaw’s situation in terms of its overall image is very good compared to the 7 cities. This is one of the two best-recognizable Polish cities, also due to its cultural and historical traditions. The city’s presence on the Internet is good, and it attracts a lot of tourists (more than 3.1 million tourists a year). The percentage of people running their own business is 11.4% and is one of the highest in Poland, contributing to the image of Warsaw as a dynamic and enterprising city. The acceptance for the city authorities, however, is relatively low – the current president (commissioner) received only 39% of votes in the first round of the elections, which is among the lowest results for the 7 compared Polish cities.

With the average CIC level of 100 in terms of overall image for the 7 Polish cities, Warsaw’s indicator is estimated at 117.
CIC: high culture

A city’s image is largely influenced by its activity in terms of high culture. Although high culture-related services are used by a relatively low number of inhabitants and visitors, it is cultural events that feature most prominently in the media and shape the city’s image of an interesting and attractive place.

Warsaw’s position in terms of high culture is very good. The city’s budget assigned for culture per capita is the highest among the major Polish cities. The number of shows and concerts per 1000 inhabitants is slightly lower than average. The number of theater festivals (65) is the highest, the number of film festivals (11) and classical music festivals (6) compared to the number of inhabitants is below the average. Warsaw is primarily a political and economic center of the country, but its presence in terms of high culture is also visible.

With the average level of 100 for the 7 cities, CIC in Warsaw in terms of high culture is 115.

CIC: everyday culture

Most inhabitants and visitors of the city establish a general opinion about it on the basis of everyday culture: the offer of restaurants, hotels, the number of movie theaters, leisure opportunities in parks or participation in popular mass events.

The everyday culture indicators disappoint: the number of movie theater seats (18.0 per 1000 inhabitants) and the number of restaurants are on the average with the other major cities, while the number of stadium seats is below the average for the 7 examined cities. Also the amount of green lands in the city (1.9 ha per 1000 inhabitants) is the lowest among the 7 cities. Despite the availability of mass entertainment centers (Warsaw is the leader in this respect), the city’s everyday culture indicators are disappointingly low. One of the factors which further lower the everyday culture of the city is the city’s somewhat chaotic urban layout, especially in the center.

With the average level of 100 for the 7 cities, CIC in Warsaw in terms of everyday culture is 76.
Warsaw’s Culture and Image Capital

With the average level of 100 for the 7 cities, Warsaw’s Culture and Image Capital amounts to 102.

Warso has a high capital in terms of Culture and Image. The city is the capital of Poland and, as such, is well-recognized in the world.

At the same time, due to historical reasons the city is not as attractive for tourists as Kraków or Gdańsk. However, the city is still one of major high culture centers in Poland.

The overall image of the city, especially worldwide, could be further improved, given a well-planned promotional strategy. The city’s weakness is the relatively low results in terms of everyday culture. Therefore, the city’s cultural attractiveness should be invested in, with a particular focus on incentives for the development of leisure services.

Improvement is also necessary in terms of architectural and urban renovation of the city, which especially needs a consistent strategy for the development of Warsaw’s city center.

Due to the city’s dynamic growth, the increasing wages and the increasing number of citizens and visitors, the situation in this respect is likely to improve significantly, given that well-thought initiatives will be taken by the city’s authorities.

Where to find inspiration?

Barcelona

Barcelona is a city which for several years now has been trying to consolidate its image of an attractive and tourist-friendly city. It has been always considered to be one of the prettiest cities in Europe, full of beautiful monuments and excellent restaurants. The city continues to work on revitalizing the city’s urban areas, on decentralizing administration, and on improving infrastructure. Especially important for the city’s image was the revitalization of Barcelona’s waterfronts, which cost approximately EUR 240 million (the city contributed 1/3 of the sum), but allowed the city to create an entertainment and shopping center in the area of the port and to extend the famous Las Ramblas promenades to Rambla del Mar. The city is constantly broadening its cultural and tourist offer. Numerous concerts, open-air events and the extensive network of hotels and restaurants make Barcelona a tourist-friendly city (the number of tourists in 2005 exceeded 5 million, which is an almost 500 thousand growth compared to 2004 and more than a 1.4 million increase compared to 2001). The result of these changes is the fully integrated city with an architecturally well thought-out structure, housing and well-developed technical infrastructure, and one of the largest sports facilities in the world. The city also created its own brand, whose logo is a B-shaped sign. Barcelona’s activities aim to create a clear and attractive image in terms of tourism, but also a business-friendly place.
Institutions

Why do we measure Institutional and Democratic Capital?

Institutional and Democratic capital determines the functioning of institutions which manage the city: city authorities, public administration, maintenance services. It also reflects the civic activity of inhabitants and the effectiveness of democratic mechanisms and the communication between the authorities and the society.

In those 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 its duties in a better way, have a stronger social mandate for managing the city, while the inhabitants’ activity supports them on the road to achieve their common goals. On the other hand, in the cities with weakly developed democratic mechanisms there is an atmosphere of mutual distrust and unhappiness, and the inhabitants do not understand and do not support the authorities’ actions. Such a situation is hardly liable to a real success in terms of economic and social development.

Measuring Institutional and Democratic Capital (IDC)

Institutional and Democratic Capital of a city is comprised of both the quality of the authorities’ actions, as well as the inhabitants’ activity and good communication between the authorities and people.

IDC is measured in three areas: the effectiveness of municipal institutions (the authorities and public administration), their actual capability of performing of one of the crucial functions – ensuring public safety and social activity of the city’s inhabitants.
Warsaw is relatively weak in terms of effectiveness of municipal institutions. The inhabitants’ assessment of the functioning of the city’s authorities is quite low, which is shown in the number of votes received by the current president (commissioner) in the first round of the elections (39% of votes - one of the lowest results among the 7 examined cities). The very high expenditure on public administration per inhabitant (more than 50% higher than the average for the 7 cities) does not translate into its effective operation. The waiting time for the entry in the economic activity register is the longest among all the analyzed cities, while the availability of offices (in convenient times) is average (the situation is improved by the growing availability of Internet-based services). This may suggest a relatively low effectiveness of offices and a low effectiveness of using funds.

With the IDC level of 100 for the 7 cities in terms of effectiveness of administration, Warsaw’s indicator equals 89.
Institutions

IDC: public safety

Public safety in the city usually results from the authorities’ actions: appropriate expenditure on law and order services, cooperation with citizens, the ability to gain people’s trust towards law and order services. While measuring IDC in terms of public safety, the following indicators were used: the city’s expenses on safety, the number of recorded crimes, the number of police officers and guards (all of the above per 1000 inhabitants) and the crime detection rate.

Warsaw is a relatively safe city. Note that the expenses on security per capita are the highest among the 7 examined cities (almost twice higher than in other major cities); similarly, the number of police officers and guards is the highest in the examined group of cities. There are nearly 77 crimes per 1000 inhabitants (in the period of January 2005 - June 2006, compared to the average of 86.6 in the 7 cities). Lower than the average, however, is the crime detection rate (43% compared to 46.6% on average in the 7 cities).

With the average level of 100 for the 7 cities, IDC in Warsaw in terms of public safety is 136.

IDC: social activity

High social activity results in better functioning of democratic mechanisms, strengthening of the democratic control over the authorities, creating a partnership between the inhabitants and authorities and a greater scale of cooperation of inhabitants in developing and implementing the city’s development strategy. In other words, active citizens contribute to faster growth, while their passivity has a negative impact on the way in which the city functions.

IDC in terms of social activity is measured by analyzing Internet sources and by measuring the number of non-governmental organizations registered in the city, as well as the average election attendance (the 2005 parliamentary elections, the first round of the 2006 self-government elections and the first round of the 2006 presidential elections). The above were also used to measure Human and Social Capital in terms of social activity.

Warsaw, similarly to Katowice, has good results in terms of social activity. There are nearly 7 non-governmental organizations registered per 1000 inhabitants (the average for the 7 cities is less than 5), however, the online activity of these organizations is relatively low. The average attendance in the 2005/2006 elections was 57% and was the highest among the examined 7 cities.

With the average level of 100 for the 7 cities, IDC in Warsaw in terms of social activity is 114.
Warsaw’s Institutional and Democratic Capital

With the average level of 100 for the 7 cities, Warsaw’s Institutional and Democratic Capital is 113.

Warsaw’s Institutional and Democratic Capital is the highest among the examined cities, but improvement is still possible and desired in many respects. Of special importance is a radical improvement of the effectiveness of municipal institutions (the city’s authorities and public administration). It is insufficient, especially considering Warsaw’s status as the capital and the greatest economic center of the country. The lack of initiatives for improvement of municipal institutions can be a serious obstacle to the city’s future growth.

Warsaw’s social activity is high, but still should be further supported by the city’s authorities, similarly as the issue of improvement of security.

Where to find inspiration?

**Dublin**

Dublin is the winner of the Cushman & Wakefield ranking in terms of the best conditions created by the city’s authorities. Among the city’s strengths are not only the legal solutions and the incentive system for investors, but also the computerized system of offices available online. Dublin has an extremely user-friendly website. By using the “online city” we can find all the needed information, such as the office hours of particular institutions, the organizational structure, information about persons responsible for specific departments, legal information, e-mail addresses, as well as documents and application forms ready for download. During the Eurostat opinion poll in 2004, 49% of Dublin’s inhabitants said that the public administration in the city works effectively.
Why do we measure Technical and Infrastructural Capital?

The broadly understood infrastructure – including efficient transport, housing resources, service infrastructure and media necessary to live and do business in the modern world (both the traditional ones – power and water – as well as the modern ones: telecommunication and the Internet) – is a prerequisite for creating an efficiently functioning metropolis.

Without efficient infrastructure the people’s quality of life deteriorates, the city’s image worsens, and its attractiveness as a place for locating investments diminishes. It is important to remember that infrastructure is not only buildings, equipment and installations – it is also the organizational efficiency of private and municipal companies, which allows them to fully utilize the available infrastructural resources. The actual Technical and Infrastructural Capital level depends also on the efficiency of services, media and housing markets. In a city with extensive housing resources, but with an inefficient market, it would be equally difficult to rent or buy appropriate quarters as in the city simply with no apartments at all.

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 real experiences and observations of the city’s inhabitants and visitors. The widely circulating bad opinions might destroy the city’s image, even it does well in other areas.

The concept of Technical and Infrastructural Capital includes various forms of property used to fulfill the city’s needs. In our opinion there are four kinds of infrastructure crucial for successful development: communication infrastructure, energy and IT infrastructure, housing infrastructure and trade and services infrastructure.
TIC: transport

A general assessment of the efficiency of transport in the city needs several factors to be taken into consideration: road infrastructure, road traffic congestion, quality of public transport and quality of the city’s connections to the outside world. The indicators used to measure TIC in terms of transport are: density of the road network, the number of cars and the number of seats in public transport (in both cases calculated in relation to population), as well as the number of direct flights and long-distance train connections. Although these are not the only indicators that could be used, they give us a general idea of what the quality and development of the city’s communication infrastructure look like.

Compared to the other cities, Warsaw’s situation in terms of transport looks good. The city has the highest results among the examined cities in terms of the road network density, the number of cars and seats in public transport per 1000 inhabitants (all of the above indicators are approximately 20% above the average for the 7 cities). The communication is improved by the presence of the subway, but the high traffic caused by commuting and transit traffic resulting from the lack of beltways presents some problems in this respect. Warsaw’s air connections with the world are the best in Poland, although the low capacity of the Okęcie airport has been a growing concern over the last few years. Also the train connections to other Polish cities are the best in Poland.

With the average level of 100 for the 7 cities, TIC in Warsaw in terms of transport equals 161.

TIC: apartments

The availability of low-priced apartments or houses in the city depends both on the housing resources owned by the city (their amount and quality), and on the efficiency of the real estate market. The more efficient the market, the easier it is to acquire and keep 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: the number of apartments per 1000 inhabitants, the indicators of quality of the housing resources (the percentage of apartments with bathrooms and the share of old apartments in the total of resources), the rate of growth of housing resources and average rents.

The number of apartments per 1000 inhabitants in Warsaw is high (more than 443 apartments compared to the average of 406 in the 7 cities), but the quality of housing resources is varied. Although the percentage of apartments with no basic amenities is the lowest, the percentage of old apartments is relatively high. Warsaw is the leader in terms of the increase of the number of new apartments (8.3% in 2002-2006 compared to the average of 5.5 in the 7 cities). Unfortunately, rents are also the highest, which suggests that the market is imbalanced (the supply is insufficient).

With the average level of 100 for the 7 cities, TIC in Warsaw in terms of housing resources is 108.
Infrastructure

TIC: media

Without efficiently and reliably supplied media it is difficult for the city to establish the image of a place where one can live normally, and first of all, where one can do business effectively. This refers both to the traditional media (power, gas, water), as well as the modern media which enable innovative growth which utilizes the citizens' knowledge and skills to the highest extent (telecommunication, the Internet).

Warsaw’s situation in terms of media is quite good. The results for traditional media (water supply and sewage systems) are close to the average for the 7 examined cities. The power consumption is slightly higher than the average for the 7 examined cities. Warsaw’s position is higher than the average in terms of the number of fixed telephony subscribers and the number of Internet users.

With the average level of 100 for the 7 cities, TIC in Warsaw in terms of media is 109.

TIC: trade and services

Various market services, especially trade, financial, hotel and catering services, create the necessary market infrastructure required to ensure that the city’s economy is working properly. These services are usually highly correlated: cities which offer e.g. large, modern shopping spaces also offer other services of high quality.

Warsaw’s situation in terms of trade and services infrastructure is close to the average for the compared cities. The commercial space indicator is lower than the average (458 m² per 1000 inhabitants, compared to 511 m² on average in the 7 cities), while the number of shopping establishments is close to the average, and the number of ATMs is higher.

With the average level of 100 for the 7 cities, TIC in Warsaw in terms of trade and services is 99.
Warsaw’s Technical and Infrastructural Capital

With the average level of 100 for the 7 cities, Warsaw’s Technical and Infrastructural Capital equals 119.

The assessment of Warsaw’s situation in terms of Technical and Infrastructural Capital is favorable, compared to other Polish cities.

Warsaw’s results in terms of communication, media and housing resources are very high, but the city’s position in terms of trade and services is slightly below average.

Despite the relatively favorable results - compared to other cities - in terms of transport, maintaining the city’s high position will require continued effort, while the implementation of the transport-related strategy and several important investments (such as the new subway lines, The Northern Bridge, the increase of capacity of access roads to the city and an effective solution to the issue of transit traffic) should be the subject of particular concern for the city’s authorities. It is likely that, if the above investments are not completed, the situation in terms of transport will deteriorate radically.

Also important is the improvement of the water supply and sewage network, as well as support for the further development of trade and services base.

Where to find inspiration?

Newcastle

Newcastle has a reputation of a city with advanced infrastructure. This is a result of the city’s preparing a clear development strategy and the fact that approximately 41% of the expenses are devoted to investments.

As a result of these actions, the city has an effective public transport system, which translates into more than 25% people using public transportation to get to work, while the average for this indicator in Great Britain is close to 15%

At the same time, opinion polls among Newcastle’s citizens show that 68% of the polled said that they are happy with the transport system of the city.

One of the key goals of the city is to improve housing infrastructure – as a result of activities targeted at this area, the number of apartments with no basic amenities dropped by 61% in 1993-2003.
Finances

Why do we measure Sources of Funding Capital?

Sources of Funding Capital (SFC) is understood as the city’s capability to find the necessary means to fund its own growth. These financial means can be drawn from various sources: these can be tax money, government subsidies, EU funds, income from bond issues or loans. These can be also private sector resources, which were successfully used to fund projects necessary from the point of view of the city’s development.

In order to develop, the modern city needs investments ensuring the efficiency of infrastructure, the desired quality of life and well-functioning public institutions. It is not enough to come up with good ideas and a good development strategy – the city also has to locate funds necessary to put these ideas into practice. A city with high SFC is the city which can both find the necessary funds, as well as obtain them from different sources in order to ensure the best results possible with the possibly lowest costs of acquiring the capital.

Measuring Sources of Funding Capital (SFC)

Sources of Funding Capital is understood as the city’s capability to fund the projects necessary for development. Well-developed SFC means that the city is able to acquire a sufficient amount of funding for this purpose, simultaneously differentiating the funding sources.

While measuring SFC we analyze three possible sources of funding, which are equally important from the city’s point of view: the city’s own resources, the means coming from the financial market and EU funds.

At the same time, we would like to stress that in the long-term Polish cities should involve more private sector funds, especially through public-private partnerships.
Warsaw’s total budgetary income in 2005 amounted to PLN 7.3 billion, which is the highest in Poland. Also the income per capita was the highest (41% higher than the average for the 7 cities), as well as the city’s own income per inhabitant (66% higher). This resulted primarily from the level of economic activity and the high GDP produced by the city. The city had problems, however, in terms of the relatively low (14%) share of investments in the city’s expenses.

With the average level of 100 for the 7 cities, SFC in Warsaw in terms of the city’s own resources is 129.

SFC: The city’s own funds

The city’s own funds are those that the city can save up in its budget for pro-development activities. The main advantage of funding development from the city’s own funds is the fact that the city does not incur any debts. However, there are some unfavorable phenomena: budget resources are always limited, and in the long-term it is possible to save up the city’s own resources only by imposing – if possible – high fees and taxes.

This may have a negative impact on the climate for running business in the city.

According to the used methodology, the full picture of SFC in terms of the city’s own funds includes: the city’s total income (including subsidies from the state budget), the city’s budget own income (per inhabitant) and the share of expenditure for investments in the city’s budget.

SFC: resources from European funds

Thanks to Poland’s membership in the European Union cities can use the development funds available under structural funds. These are non-returnable grants, covering the majority of the costs of investments conducive to the regional development and the improvement of the quality of life. Using these resources is extremely favorable to the city (the only problem is finding funds for covering the “own contribution” for the project).

Obtaining funds from European funds, however, is somewhat complicated and the bureaucratic procedures related to proper use of funds are extremely inconvenient.

Measuring SFC in terms of European funds is based on the observations of the EU resources obtained by the city (both the pre-accession funds as well as post-accession funds) per inhabitant.

The total amount of EU funds acquired by Warsaw is the highest in the country. The assessment changes, however, after taking into account the number of the city’s inhabitants, and is slightly lower than average for the 7 cities. The situation could change significantly, if the application procedure for the project of the extension of the I subway line to Młociny is completed (due to the prolonged process of changing the Transport Operational Program, the application procedure has been already going on for more than a year, while the subsidy still has not been granted).

With the average SFC level of 100 in terms of European funds for the 7 Polish cities, Warsaw’s indicator is estimated at 93.
Warsaw’s situation in terms of sources of funding acquired in the financial market is ambiguous. On the one hand, the total debt of 38% of the city’s budget can be regarded as safe, while the proportion of the debt servicing to the income is close to the average observed in the 7 cities. On the other hand, however, the city has not put enough effort into optimizing the forms of funding growth. The city has not issued bonds, and has not applied for a credit rating awarded by international agencies.

With the average level of 100 for the 7 cities, SFC in Warsaw in terms of the financial market resources is 75.

**SFC: Financial market sources**

The funds coming from the financial market can be obtained by raising a loan or issuing communal bonds. In the case of a city with a good financial situation, trusted by investors, a professional issue of bonds usually involves lower costs than raising loans. One of the advantages of funding development from financial market funds is the possibility of completing investments which cost more than the budget is able to cover. An unfavorable phenomenon is incurring debts.

Measuring SFC in terms of funds coming from the financial market includes the following: the proportion of the debt and annual debt servicing costs to the city’s income, the proportion of the issue of obligations to the income (this shows the active search for methods of lowering the debt servicing costs).

Warsaw’s progress in terms of mixed funding is relatively low. The city resigned from the project of using mixed funding to finance the stadium at Łazienkowska Street and the expansion of the subway. It seems that the city’s authorities are currently considering using mixed funding for the construction of an auditorium hall and congress center and, again, for the subway lines II and III.

**SFC: Mixed funding (public-private)**

The financial means obtained by mixed funding are those that are acquired by the city by signing relevant contracts with private investors, which result in funding of projects important for the city’s development by the private sector. The use of mixed funding is to be considered to be the sign of the city’s highest capabilities in terms of acquiring financial means for development. Because mixed funding is not popular in Poland yet, we do not include it in the SFC measurement. However, we would like to stress its importance for the future development opportunities of Polish cities.
Warsaw’s Sources of Funding Capital

With the average level of 100 for the 7 cities, Warsaw’s Sources of Funding Capital amounts to 99.

Therefore, the overall assessment of SFC is average. The city has a good income base, which mainly results from the highest per capita GDP in Poland. Warsaw does moderately well in terms of acquiring EU funds, but definitely has some problems with acquiring resources from the financial market. Alarmingly low is the share of investments in the city’s expenses. Considering the level of economic development and activity, the city is able to find resources necessary to fund growth. The city’s priority should the optimization of debt, which would lower the costs of acquiring capital. Other tasks include: greater usage of EU funds and more activity in terms of seeking mixed forms of funding.

Where to find inspiration?

Bilbao

Bilbao is considered to be one of the examples of good usage, financing and balancing of the city’s budget. GDP is close to the average GDP of the European Union. The city achieves particular success in acquiring and using funds. It does very well in terms of mixed funding, combining public and private capital, but also uses EU funds.

The EU funds were used e.g. in the city’s revitalization project. The revitalization concept assumed an integrated approach to revitalizing the neighborhood by combining training and pro-employment activities with the renovation of buildings and environment improvement programs. In order to create training and employment opportunities, the unemployed were involved in practical works, which gave them the necessary experience, and enabled them to work on improving the city’s image and quality of life. Moreover, Bilbao ran a spectacular project of revitalization of the Nervian river bank, whose total cost was estimated at EUR 84 billion, while the city’s own contribution amounted to EUR 1.8 billion. The revitalization project was organized by a private entity – a company established by public shareholders. The result, among other things, is the Guggenheim Museum, whose cost (USD 100 million) was covered from private funds in 30%.
Investments

Why do we measure Investment Attractiveness Capital?

Investment Attractiveness Capital is primarily understood as the past ability to attract investors to the city, reflecting the general opinions on the city’s attractiveness as a place for locating business. This capital is not always closely related to the actual strengths and weaknesses of the city: sometimes cities offering very good conditions are being omitted by investors, whereas others, offering significantly worse conditions, are on the list of the cities popular among investors. The city which is not perceived as a good place for locating investments should do its best to change this situation.

Investors often do not behave in an entirely rational way: investments are located in places where past investments were located, even though other cities might offer better conditions. Location of investments can be also determined by subjective factors of secondary importance: the ease of access to the city for business travelers, the way in which they are treated by the local administration, the first impressions of the visit. This does not change the fact that Investment Attractiveness Capital is of key importance for the future development of the city.

Measuring Investment Attractiveness Capital (IAC)

The city’s Investment Attractiveness Capital is of prime importance to the city’s development opportunities. Although the evaluation of attractiveness for investments made by businesses is not always fair, the city has no choice but to promote its image among investors in a patient and effective way.

Investment Attractiveness Capital is primarily measured by analyzing the city’s successes in attracting investors – both domestic and foreign. We would like to draw attention, however, to some of the factors which may contribute to consolidating the city’s image as a good location for business.
IAC: foreign investors

The assessment of the city’s attractiveness for investments by foreign companies is based on analyzing the investments made over the last several years. One has to remember that foreign companies may be less informed about the real strengths of cities, therefore the scale of the decisions based on common opinions and observing how other companies operate may be significant.

Warsaw’s situation in terms of attractiveness for foreign investors is good. The number of foreign investors is the highest in Poland, although the estimated size of the investments made in the last 5 years per inhabitant is clearly lower than average (obviously, considering that Warsaw’s population is the highest in Poland, the global investment sums are the highest among the examined cities).

With the average level of 100 for the 7 cities, IAC in Warsaw in terms of attractiveness for foreign investors is 110.

IAC: domestic companies

Domestic companies usually have a broader knowledge of the actual strengths and weaknesses of cities as places for locating the investment than foreign companies, therefore their decisions may be more rational. Our analysis considers, first of all, large domestic companies, which can often have a lot of choice in selecting a place for their investments over the long term.

Primary indicators used to measure IAC in this respect are: the total size of companies’ expenses may be more rational. (excluding the estimated expenses made by the largest foreign companies) and the proportion of capital expenditure to the company’s property.

Warsaw seems to be a very attractive place for locating investments from the point of view of domestic companies. The capital expenditure per capita is 77% higher than the average among the 7 cities, although the proportion of the capital expenditure to the city’s property is among the lowest among the examined cities.

With the average level of 100 for the 7 cities, IAC in Warsaw in terms of attractiveness for domestic companies is 134.
Investments

IAC: subjective investment conditions

Observations – often superficial – in regard to specific conditions for investments and running business in the city can be often more important than the city’s actual strengths related to e.g. human capital or infrastructure. Our analysis takes into consideration also these factors which can instantly encourage or discourage companies from making investments.

Warsaw’s results in terms of subjective investment conditions are very favorable. Although the percentage of the city’s area covered by the spatial development plans is relatively low and equals 16%, the city has a good hotel base and a relatively high percentage of people with the knowledge of English.

With the average level of 100 for the 7 cities, IAC in Warsaw in terms of investment conditions is 111.
Warsaw’s Investment Attractiveness Capital

With the average level of 100 for the 7 cities, Warsaw’s Investment Attractiveness Capital is 116.

The overall assessment of Investment Attractiveness Capital is high (the highest in Poland), but the situation is hardly perfect. Although the city managed to attract a lot of foreign investors, the size of investments in relation to the number of inhabitants is quite low. The situation in terms of subjective investment conditions is among the best, however, compared to other Polish cities.

The city should continue its policy of consistent promotion, at the same time making better use of its actual investment-related assets and the high image capital, and attempting to increase the share of investments based on knowledge and high qualifications.

Where to find inspiration?
Frankfurt

Frankfurt is one of the leaders in investment attractiveness for business (according to the Cushman & Wakefield ranking). The value of the investments in construction in 2004 amounted to EUR 1.6 billion; also high is the number of new businesses emerging in the city. Frankfurt has very high GDP per capita (almost EUR 75 thousand), which is higher than GDP in Paris (EUR 67.2 thousand) and London (EUR 35 thousand). Frankfurt’s advantages include: easy access to markets and clients, qualified and cost-effective personnel, good city communication, very good communication infrastructure (the administration and companies are highly computerized), availability and low costs of office space, as well as high quality of life of workers. Frankfurt has good connections with the rest of Europe and the world – transport availability indicators (EU average 27=100) amount, respectively, to 187 for road transport, 230 for trains, and 199 for air transport. The number of flights (passenger and cargo) in 2005 exceeded 475 thousand. In the case of Frankfurt, the important thing is the city’s openness in regard to innovativeness, not only in terms of education, but also business.
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