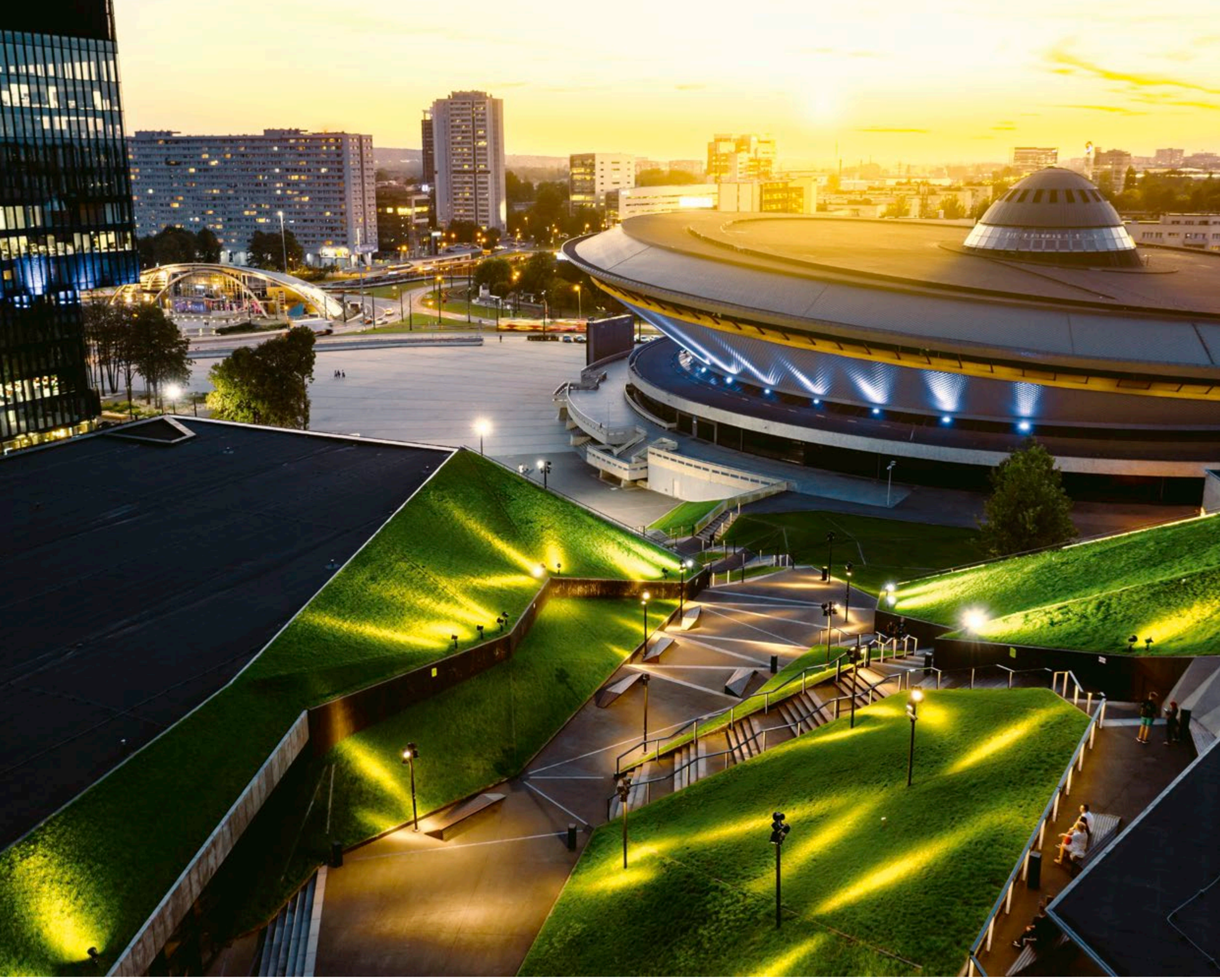

BUSINESS SERVICES SECTOR IN KATOWICE

KATOWICE
for a change

ABSL

Report prepared by the Association of Business Service Leaders (ABSL)
in cooperation with Colliers, Mercer, Randstad and Randstad Sourceright

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The Association of Business Service Leaders (ABSL) is a leading organization representing business services in Poland, which represents over 230 of the largest companies and sets the standards and directions for growth in the industry, now employs over 400,000 people. In Katowice operates the ABSL Silesia Regional Chapter which is a local action group composed of investors representing investors, operating jointly in the Silesian and Opolskie Voivodeships. The priorities of the ABSL Silesian Chapter include supporting the efforts of members of the Association, exchanging knowledge and best practices in order to foster an investment-friendly atmosphere, promoting close relationships between local active professional groups and initiating activities which serve to promote the business services sector. Periodic meetings, local events and community initiatives organized as part of the ABSL Silesia Regional Chapter bring together representatives of servicescenters, companies working with the sector and invited guests representing public authorities and university authorities.

FOREWORD

Dear Readers,

Over the past few years Katowice has followed the path of continuous transformation, steadily pursuing the goals of sustainable economic development. During that time we have made efforts to create a more attractive investment climate in the business services sector. The latest report I am presenting is a detailed analysis of BSS in Katowice.

The business services sector in the city is already well established. In 2022, we have almost 30,000 people in the centres in Metropolis GZM, and the vast majority of specialists work in Katowice.

The growth of the sector is two-track – it is generated both by new investment projects and by investors who are already present in Katowice, and expand the range of their services. The years 2020-2022 were marked by the COVID-19 pandemic but BSS proved that, thanks to its flexibility and adaptability, it can succeed even in hard times. This thesis is supported (since the beginning of 2020) by new investment projects of Aebi Schmidt, Ammega, AT&T, Capgemini (Cyber Defense Center), Guess, Hyland, Infobip, LKQ, Nexi Digital, Prime Engineering, PubNub, SD Worx or TMF Group. On top of that, new recruitments were carried out by most of the already present investors – Diebold Nixdorf, EPAM, Keywords Studios, Sopra Steria and DAZN to name a few. These trends prove a high investment potential of the city.

We have identified many factors which have a strong influence on growth of BSS. To attract investors it is important to build a strong brand of the city, which is the most valuable asset we can have in the national and international arena. We regularly report on a talent pool in a population of over two million, on excellent transport links, including air transport, on cooperation with the local universities and secondary schools, on business and conference events but also on improvements in quality of life. The last factor has gained particular importance in recent years, helping us to stand out from other metropolises, with help of our new projects in active urban mobility and sustainable transport, attractive leisure activities and, finally, implementation of the green city idea. These assets let us establish the right communication and become the effective tool in our strategy for attracting investors.

Most reports and studies highlight the phenomenon of Katowice's economic transformation.

I sincerely hope that data, substantiated by numerous analyses, will reinforce your belief that Katowice has assets which support development and new investments in business services sector.

I invite you to Katowice. See you there!

Marcin Krupa
Mayor of Katowice

1 KATOWICE KEY FACTS

The report presents the results of an analysis of the position of Katowice & the GZM Metropolis as a location for business services centers. The inquiry is based on the ABSL database concerning modern business services centers in Poland (with the data edge at Q1 2022), an ABSL publication "Business Services Sector in Poland 2022", a survey conducted by ABSL in January-February 2022, and an ABSL report "Investment potential of Polish cities. Location benchmark of the business services sector".

Different sections of the report provide the most important statistics concerning the development of Katowice & GZM and the business services sector, location of centers, and position of Katowice & GZM in the ranking of attractiveness.

FIGURE 1.1

BASIC INFORMATION ABOUT THE DEVELOPMENT OF KATOWICE

6,526 PLN

the average gross monthly salary in Katowice is PLN 6.5 thousand – 118% of the national average (PL=100)

6th place

the Silesian University of Technology is the 6th best technological university in Poland according to the "Perspektywy 2021" ranking

5th place

Katowice took 5th place in the ranking of Top 10 Large european cities of the future 2022/23 – FDI Strategy prepared by fDi Intelligence

13%

share of Katowice in 2.2. million GZM population

168,400

the working-age population in Katowice (1.3 m in GZM)

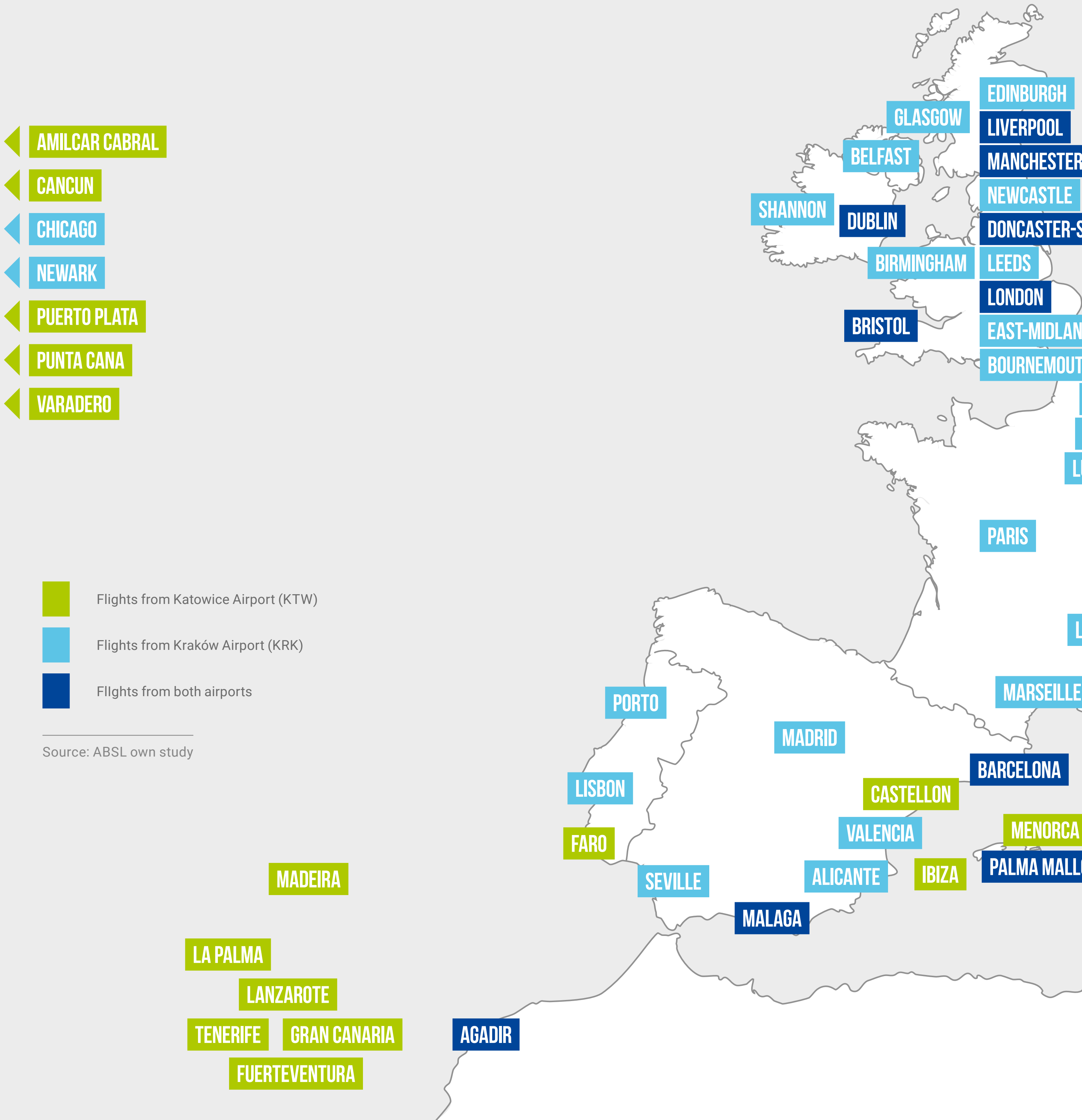
101,600

the mobile-age population in Katowice (792,600 in GZM)

[1] Metropolis GZM (*Górnośląsko-Zagłębiowska Metropolia*) covers nearly one-third of the area of the entire Silesian Voivodeship, and half of all residents of the Province live within the boundaries of the discussed area. The Metropolis is composed of 41 towns and municipalities: Będzin, Bieruń, Bobrowniki, Bojszowy, Bytom, Chełm Śląski, Chorzów, Czeladź, Dąbrowa Górnicza, Gierałtowice, Gliwice, Imielin, Katowice, Knurów, Kobiór, Lędziny, Łaziska Górne, Mierzęcice, Mikołów, Mysłowice, Ożarowice, Piekary Śląskie, Pilchowice, Psary, Pyskowice, Radzionków, Ruda Śląska, Rudziniec, Siemianowice Śląskie, Siewierz, Sławków, Sosnowiec, Sośnicowice, Świerklaniec, Świętochłowice, Tarnowskie Góry, Tychy, Wojkowice, Wyry, Zabrze, Zbrosławice.

FIGURE 1.2

KATOWICE AND KRAKOW AIRPORTS – LIST OF INTERNATIONAL AND DOMESTIC DESTINATIONS IN REGULAR AND CHARTER FLIGHTS



Flights from Katowice Airport (KTW)

Flights from Kraków Airport (KRK)

FIlghts from both airports

Source: ABSL own study


TRONDHEIM
BERGEN
STAVANGER
OSLO
HELSINKI
STOCKHOLM
GÖTEBORG
RIGA
BILLUND
MALMÖ
COPENHAGEN
GDAŃSK
AMSTERDAM
SZCZECIN
OLSZTYN
EINDHOVEN
BERLIN
COLOGNE
DÜSSELDORF
WARSAW
BRUSSELS
DORTMUND
LILLE
NUREMBERG
PRAGUE
KATOWICE
KIEV
KHARKOV
FRANKFURT
KRAKÓW
STUTTGART
MUNICH
VIENNA
BASEL
ZURICH
BUDAPEST
TURIN
BERGAMO
MILAN
VENICE
SPLIT
ZADAR
NICEA
BOLONIA
MOSTAR
PISA
RIMINI
DUBROVNIK
VARNA
ANCONA
PODGORICA
BURGAS
OLBIA
ROME
PESCARA
KAVALA
ALGHERO
NAPLES
BARI
TIRANA
THESSALONIKI
CAGLIARI
OHRID
SKIATOS
LAMEZIA
CORFU
ATHENS
IZMIR
PALERMO
PREVEZA
SAMOS
LESBOS
KOS
BODRUM
ENFIDHA
TRAPANI
CATANIA
ZAKYNTHOS
CEPHALONIA
PATRAS
ANTALYA
MONASTIR
KALAMATA
SANTORIN
RODOS
DALAMAN
ERCAN
MALTA
PAFOS
LARNAKA
DJERBA
CHANIA
HERAKLION
ABU DHABI
DUBAI
HURGHADA
KUTAISI
MARSA ALAM
MARSA MATRUH
MOMBASA
SALALAH
SHARM EL-SHEIKH
TABA
TEL AVIV
ZANZIBAR

FIGURE 1.3
KATOWICE AIRPORT (KTW)

30 km (30 min)
Distance and travel time from downtown Katowice.

2.9 million (2021)
Total number of passengers served.

22
Number of countries served.

3.8-4.0 million
Forecast for 2022.

61
Number of destinations.

32,100 t (2021)
Cargo transport.

9
Number of airlines.

Corendon Airlines, LOT Polish Airlines, Lufthansa, Ryanair, SunExpress, Wizz Air
Airlines operating scheduled flights.

TABLE 1.1
NUMBER OF DIRECT FLIGHTS OPERATED PER WEEK TO SELECTED DESTINATIONS, AND FLIGHT TIMES

Dortmund	DTM	29	1 h 40 min
Warsaw Chopin	WAW	21	55 min
Frankfurt am Main	FRA	14	1 h 30 min
London Luton	LTN	14	2 h 25 min
London Stansted	STN	11	2 h 20 min
Oslo	OSL	11	2 h 00 min
Kolonia-Bonn	CGN	8	1 h 40 min

Source: http://www.katowice-airport.com

TABLE 1.2

DISTANCES AND ESTIMATED TRAVEL TIMES TO SELECTED CITIES

	Distance in km	Travel time By car	By train	By plane
Warsaw	294	3 h 00 min	2 h 30 min	55 min
Vienna	390	3 h 40 min	4 h 45 min	3 h 00 min*
Berlin	465	5 h 20 min	8 h 00 min*	3 h 05 min*
Frankfurt am Main	897	8 h 48 min	13 h 40 min**	1 h 35 min
Cologne	1,007	9 h 50 min	12 h 45 min***	1 h 40 min

* One asterisk means one transfer required.

Source: Katowice City Hall

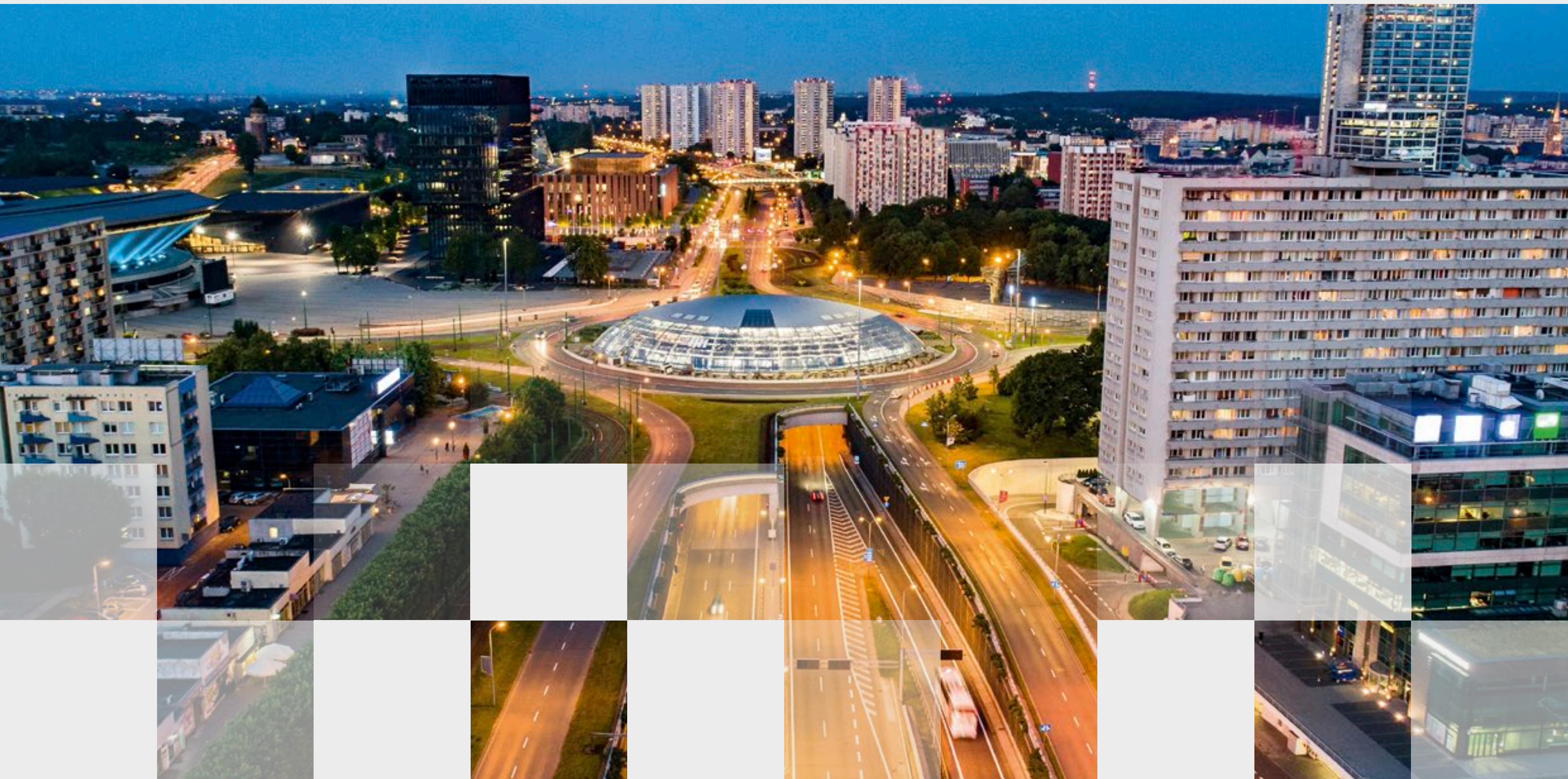
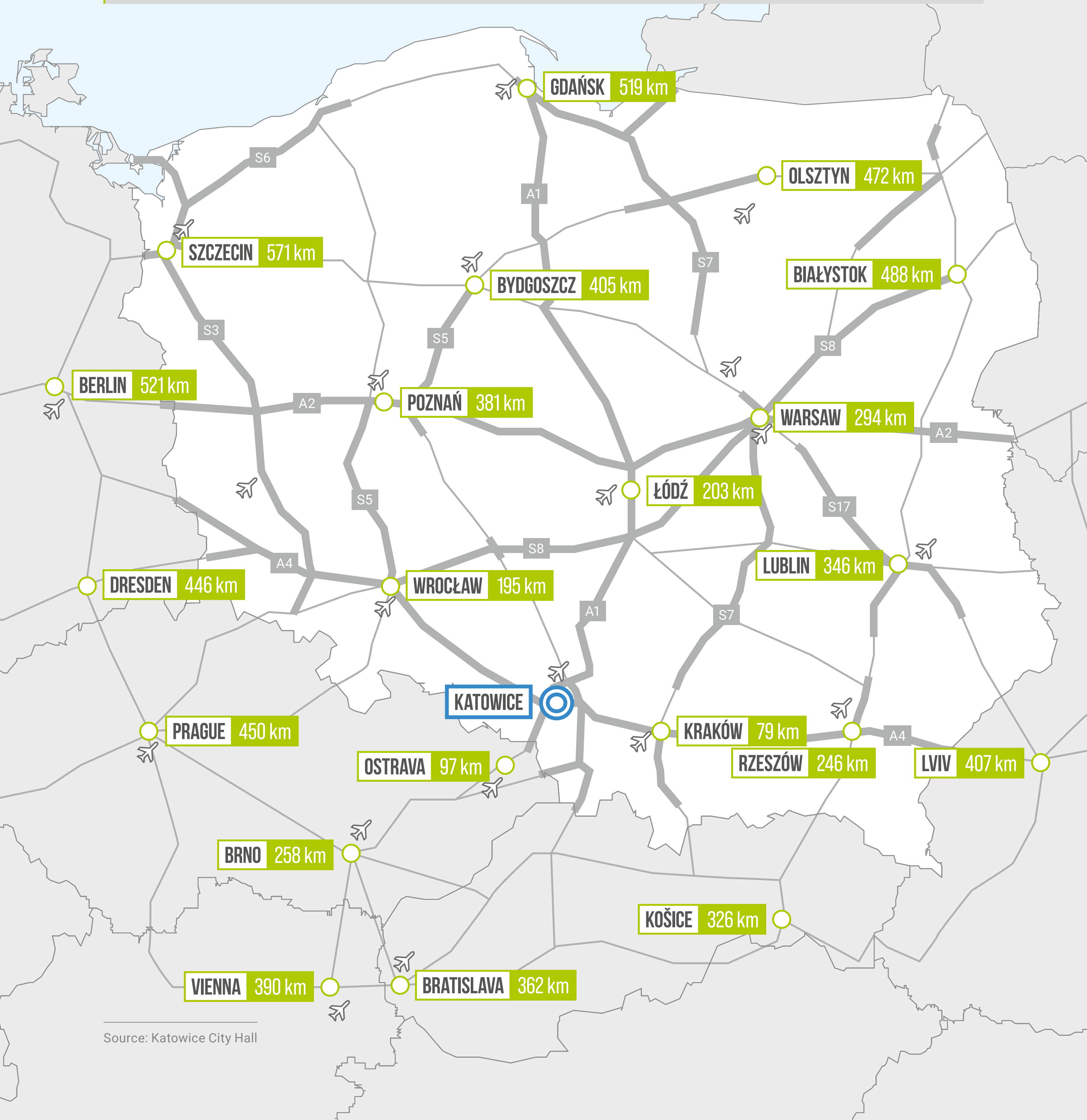


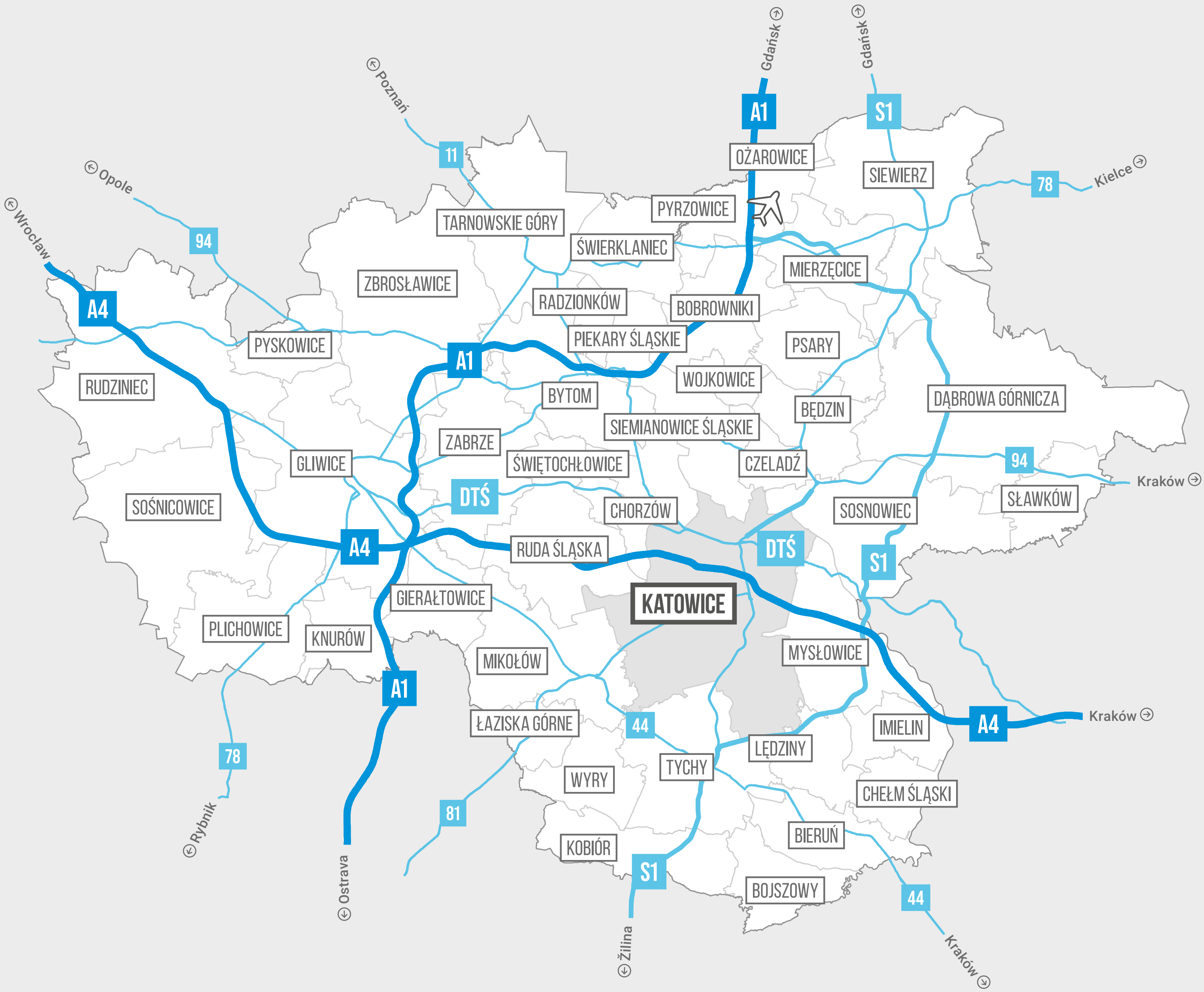
FIGURE 1.4

LOCATION OF KATOWICE



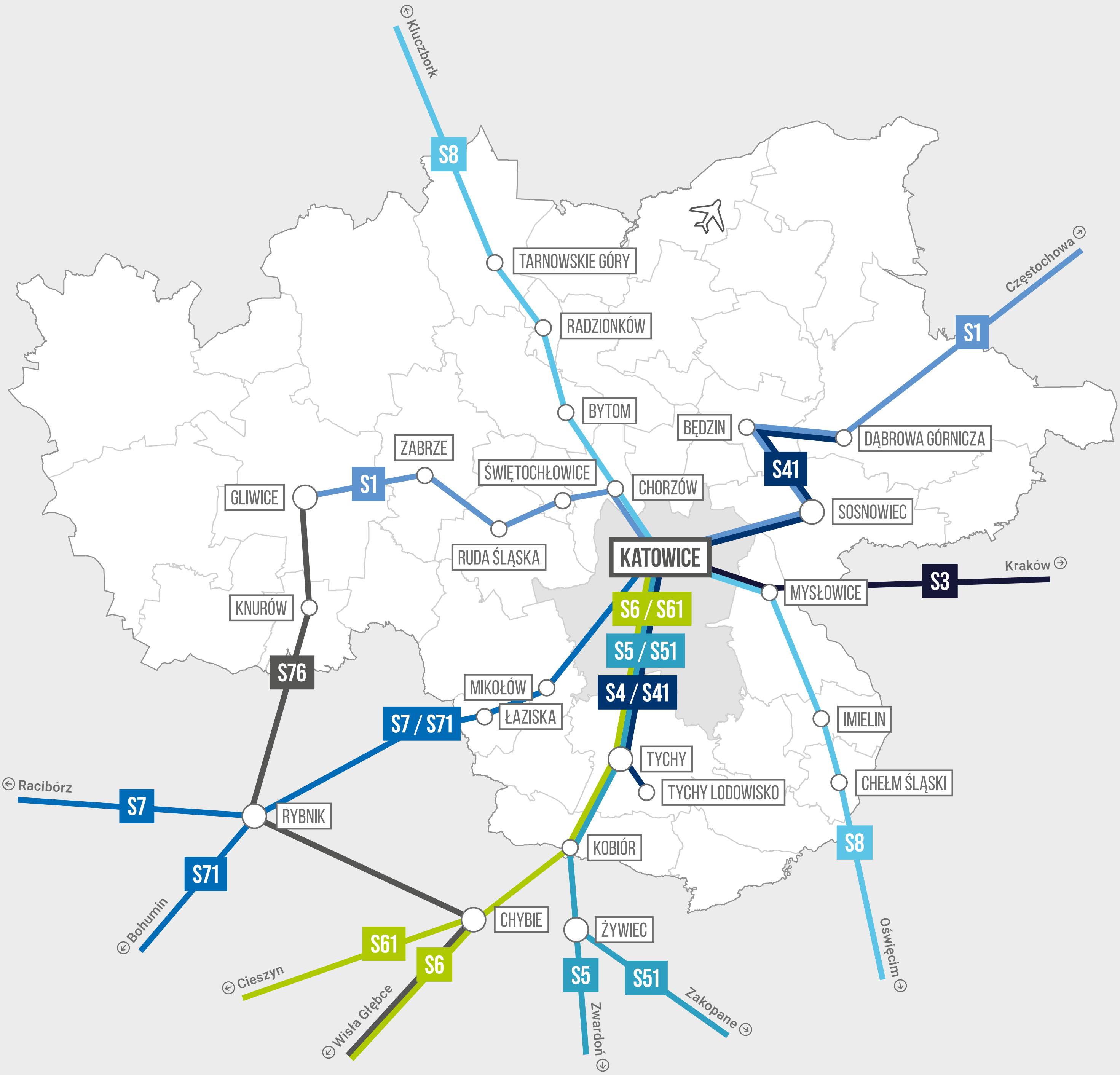
Source: Katowice City Hall

FIGURE 1.5
METROPOLIS GZM – ROAD NETWORK



Source: Katowice City Hall

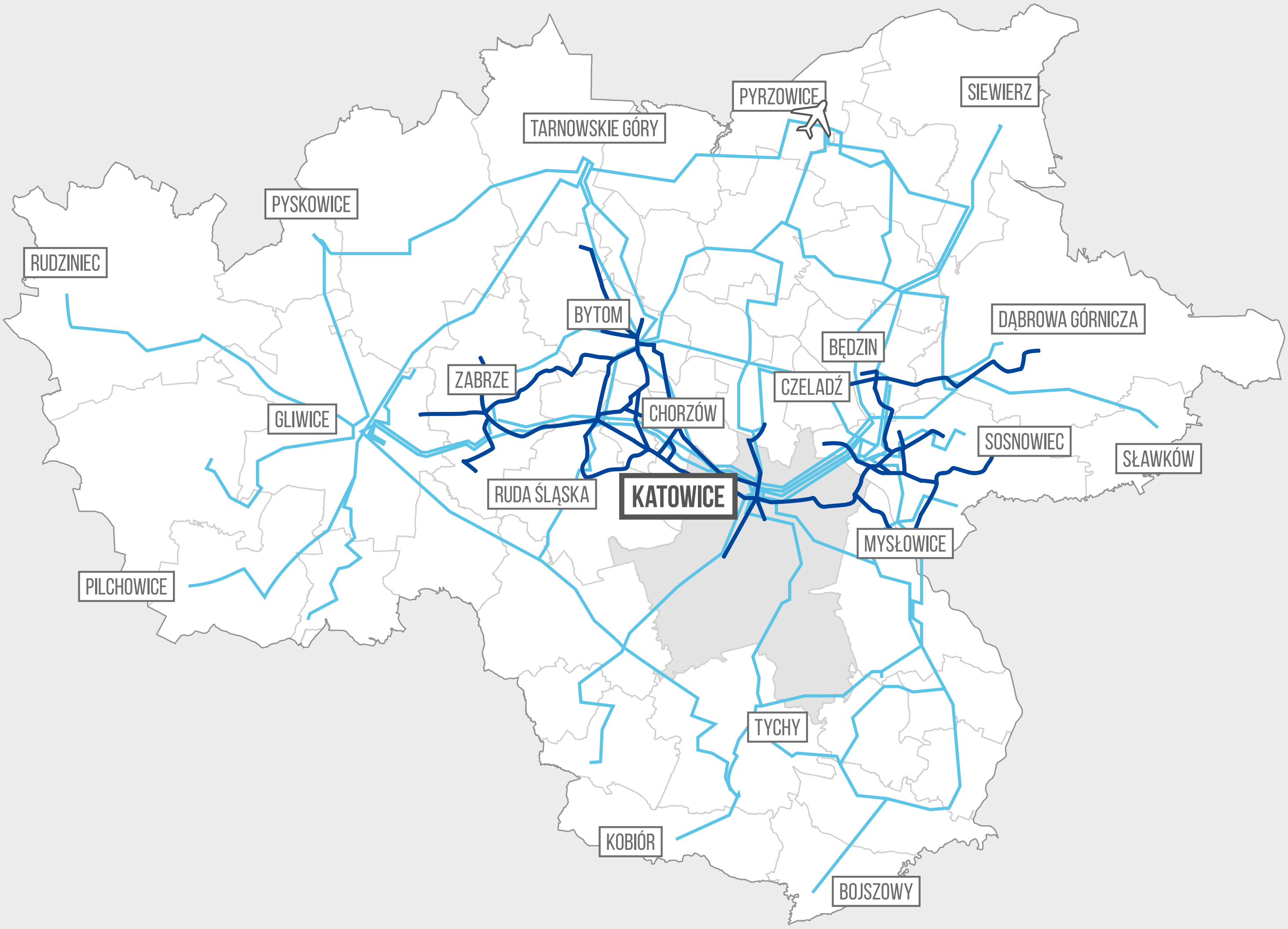
FIGURE 1.6
METROPOLIS GZM – RAILWAY NETWORK



Source: Katowice City Hall

FIGURE 1.7

METROPOLIS GZM – PUBLIC TRANSPORTATION NETWORK



Source: Katowice City Hall

Photo: Jeremi Astaszow / Katowice City Hall

2 BUSINESS SERVICES CENTERS

FIGURE 2.1
BASIC INFORMATION ABOUT THE BUSINESS SERVICES SECTOR IN KATOWICE & GZM

29,700

A number of employees of BPO, SSC/GBS, IT, and R&D[2] centers (Q1 2022). It makes up 7.4% of overall employment in the business services sector in Poland. The majority of the employees in the analyzed area work in Katowice (82%, i.e., 24,400 people).

126

Number of BPO, SSC/GBS, IT, and R&D centers (Q1 2022). Most of them (96) operate in Katowice (76.2%). 91 centers are owned by international companies (72.2% share).

18

A number of countries with foreign head offices of companies that own business services centers in Katowice & GZM. Among international companies, the most significant number of centers is owned by companies from the USA, Germany, France, the United Kingdom, and the Netherlands.

67.6%

Increase in total employment at services centers located in Katowice & GZM in 2017-2022 (by 12,000 people, 91.1% found employment in Katowice).

IT

IT services are the essential services provided by centers in the GZM. Centers that primarily provide IT services employ 43% of people in the local industry.

34

A number of services centers have been formed in the GZM since 2017. These investments have contributed to the creation of 5,000 jobs.

32,000+

The number of employees in the sector in Katowice & GZM is forecasted for Q1 2023.

Source: ABSL's study is based on the ABSL database

[2] BPO – Business Process Outsourcing, SSC/GBS – Shared Services Center/Global Business Services, IT – Information Technology, R&D – Research & Development.

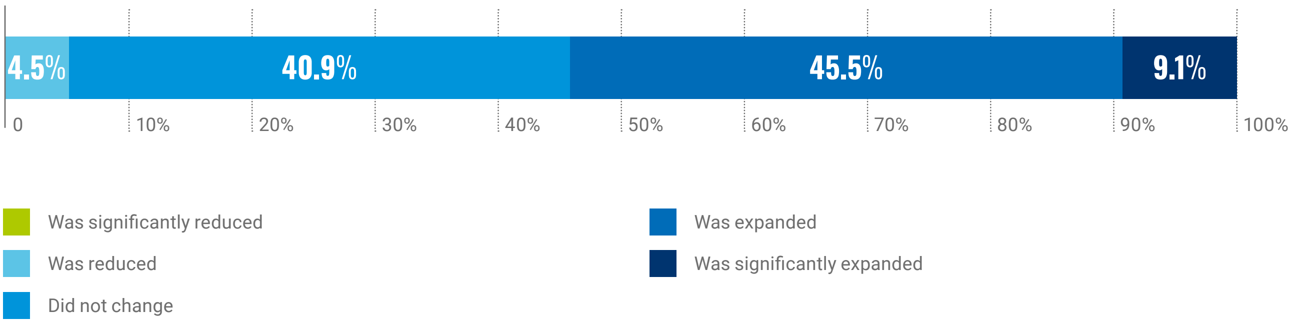
Photo: POLANDONAIR_com/Katowice City Hall

3 DEVELOPMENT OF THE BUSINESS SERVICES SECTOR

Katowice & GZM belong to top-5 most essential locations of business services centers in Poland. The region employs 7.4% of people working in the sector in Poland. One hundred twenty-six services centers owned by investors from eighteen countries are located in Katowice & GZM. Apart from Poland, the primary countries with companies investing in services centers include the USA (25), Germany (13), and France (12). Polish investors currently own 35 centers.

FIGURE 3.1

CHANGES IN THE EMPLOYMENT STRUCTURE AT BUSINESS SERVICES CENTERS IN KATOWICE AND METROPOLIS GZM IN 2021



Source: ABSL's study is based on the results of the survey

FIGURE 3.2

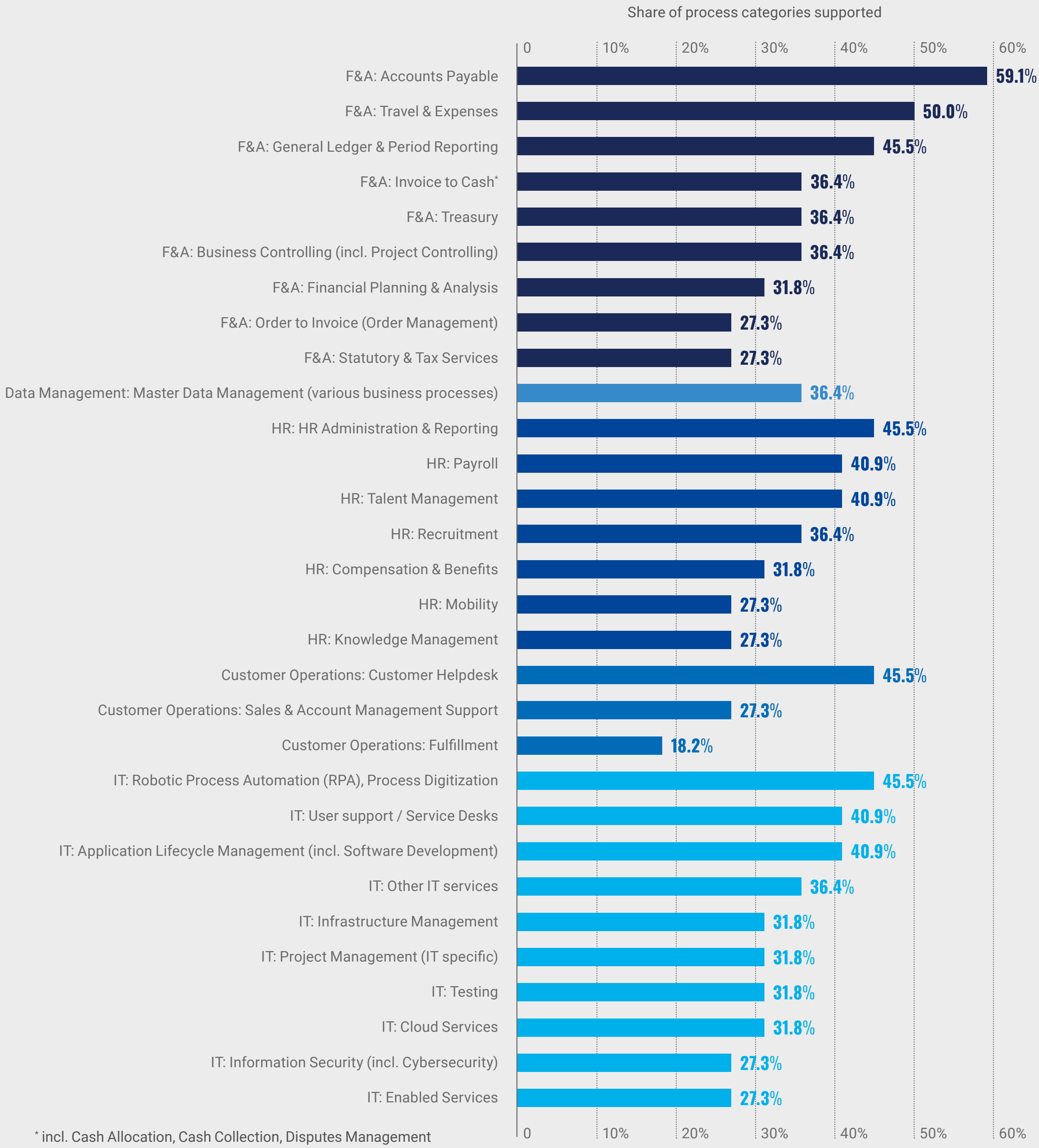
LOCATIONS OF BUSINESS SERVICES CENTERS IN KATOWICE & GZM (NUMBER OF CENTERS)

96 KATOWICE
14 GLIWICE
3 CHORZÓW
3 DĄBROWA GÓRNICZA
3 SOSNOWIEC
2 BYTOM
1 KOTLARNIA
1 RUDA ŚLĄSKA
1 TYCHY
1 ZABRZE
1 ŻERNICA

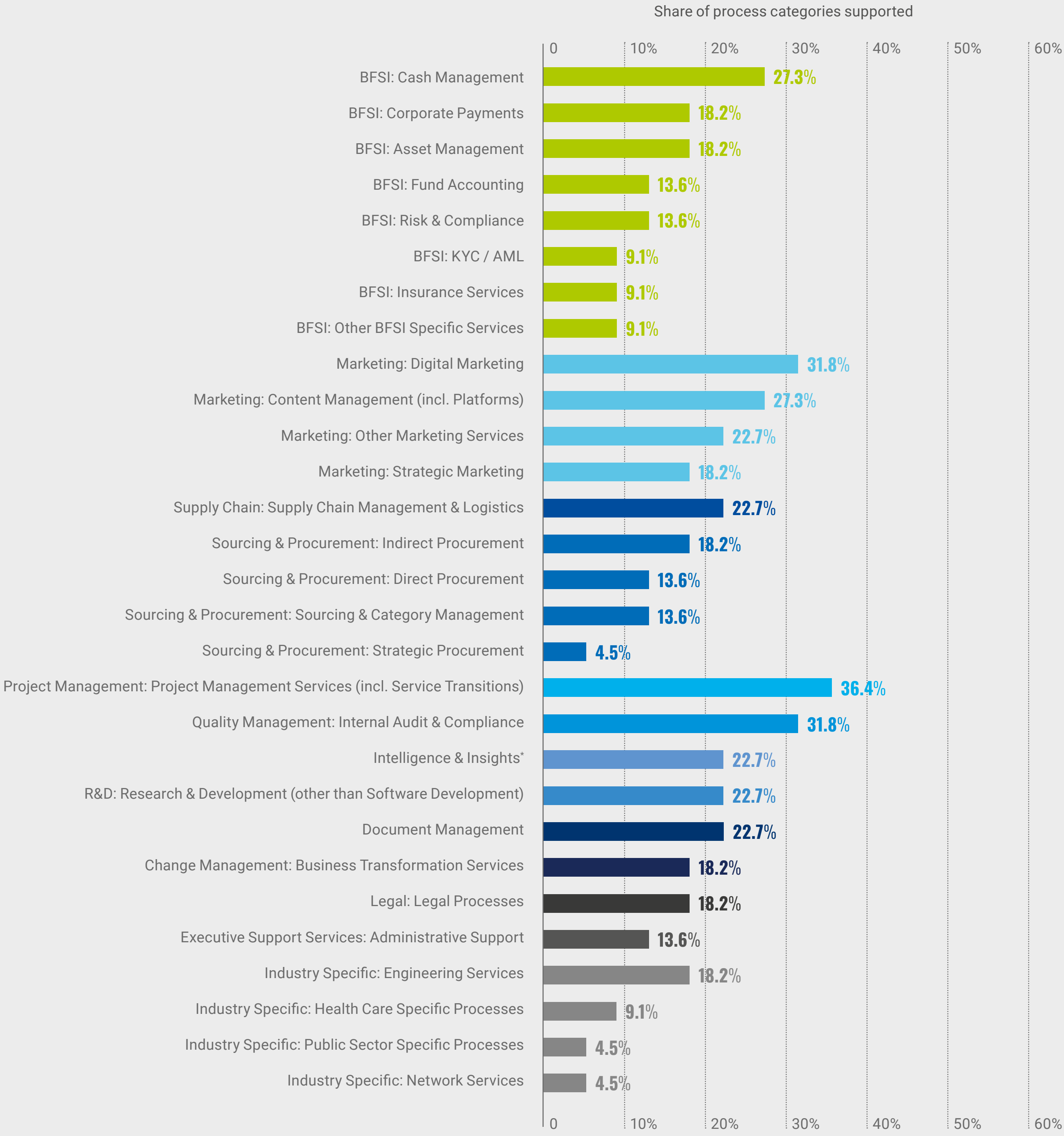
Source: ABSL's study is based on the ABSL database

FIGURE 3.3

SERVICE CATEGORIES SUPPORTED BY BUSINESS SERVICES CENTERS IN KATOWICE & GZM



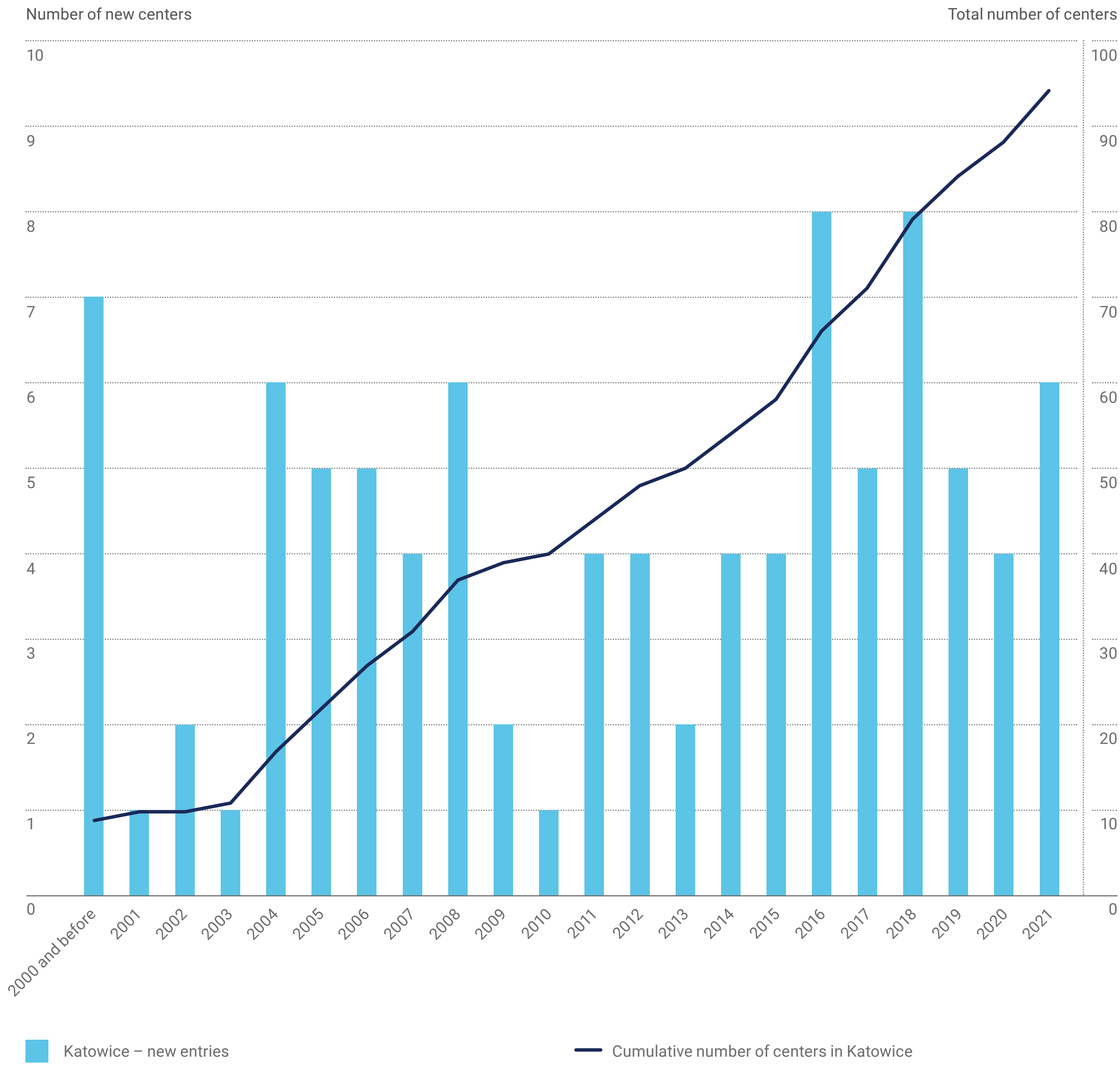
* incl. Cash Allocation, Cash Collection, Disputes Management



* Business Intelligence, Data Analytics, Complex Performance Reporting.

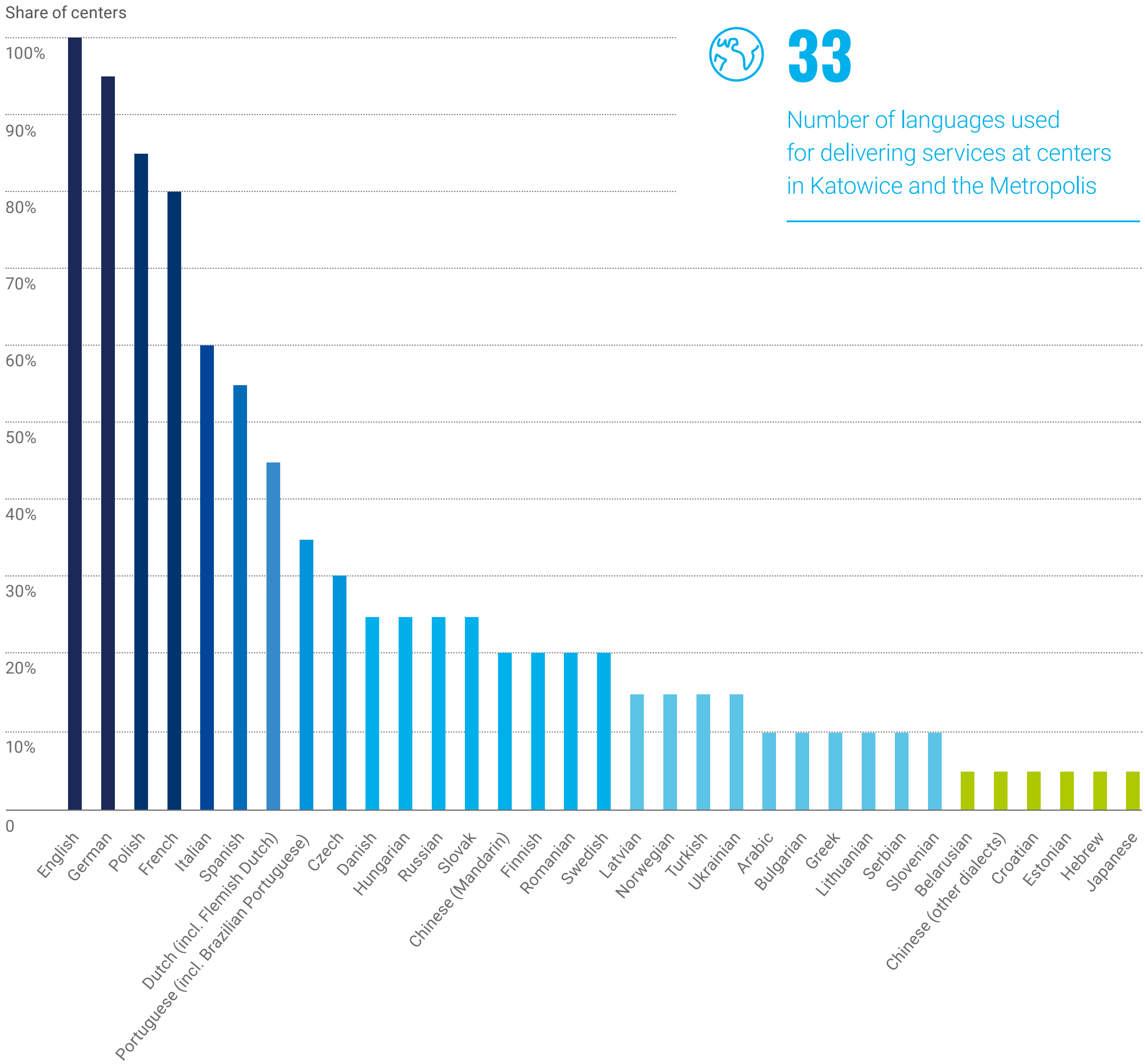
Source: ABSL's study is based on responses from investors with business services centers in Katowice & GZM

FIGURE 3.4
YEARS OF ESTABLISHMENT OF NEW CENTERS IN KATOWICE



Source: ABSL's study is based on the ABSL database

FIGURE 3.5
LANGUAGES USED TO DELIVER BUSINESS SERVICES



33

Number of languages used for delivering services at centers in Katowice and the Metropolis

Source: ABSL's study is based on responses from the ABSL's annual 2022 survey by investors with business services centers in Katowice & GZM

TABLE 3.1

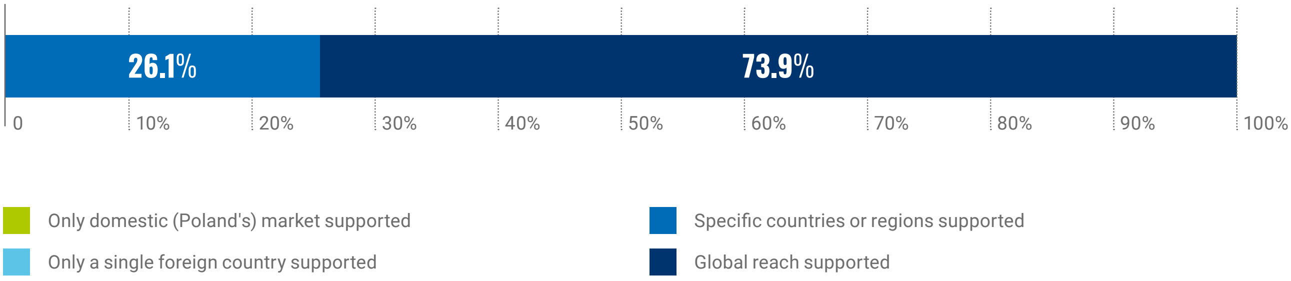
LARGEST INVESTORS IN TERMS OF HEADCOUNT IN BUSINESS SERVICES CENTERS

Investor	Parent HQ country	Employment
Capgemini		>1,500
PwC		>1,500
ING		1,001-1,500
Sopra Steria		1,001-1,500
Kyndryl		1,001-1,500
ista International GmbH		1,001-1,500
Future Processing		500-1,000
Unilever		500-1,000
Tauron		500-1,000
Genpact		500-1,000
Kamsoft		500-1,000
WASKO		500-1,000
ArcelorMittal		500-1,000
Arteria		500-1,000
Teleperformance		500-1,000
Fujitsu		500-1,000
Honeywell		500-1,000
HireRight		500-1,000
Euvic		500-1,000
Oasis Group		500-1,000

Source: ABSL's elaboration, based on the ABSL database and other sources, incl. Internet websites

FIGURE 3.6

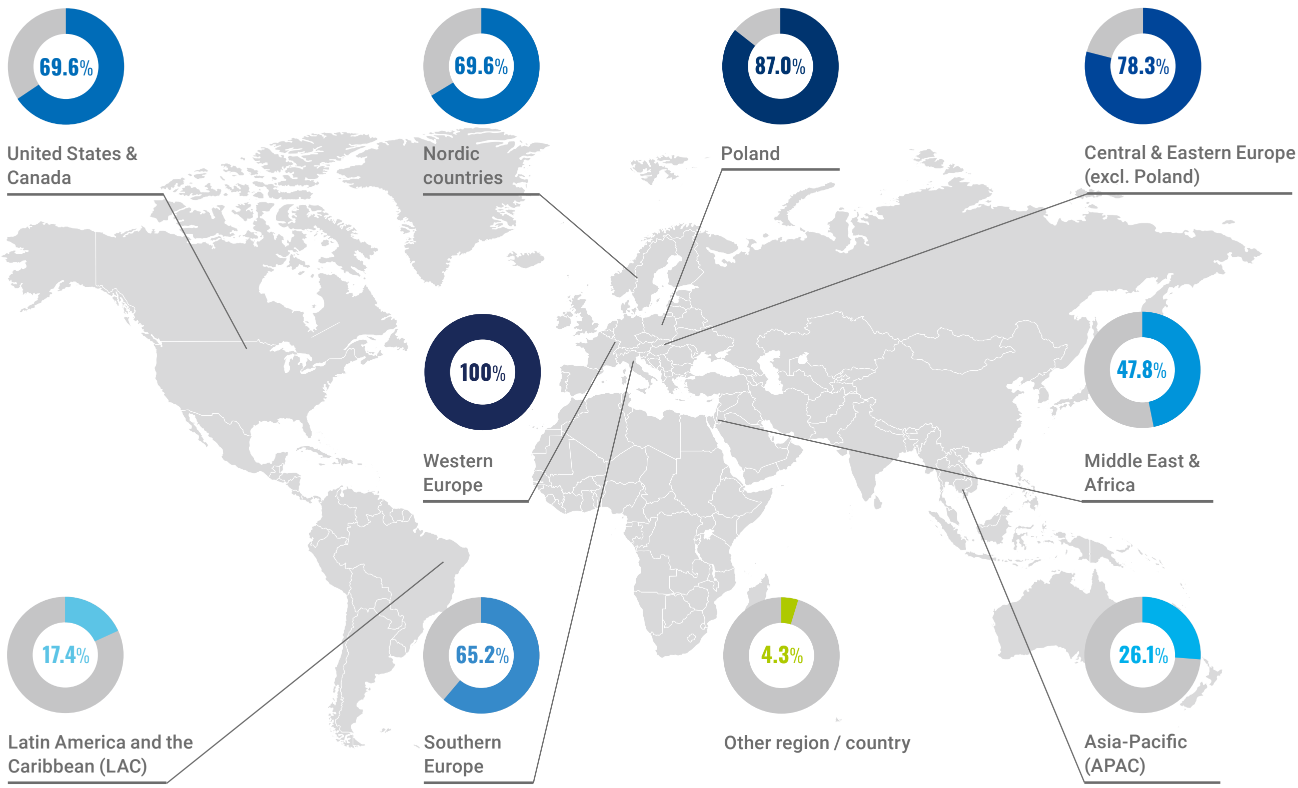
GEOGRAPHICAL PROFILE OF ACTIVITY (PROCESSES SUPPORTED FROM LOCATION(S) IN KATOWICE & GZM) (%)



Source: ABSL's study is based on the survey results (N=23 companies from Katowice & GZM)

FIGURE 3.7

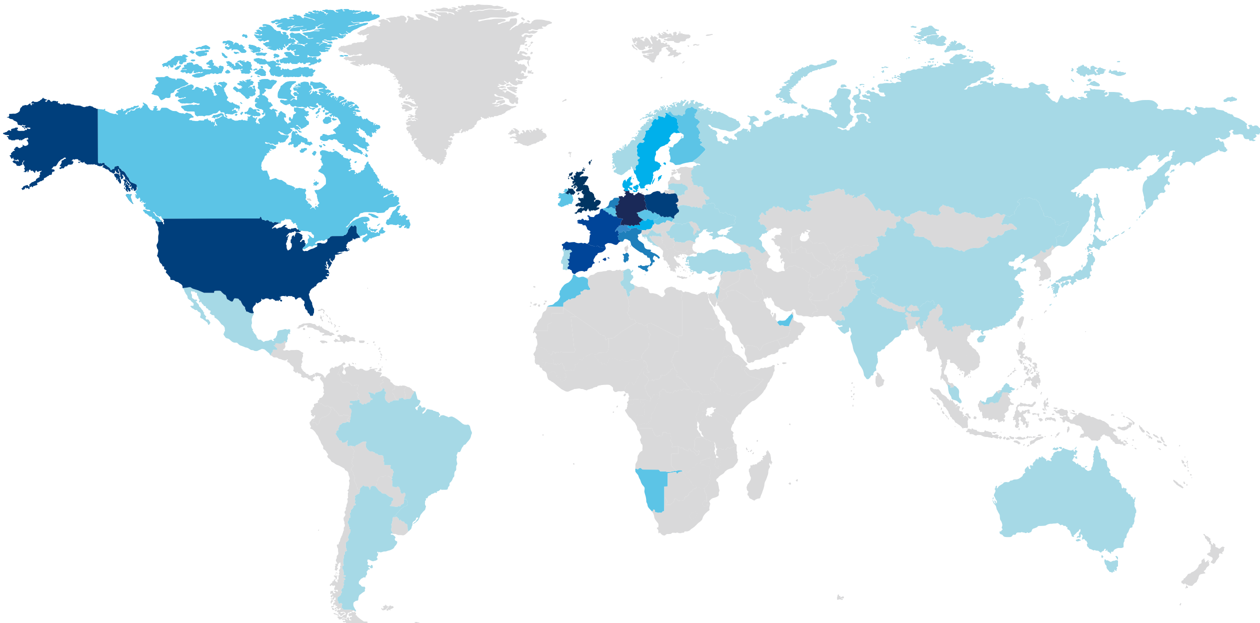
GEOGRAPHICAL RANGE OF SERVICES PROVIDED FROM CENTERS IN KATOWICE & GZM



Source: ABSL's study is based on the survey results (N=23 companies from Katowice & GZM)

FIGURE 3.8

THE MOST IMPORTANT COUNTRIES FOR WHICH CENTERS PROVIDE SERVICES FROM KATOWICE & GZM



75% Germany	55% United Kingdom	40% Poland	40% United States	35% France	35% Spain
25% Italy	25% Netherlands	15% Switzerland	10% Austria	10% Denmark	10% Sweden
5% Belgium	5% Canada	5% Czech Republic	5% Finland	5% Ireland	5% Luxembourg
5% Malta	5% Morocco	5% Namibia	5% Slovakia	5% United Arab Emirates	<5% Others

Source: ABSL's study is based on the survey results (N=20 companies from Katowice & GZM)

EMPLOYMENT IN THE BUSINESS SERVICES SECTOR

6

number of centers employing a minimum of 1,000 people in Katowice.

13

number of centers employing a minimum of 500 people in Katowice (17 in Katowice & GZM).

8%

of the total number of employees in the sector in Katowice & GZM are foreigners (over 2,400 people)

10.9%

accumulated job growth in the sector (CAGR*) in 2017-2022 in the region of Katowice & GZM; compared to Poland, 10.2%.

24

The number of countries of origin of foreigners working in business services centers covered by the ABSL survey in Katowice & GZM.

* Compound Annual Growth Rate, CAGR.

Source: ABSL's study is based on the ABSL database

At the end of Q1 2022, the centers functioning in Katowice & GZM employed 29,700 people (2,700 more than in the preceding year). Most jobs (78%) were created at centers owned by international companies. Centers owned by Polish companies employed 22% of the overall headcount in the sector.

TABLE 3.2

EMPLOYMENT IN THE INDUSTRY AND NUMBER OF CENTERS BY COUNTRY OF ORIGIN IN KATOWICE & GZM (2022)

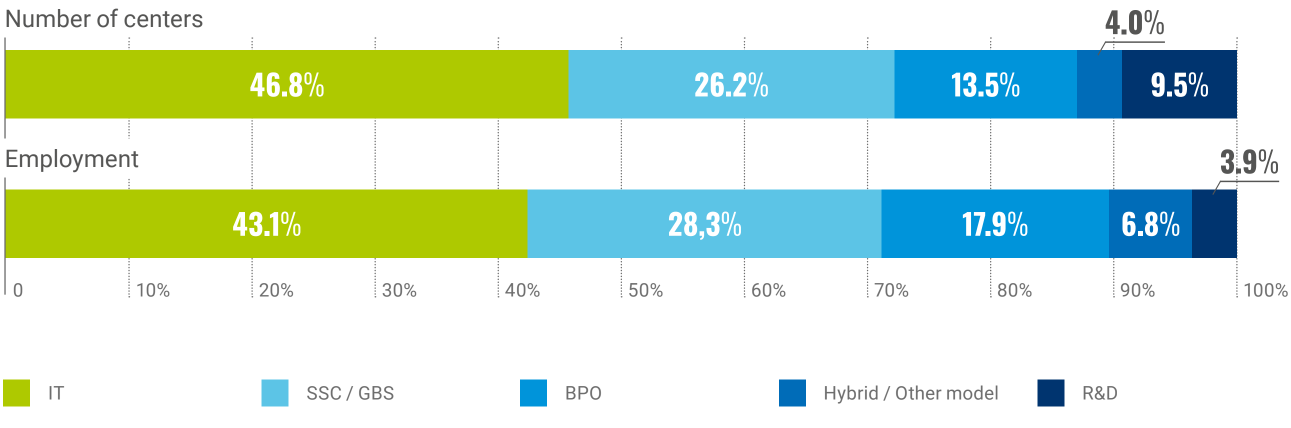
Country of origin	Employment	Share in total employment (%)	Number of centers	Share in total number of centers (%)
Poland	6,535	22.0	35	27.8
France	5,547	18.7	12	9.5
United States	5,315	17.9	25	19.8
United Kingdom	3,365	11.3	9	7.1
Germany	2,601	8.8	13	10.3
Netherlands	2,217	7.5	7	5.6
Ireland	1,050	3.5	4	3.2
Other countries	3,065	10.3	21	16.7
Overall	**29,695**	**100.0**	**126**	**100.0**

Source: ABSL's study is based on the ABSL business services centers database

Katowice is the leading location in the metropolitan area, employing 82% of the overall number of people working in the sector. Out of the 126 centers, 59 (47%) are IT centers. They employ 43.0% of the people working in the industry. Shared services centers (SSC/GBS) employ 28.3% of the overall number of people working in the sector, and BPO centers – 17.9%. Other types of centers employ 10.8% of the overall number of employees.

In comparison to Poland overall, the sector in Katowice & GZM is characterized by a larger share of IT centers in employment (by 11.8 p.p.), hybrid/others (by 2.9 p.p), and lower percentages of SSC/GBS (-6.9 p.p), R&D (-7.0 p.p) as well as BPO (-0.8 p.p.).

FIGURE 3.9
EMPLOYMENT AND NUMBER OF CENTERS IN KATOWICE & GZM IN 2022, STRUCTURE BY TYPE OF CENTER (%)



Source: ABSL's study is based on the ABSL database

The average employment rate at centers functioning in the Katowice & GZM area is 241 people (the median is 100), and it is higher at foreign-owned centers (257) than domestically-owned centers (198).

The average number of employees at centers in Katowice is higher than the average for the metropolitan area, and it amounts to 262 people (the median is 115 people). For comparison, the median of employment at centers in Poland is 90. It means that Katowice centers employ more people than centers in the Metropolis area and Poland. It also applies to international centers. Compared to the Polish centers, the higher average employment at centers of international investors reflects tendencies observed in the entire economy, not just in the services sector and not only in Poland. Multinational companies are generally larger, usually more productive, and, at the same time, more internationalized. In Katowice & GZM, the highest average headcount is recorded at centers with head offices located in France (462 people), the UK (373), and the Netherlands (316 people). The seventeen largest centers, each employing at least 500 people, make up 54% of the overall employment in the sector.

TABLE 3.3

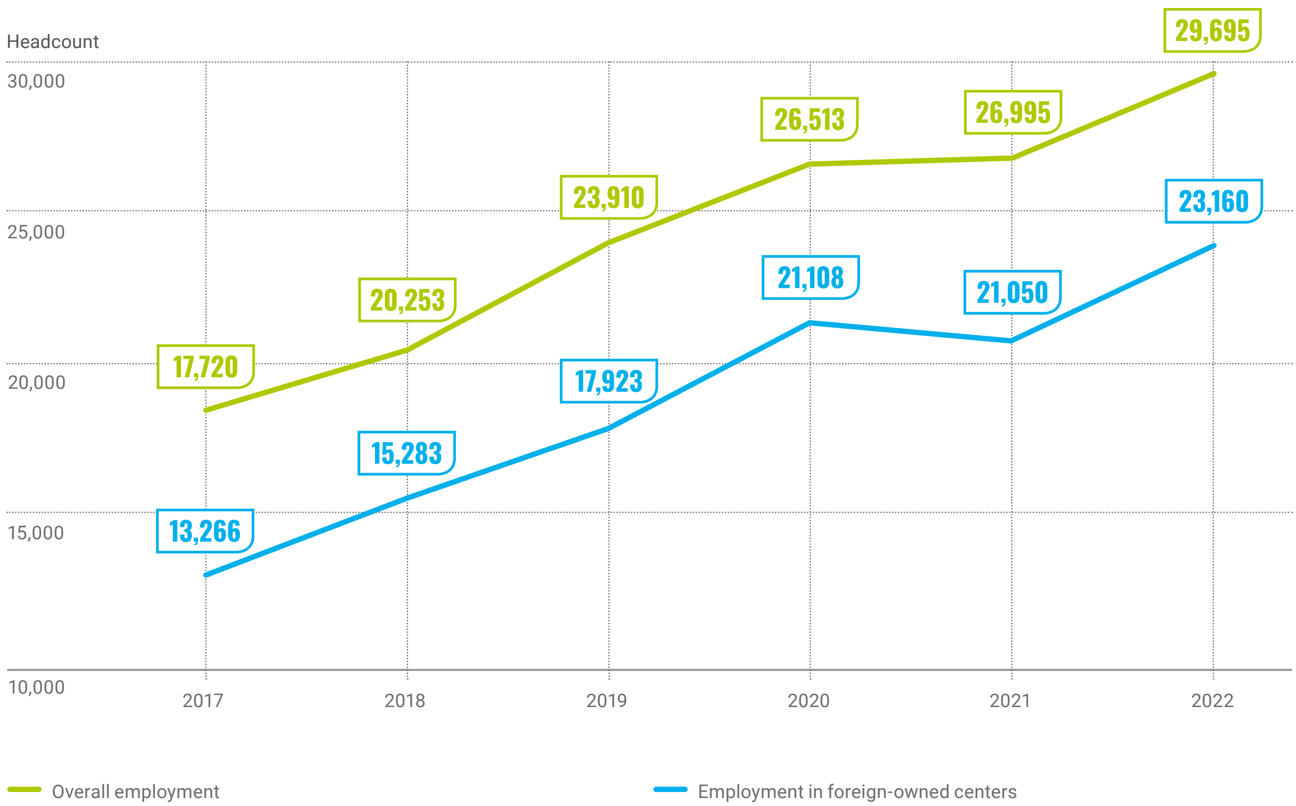
AVERAGE NUMBER OF EMPLOYEES (ARITHMETIC AVERAGE) AT CENTERS, BY LOCATION (NUMBER OF PEOPLE)

	Katowice	Katowice & GZM	Poland
Polish centers	183	198	130
International centers	291	257	284
Overall	262	241	236

Source: ABSL's study is based on the ABSL database

FIGURE 3.10

EMPLOYMENT IN THE BUSINESS SERVICES SECTOR IN KATOWICE & GZM (2017-2022)



Source: ABSL's study is based on the ABSL database

Direct comparisons with the reports of ABSL published in the past should be avoided. Instead, we recommend relying on the information included in this report. The ABSL database is continuously updated, including information concerning previous years.

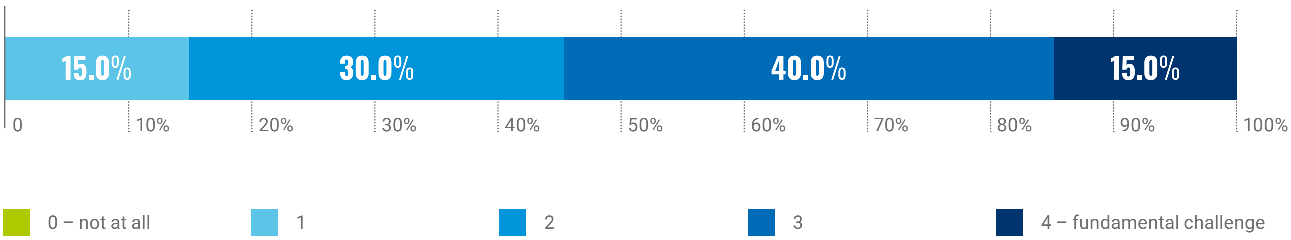
The contribution of the business services sector to the labor market in Katowice & GZM is more significant than would result from a simple analysis of employment in those centers themselves. Therefore, indirect and induced multiplier effects should be considered as well.

Using the multiplier developed by EY[1] (equal to 1.8), the number of jobs generated by centers in Katowice & GZM should be estimated as 53,500.

According to the ABSL 2022 survey, the availability of a talent pool in Poland is perceived as a severe or fundamental barrier for centers to operate and grow, as declared by companies from Katowice & GZM (Figure 3.11).

FIGURE 3.11

AVAILABILITY OF A TALENT POOL IN POLAND AS A BARRIER (A BOTTLENECK) FOR CENTER(S) TO OPERATE AND GROW



Source: ABSL's study is based on the survey results (N=20 companies from Katowice & GZM)

The challenge posed by a talent pool size is expected to intensify in the perspective of 2027. To some extent, a remedy to overcome the talent pool bottlenecks is seen in sourcing personnel from outside the locations (both within Poland and abroad) and working in a hybrid model (including more WFH). 45% of respondents representing Katowice & GZM declare that it can severely improve talent pool availability.

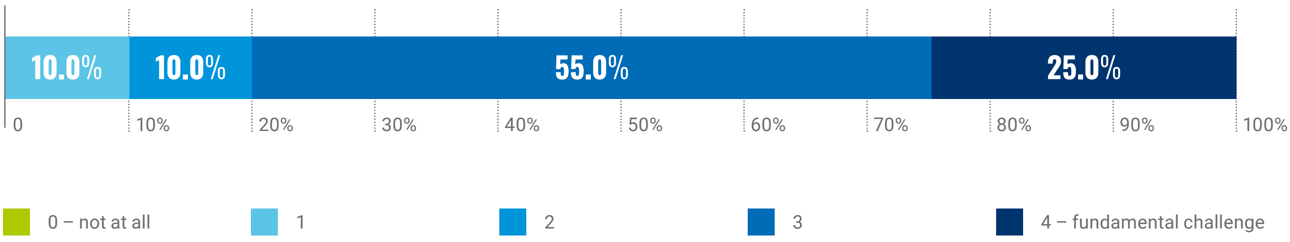
The sector operates in a changing economic environment, which is not surprising. However, the dynamics and scope of the changes are more significant than expected. The COVID-19 pandemic has evoked several serious consequences and challenges. Moreover, it has accelerated changes that the sector was already undergoing, including the growing role of artificial intelligence, robotics, soft skills, big data (or even "oceans of data"), and rising customer expectations.

[1] EY (2019) "Global Business Services last decade and outlook for the next years", based on the EY SPECTRUM model, on the basis of data from Statistics Poland, ABSL, Randstad Sourceright, and JLL.

Notwithstanding the longer-term perspective talent pool availability problems, in the 2023 perspective, 25.0% of the centers plan no changes in employment level, while 66.6% will increase employment. It is worth mentioning that the distribution of answers obtained from respondents from Katowice & GZM slightly differs from the answers for Poland overall. For the sector in Poland, the declared projections are more optimistic.

FIGURE 3.12

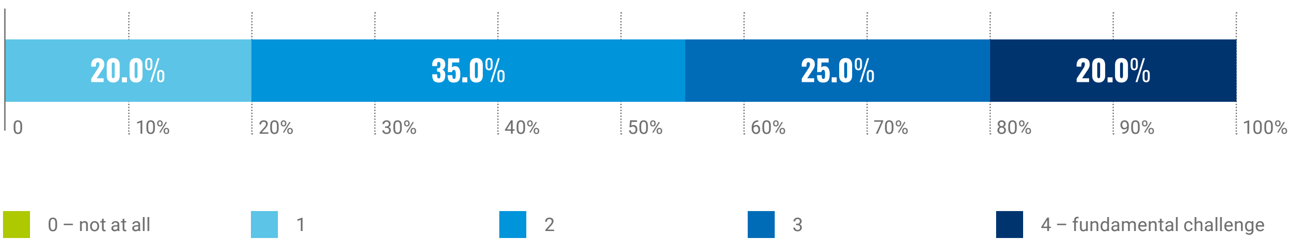
WILL THE PROBLEM WITH THE TALENT POOL AVAILABILITY INTENSIFY IN THE PERSPECTIVE OF 2027?



Source: ABSL's study is based on the survey results (N=20 companies from Katowice & GZM)

FIGURE 3.13

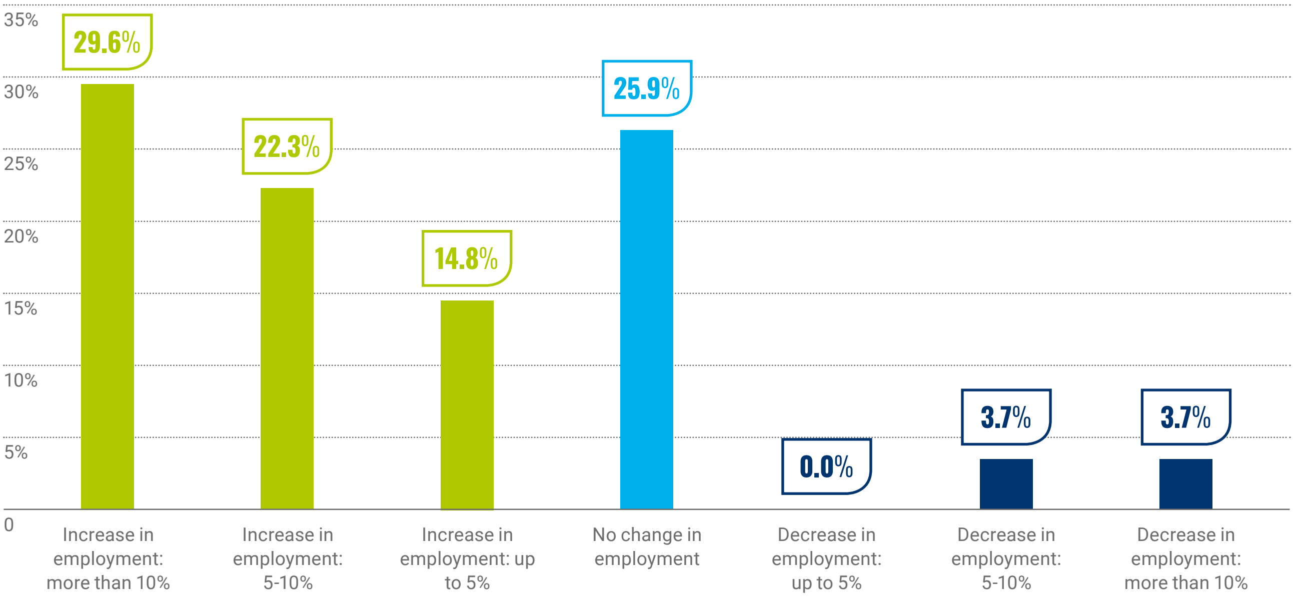
TO WHAT EXTENT THE SOURCING OF PERSONNEL FROM OUTSIDE OF YOUR MAIN LOCATIONS IN WFH MODE CAN HELP TO IMPROVE TALENT POOL AVAILABILITY?



Source: ABSL's study is based on the survey results (N=20 companies from Katowice & GZM)

FIGURE 3.14

PLANS OF CENTERS IN KATOWICE & GZM REGARDING CHANGES IN HEADCOUNT, UP TO Q1 2023 (SHARE OF CENTERS IN %)

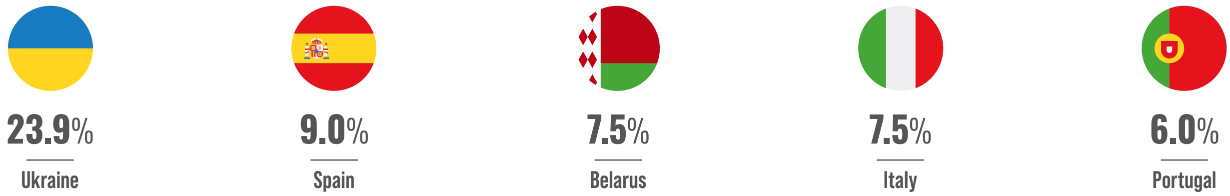


Source: ABSL's study is based on the results of the survey

A characteristic feature of the KIBS[2] sector in Poland is the growing share of foreigners in employment. For Poland, it amounts to 13.8%. In the case of Katowice & GZM, it is lower (8%). In the ABSL survey, respondents indicated five countries with the most significant number of foreigners working in the service centers they represent. In the case of Katowice & GZM, these are Ukrainians, Spaniards, Belarusians, Italians, and Portuguese.

FIGURE 3.15

COUNTRIES MOST OFTEN INDICATED AS THE COUNTRY OF ORIGIN OF FOREIGNERS EMPLOYED IN BUSINESS SERVICES CENTERS IN KATOWICE & GZM (% OF INDICATIONS)

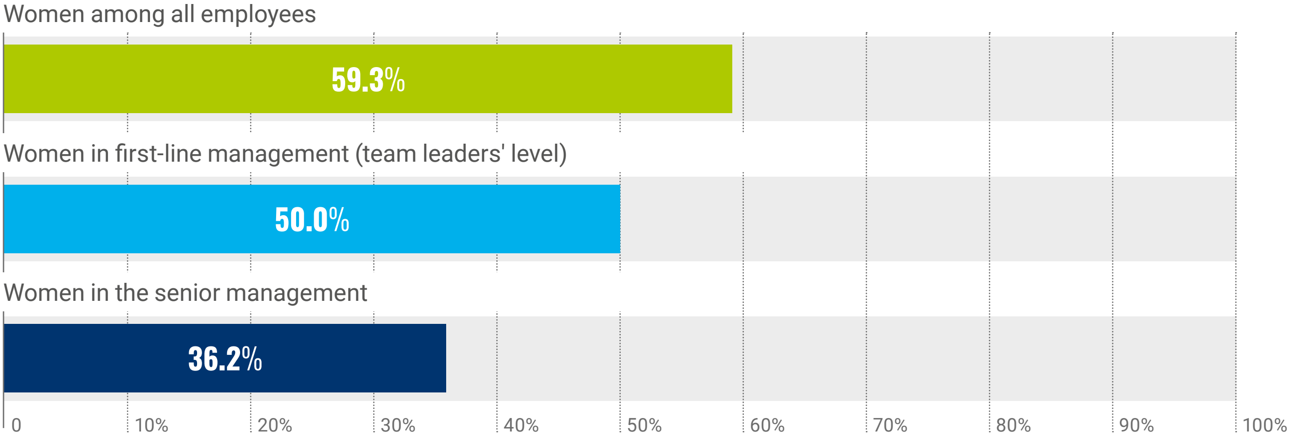


Source: ABSL's study is based on responses from investors with business services centers in Katowice & GZM

[2] Knowledge-Intensive Business Services.

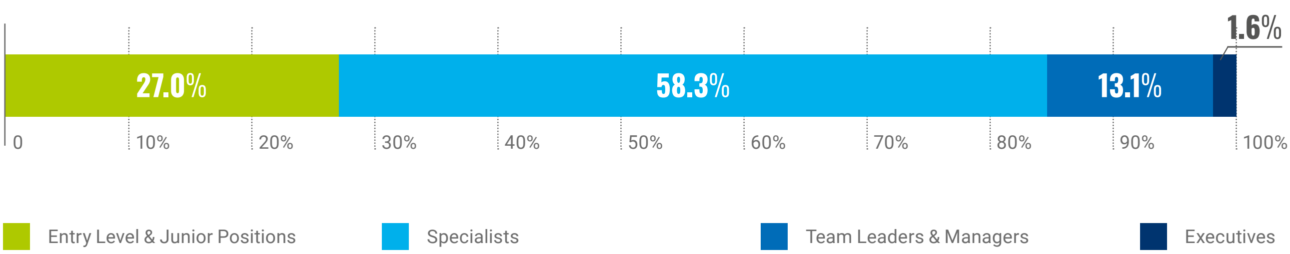
Another aspect of the analysis of the situation in the sectoral survey is the participation of women in employment. The results presented are employment-weighted. The share of women in total employment in Katowice & GZM centers is 59.3%, significantly higher than the average for Poland (52.8%).

FIGURE 3.16
SHARE OF WOMEN IN OVERALL EMPLOYMENT IN KATOWICE & GZM (%)



Source: ABSL's study is based on the results of the survey. The results are weighted by overall employment

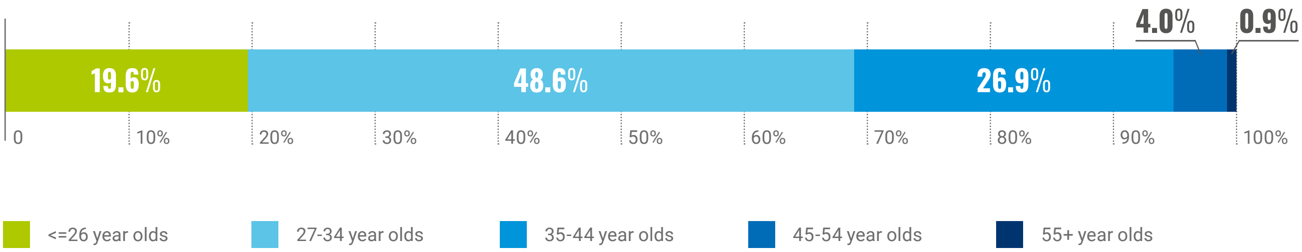
FIGURE 3.17
EMPLOYMENT STRUCTURE OF BUSINESS SERVICES CENTERS BY JOB CATEGORY IN KATOWICE & GZM (%)



ABSL's study is based on a survey addressed to business services centers. The results are weighted by overall employment

FIGURE 3.18

THE EMPLOYMENT STRUCTURE OF BUSINESS SERVICES CENTERS ON THE AGE OF EMPLOYEES IN KATOWICE & GZM (%)



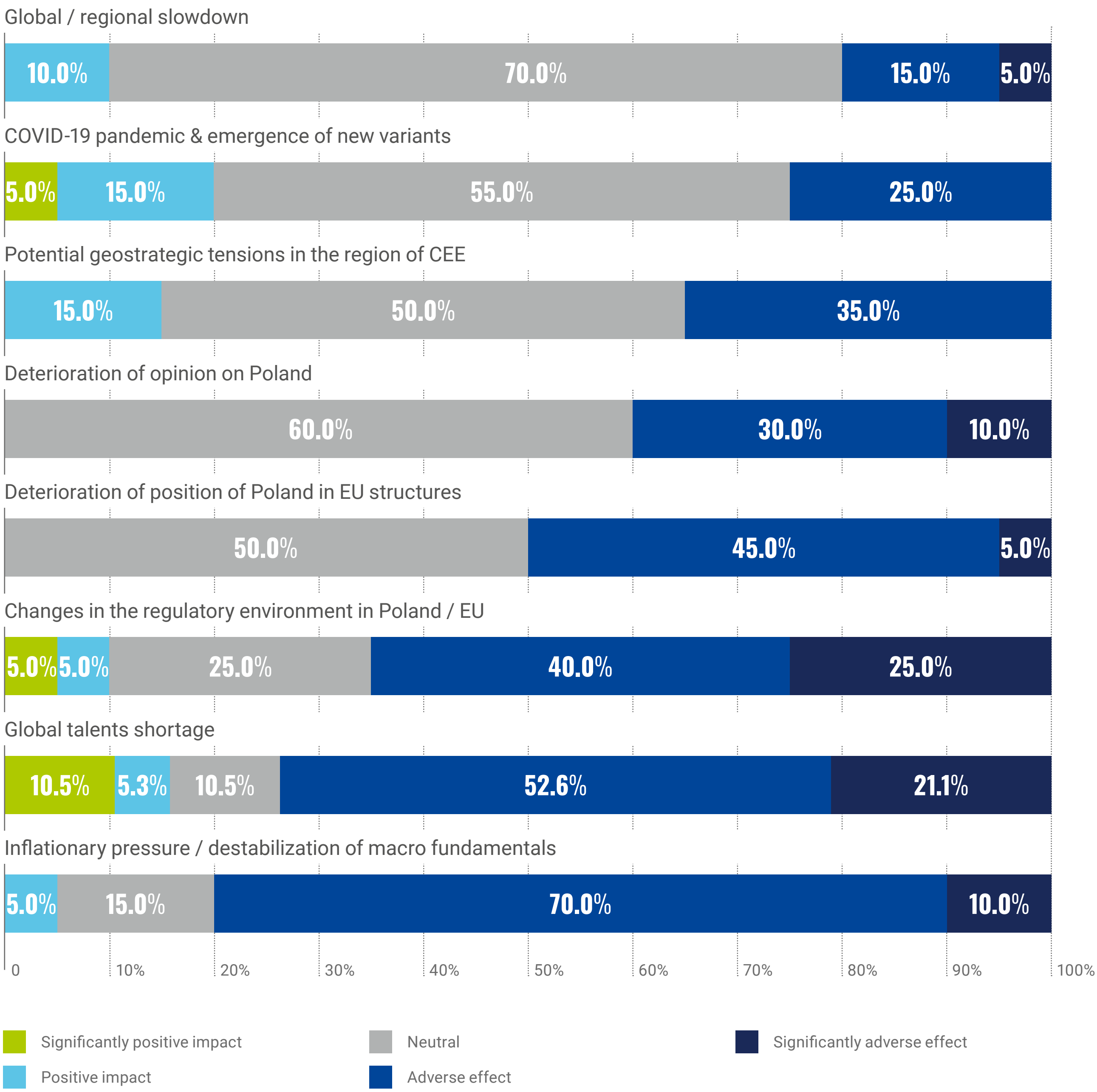
Source: ABSL's study is based on a survey addressed to business services centers. The results are weighted by overall employment

DRIVERS OF CHANGE IN THE SECTOR

Inflationary pressure and destabilization of macro fundamentals are perceived as factors that will have the most adverse effect on centers' activities in the coming year, followed by global talent shortage and changes in the regulatory environment in Poland and the EU. Figure 3.19 provides a synthesis of respondents' opinions on those factors that will affect centers' activities in the coming year by centers established in Katowice & GZM. The average of the responses was counted on the Likert scale, from -2 = Significantly adverse effect to +2 = Significantly positive impact.

FIGURE 3.19

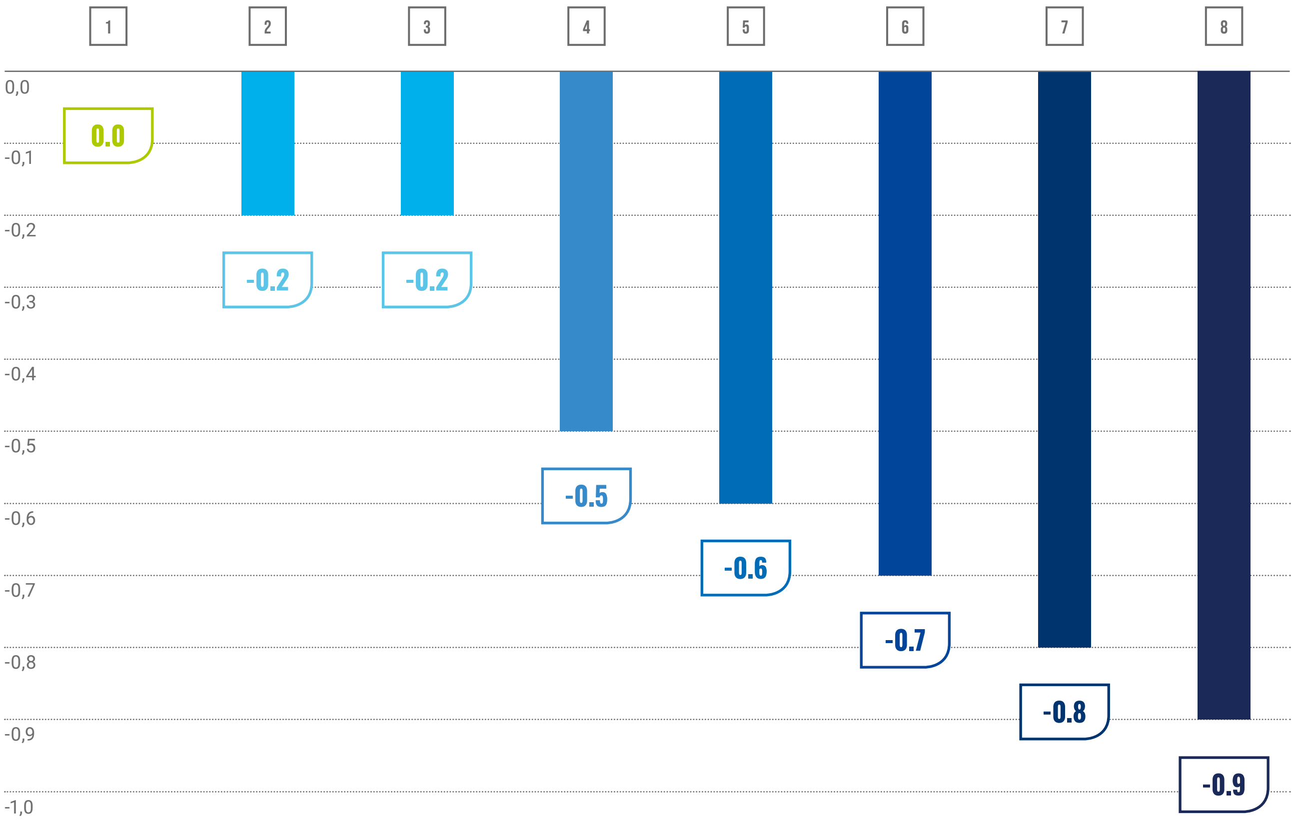
PERCEIVED IMPACT OF SPECIFIC FACTORS ON THE DEVELOPMENT OF THE INDUSTRY IN POLAND IN THE COMING YEAR (%)



Source: ABSL's study is based on the survey results (N=20 companies from Katowice & GZM)

FIGURE 3.20

IMPACT OF SPECIFIC FACTORS ON THE SECTOR IN POLAND IN THE COMING YEAR (AVERAGE OF RESPONSES)



1 COVID-19 pandemic & emergence of new variants

2 Global / regional slowdown

3 Potential geostrategic tensions in the region of CEE

4 Deterioration of opinion on Poland

5 Deterioration of position of Poland in EU structures

6 Global talents shortage

7 Changes in the regulatory environment in Poland / EU

8 Inflationary pressure / destabilization of macro fundamentals

Source: ABSL's study is based on the survey results (N=20 companies from Katowice & GZM)

Photo: POLANDONAIR_com/Katowice City Hall

4 FORECAST OF SECTOR DEVELOPMENT IN KATOWICE & GZM UNTIL 2031

The figure below presents the employment forecast for Katowice & GZM in the business services sector until 2031. We adopted the ABSL forecast from 2021 as a starting point for the prognosis. It assumes two different visions for developing Poland's knowledge-intensive business services sector. For both scenarios, the employment increases – up to 653,000 jobs in the optimistic scenario and 483,000 in the pessimistic one.

Considering Katowice & GZM's share in Poland's total employment in 2022 and keeping this share constant, we obtain the first scenario (48,500 people in 2031, CAGR in 2022-2031 equal to 5.6%).

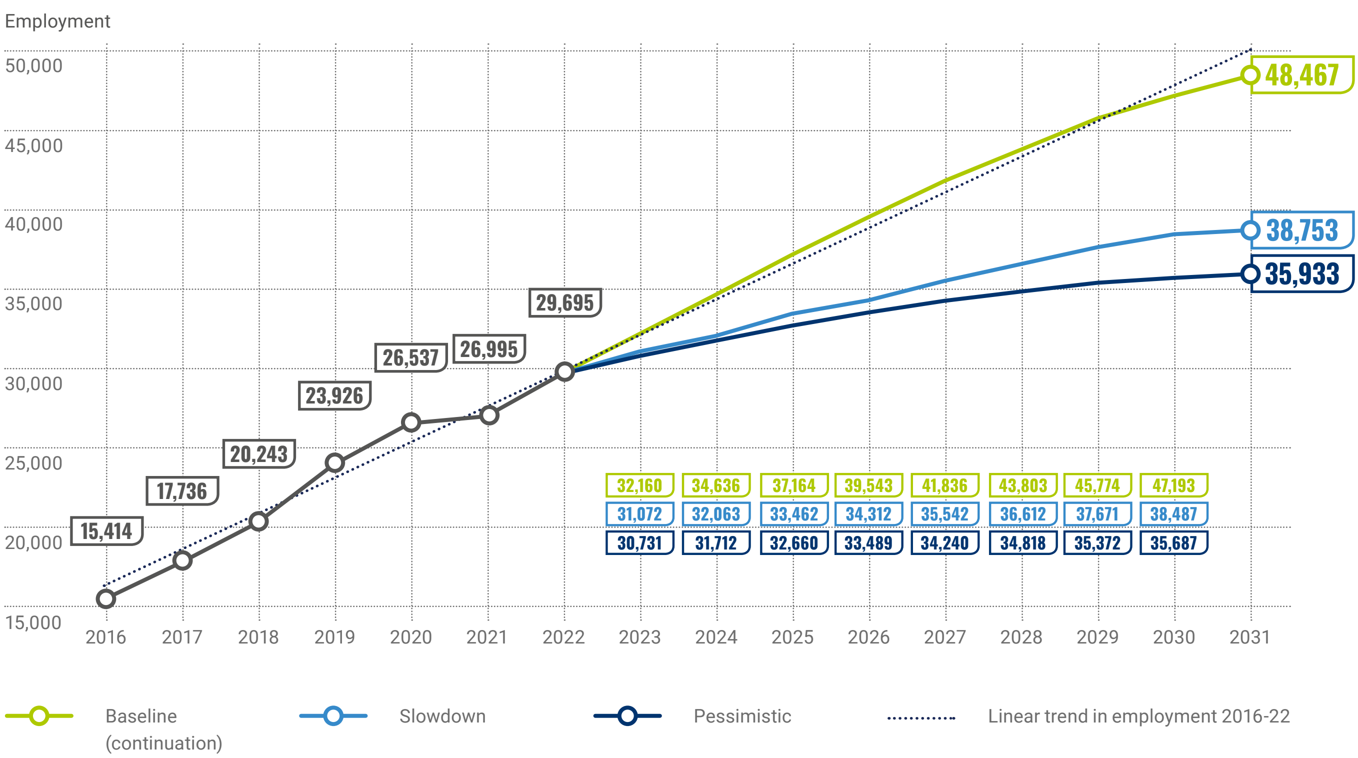
The second scenario assumes a pessimistic development of the sector for Poland overall, with Katowice & GZM increasing their share gradually from 7.4% to approximately 8.0% in the 2031 perspective. In 2031, employment in the KIBS sector in Katowice & GZM will reach 38,800 people (CAGR 2022-2031 = 3.0%).

The third scenario assumes a pessimistic vision of total employment in the sector in Poland, with Katowice & GZM maintaining their current share in total employment in Poland. As a result, jobs in Katowice & GZM in 2031 will increase to 35,900 employees (CAGR = 2.1%).

We want to emphasize that given the current state of the sector's development in Poland, we assume increasing total employment in the industry with decreasing growth dynamics, which is why the line flattens towards the end of the forecast horizon.

FIGURE 4.1

FORECAST OF EMPLOYMENT IN THE KIBS SECTOR IN KATOWICE & GZM, UP TO 2031



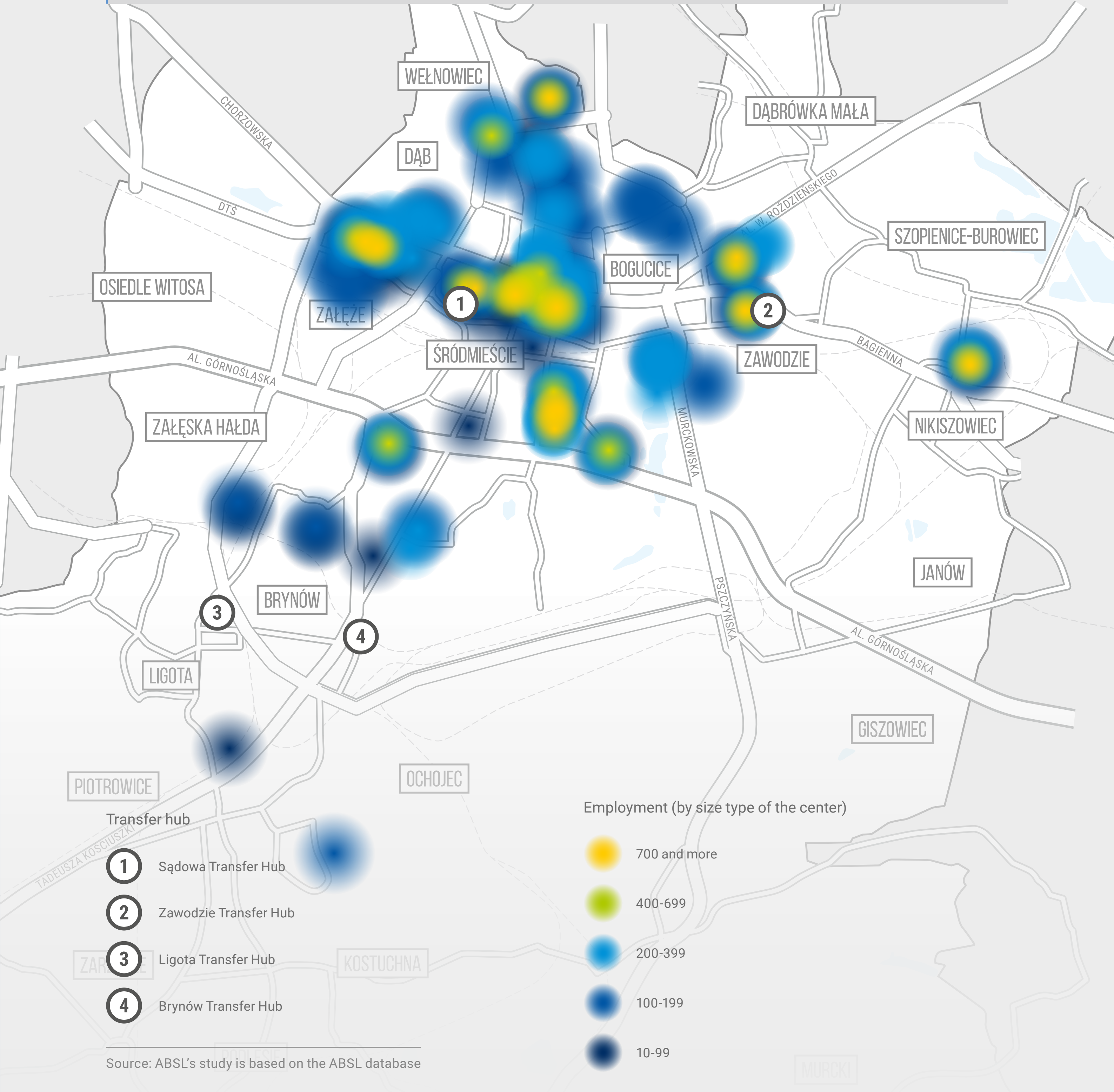
Source: ABSL's study

Photo: POLANDONAIR_com/Katowice City Hall

5 LOCATION OF THE BUSINESS SERVICES CENTERS

FIGURE 5.1

EMPLOYMENT IN VARIOUS TYPES OF BUSINESS SERVICES CENTERS LOCATED IN KATOWICE

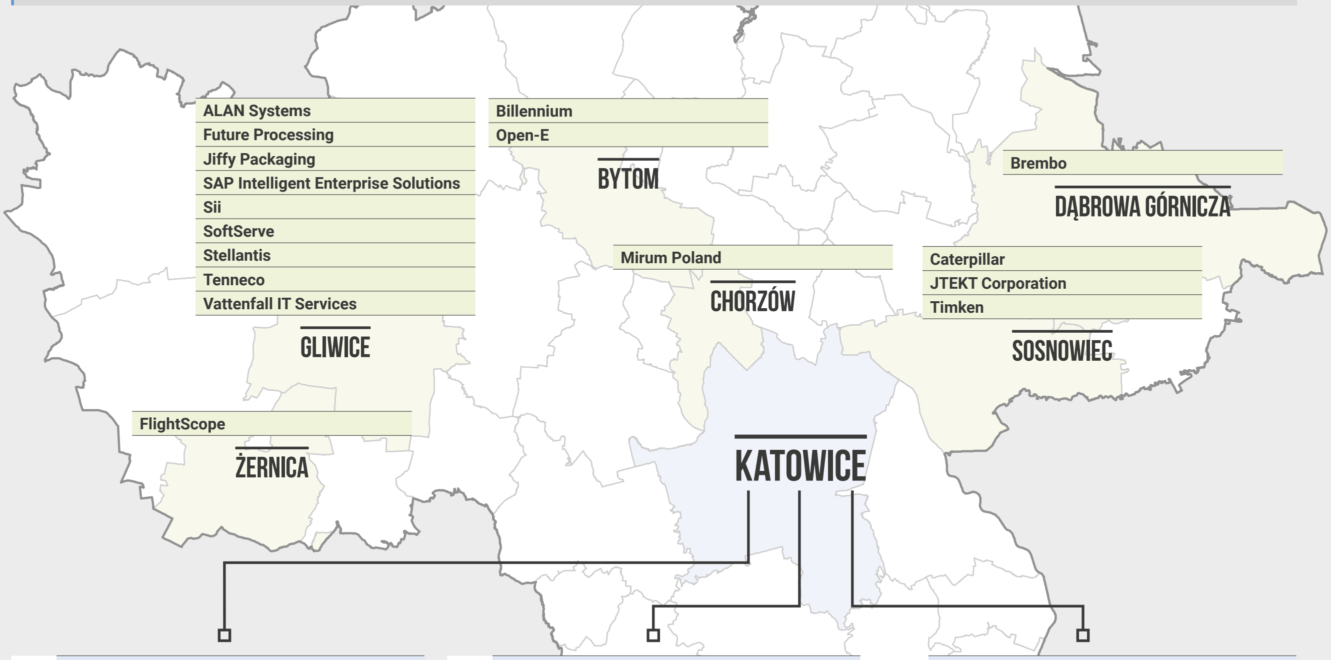


Source: ABSL's study is based on the ABSL database

Location of the business services centers

FIGURE 5.2

SELECTED BUSINESS SERVICES CENTERS LOCATED IN KATOWICE & GZM



☑	AC Project
	Accenture Advanced Technology Center
✓	ALAN Systems
☑	Altium
	Arvato BPO Finance & Accounting
	Avenga
☑	Barona
	BDO Polska
☑	BPSC
☑	Cadence
	Capgemini Business Services
	Capgemini Cloud Infrastructure Services
✓	COIG
	CSHARK
	Cyclad
✓☑	DAZN Media Poland
	Diebold Nixdorf
☑	Dunlop Conveyor Belting
	EPAM
☑	eSky.pl
✓	Eurofins
✓	Euvic
☑	Famur Institute
	Fujitsu Technology Solutions
	getsix

	Grant Thornton Frąckowiak
	Groupon
☑	Guardian
✓	Hemmersbach Central Support
☑	HireRight
☑	Honeywell
	Huawei
☑	Hyland Software
☑	Infobip
✓	ING Tech Poland
	intive
✓	ista Shared Services Polska
☑	Jamf
✓	JCommerce
☑	Kamsoft
☑	Keywords Studios
☑	KLDiscovery Ontrack
☑	Knauf IT Services
✓	Kotrak
	Kyndryl Customer Innovation Center
☑	Micomp
	Netguru
✓	Omnis
✓	Onwelo
	Orange

☑	PubNub
	PwC Service Delivery Center
☑	relayr (Proximetry Poland)
☑	Rockwell Automation
	RSM Poland
☑	Sandvik Coromant
	Sapiens International Corporation
✓	Scalo
☑	SD Worx Poland
☑	SGS Global Business Services Europe
☑	SGX Sensortech
	Siemens EDA
	Sii
☑	Simio
☑	SMS Metallurgy
✓	Soflab Technology
☑	Sopra Steria
☑	Stats Perform
☑	STS
	Teleperformance Polska
	TMF Group
☑	TÜV Rheinland
☑	Unilever Poland Services
✓	Vattenfall IT Services
☑	Webanywhere

✓ Katowice as a first location in Poland

☑ Katowice as the only location in Poland

Source: ABSL's study is based on the ABSL database

TABLE 5.1
EXAMPLES OF CENTERS OPERATING IN KATOWICE

Investor	Parent HQ country	Center type	Year of establishment	Employment	Profile of operations
PwC Service Delivery Center		SSC / GBS	2009	>1,501	Support services for financial audit departments, tax advice, and staffing, accounting and purchasing services for PwC companies.
Capgemini Cloud Infrastructure Services		IT	2006	>1,501	Remote support, IT infrastructure management and data security and protection services.
ING Tech Poland		IT	2003	1,001-1,500	IT services for entities from the ING Group worldwide: hosting system resources, remote IT resource management services, software services, and IT security services.
Sopra Steria		IT	2007	1,001-1,500	IT services involving infrastructure management and software development.
Kyndryl Customer Innovation Center		Hybrid / Other model	2013	1,001-1,500	Delivery of end-to-end IT services, including network infrastructure management, maintaining and monitoring IT infrastructure and systems.
Capgemini Business Services		BPO	2006	1,001-1,500	Finance and accounting, banking operations, customer service, supply management and human resources management services.
Unilever Poland Services		SSC / GBS	2008	501-1,000	Providing services for Unilever group companies, including: finance and accounting, procurement, logistics, data analytics and project management.
Tauron Obsługa Klienta		SSC / GBS	–	501-1,000	Providing services in: finance and accounting, IT support, payroll and human resources and customer support.
Genpact		BPO	2021	501-1,000	Provides services in: finance and accounting, insurance and banking, supply chain management, customer support and corporate applications.
Keywords Studios		IT	2018	501-1,000	Provides services in game development, including quality assurance, localization, marketing and player support.
Kamsoft		IT	1987	501-1,000	Providing specialized software in medical and pharmacy related fields.
Fujitsu Technology Solutions		IT	2018	501-1,000	IT services, including: software development, IT infrastructure management.
Honeywell		SSC / GBS	2019	501-1,000	Providing services, including: sales, customer experience, technical support, supply chain, product development or engineering services.

Location of the business services centers

Investor	Parent HQ country	Center type	Year of establishment	Employment	Profile of operations
HireRight		BPO	2004	401-500	Research and background screening services in recrtuitment process.
COIG		IT	1976	401-500	IT services focused on data processing, providing outsourcing of IT services bassed on own solutions, Data Center services.
Euvic		IT	2004	401-500	Providing integrated IT services in digital transformation field.
SGS Global Business Services Europe		SSC / GBS	2014	401-500	Support services for SGS group companies involving finance and accounting, contract and certification support.
Sii		IT	2014	401-500	IT services (including software development) for the banking sector, rail transportation, automotive sector, industry, automation and robotics.
Alight		BPO	2007	301-400	Providing payroll and HR related services.
Stats Perform		IT	2011	301-400	Providing IT related services, including software development, AI and data processing across media and tech in sports.
Teleperformance Polska		BPO	2014	301-400	Customer services.
TMF Group		BPO	2000	301-400	Providing customer support in fields of: finance and accounting, tax compliance, corporate administration, payroll and HR.
eSky.pl		Hybrid / Other model	2004	301-400	Providing IT services, including IT security and software development.
Accenture Advanced Technology Center		IT	2017	201-300	Services relating to information technology, including application support and development and system integration.
BPSC		IT	1988	201-300	Providing complex ERP solutions for businesses.
Diebold Nixdorf		IT	2011	201-300	Creation and development of software.
Eurofins		SSC/ GBS	2016	201-300	Finance and Accounting, global strategic procurement, group reporting and controlling, data analysis, recruitment and IT services.
ista Shared Services Polska		SSC / GBS	2006	201-300	Accounting services for ista Group companies. Development and administration of internal IT systems.
Rockwell Automation		SSC / GBS	2006	201-300	Providing Finance and Accounting services for Rockwell Automation group companies.

Investor	Parent HQ country	Center type	Year of establishment	Employment	Profile of operations
DAZN Media Poland		Hybrid / Other model	2011	201-300	Providing IT services in software and application development in sports streaming.
TÜV Rheinland		SSC / GBS	2018	201-300	Providing services for group companies in the fields of: finance and accounting, human resources and payroll, process automation and project management.
Arvato BPO Finance & Accounting		BPO	2018	100-200	Providing finance and accounting services for external clients.
EPAM		IT	2016	100-200	Providing IT related services in the field of software development, cloud computing, business analysis and data analytics.
JCommerce		IT	2005	100-200	Providing outsourcing services in IT.
Siemens EDA		SSC / GBS	2005	100-200	Providing support in finance and accounting related processes and IT support.
Alstom Power		R&D	2021	100-200	Providing services in IT, including system engineering, testing and database management.
Teleperformance Polska		BPO	2018	100-200	Providing customer support related services.
Knauf IT Services		IT	2017	100-200	Providing IT support services for Knauf Group companies.
ZETO Katowice		IT	1965	100-200	Providing iT services, including software development.
KLDiscovery Ontrack		Hybrid / Other model	2001	100-200	Providing software development services.
Scalo		IT	2004	100-200	Providing software development services.
Call Center Inter Galactica		BPO	2019	100-200	Providing customer support services.
ASTEK		IT	2016	100-200	Provider of IT services and outsourcing of IT specialists and engineering.
Barona		IT	2012	100-200	Providing staffing and recruitment services.
Sandvik Coromant		SSC / GBS	2020	100-200	Providing sales support, logistics and procurement services for group companies.
Guardian		SSC / GBS	2017	100-200	Providing finance and accounting, supply chain management and logistics and customer operations services for group companies.

Location of the business services centers

Investor	Parent HQ country	Center type	Year of establishment	Employment	Profile of operations
Saint-Gobain		SSC / GBS	2008	100-200	Providing finance and accounting and IT services for internal customers.
Hemmersbach Central Support		IT	2010	100-200	Providing IT related services.
Huawei		IT	2019	100-200	Providing IT related services.
Kotrak		IT	1990	100-200	Providing IT related services, including software development and ERP systems implementation and integration.
ArchiDoc		BPO	2021	100-200	Providing services of archiving, digitilizing and managing documents.
Oracle		IT	2012	100-200	Providing IT related services.
Sapiens International Corporation		IT	2016	100-200	Software development for insurance and financial services industry.
Simio		BPO	2012	100-200	Providing marketing and customer support services.
Soflab Technology		IT	2008	100-200	Providing IT services, including testing, business intelligence and process automation.
STS		SSC / GBS	2018	100-200	Providing application development services.
Hyland Software		R&D	2020	100-200	Research and Development services in development of cloud based solutions.
Ammega Business Services		SSC / GBS	2021	100-200	Providing services for group companies in the fields of: finance and accounting, supply chain managment and logistics and IT.

The table presents information on the centers that employ at least 100 people in Katowice at the end of Q1 2022. The employment range relates only to operations in Katowice (not in Poland overall).

Source: ABSL's elaboration, based on the ABSL database and other sources, incl. Internet websites

TABLE 5.2

EXAMPLES OF CENTERS OPERATING IN GZM, OUTSIDE KATOWICE

Investor	Parent HQ country	Center type	Year of establishment	Employment
ista Shared Services Polska		SSC / GBS	2006	501-1,000
Future Processing		IT	2000	501-1,000
ArcelorMittal Business Center of Excellence Poland (BCOE)		SSC / GBS	2008	501-1,000
Arteria CS		BPO	1999	501-1,000
ArchiDoc		BPO	1994	301-400
SAP Hybris		R&D	2007	301-400
WASKO		IT	1988	100-200
Boldare		IT	2004	100-200
Stellantis		SSC / GBS	2007	100-200
SoftServe		IT	2017	100-200
Sygnity		IT	1992	100-200
Tenneco		R&D	2001	100-200
Vattenfall IT Services		SSC / GBS	2011	100-200

The table presents information on the centers in GZM outside Katowice, with at least 100 people at the end of Q1 2022. The employment range relates only to operations within GZM outside Katowice.

Source: ABSL's elaboration, based on the ABSL database and other sources, incl. Internet websites

Photo: Przemysław Borsuk / Katowice City Hall

6 INVESTORS ABOUT THEMSELVES

Hyland

Hyland is a leading content services and intelligent automation solutions provider focused on helping organizations deliver a complete view of the information, where and when they need it. It's product portfolio serves as a content hub, to smartly surface information by connecting data and systems across the enterprise. By providing users with easy, secure access to complete information – anytime, anywhere, on any device – we enable digital transformation and facilitate more responsive, meaningful interactions.

Jeremy Nass,
R&D Country Manager at Hyland

In early 2020 we chose Katowice as the location for our first office in Poland. Our decision was based on many factors, with the most important being the highly skilled technology workforce in the region.

We expected to quickly grow our office into a major R&D center to accelerate our cloud-first product vision and technology development efforts. What we didn't expect at the time was to open a new office in parallel with a global pandemic, which dramatically impacted people's approach to work, and life in general. Regardless of these changes and challenges, we quickly built a team of talented individuals who have made a positive impact on our company goals, and more importantly, our Hyland culture.

Today we have over 125 employees, and plan to at least double in size over the next two years.

kyndryl

Kyndryl Customer Innovation Centre (CIC) in Katowice was one of the area's first international businesses, established in 2014. Today, the CIC is an integral component of Kyndryl's global network, employing 11K talented technical professionals across Central & Eastern Europe who are involved with designing, building, managing, and modernizing mission-critical technology systems and services for enterprise customers 24x7x365. The Centre provides end-to-end IT services, including network management, server systems operations, maintenance and monitoring of computer hardware and software for customers in Poland and around the world.

Zbigniew Traczyk,

Director of Kyndryl Global Services Delivery Centre Polska Sp. z o.o.

Our location in Katowice, the capital city of the Silesian region, is part of an urban metropolis area with more than 2.5 million. With its' academic background and due to its location, Silesian agglomeration is a place of highly skilled technically professionals. Kyndryl is proud to be a contributing community member of Katowice through a number of different local area initiatives that bring together business, government, academia and universities as well as research and new startup emerging organizations into a vibrant, intelligent and involved ecosystem of mutual interest in Poland's economic growth. At Kyndryl, we welcome professionals who are inspired by technology and the opportunities of the future and are interested in building new professional connections. Kyndryl is continuing to invest in the Customer Innovation Center Katowice and is hiring for new professionals, including Technical Specialists, Sellers, Architects and Consultants.

sdworx

Work is more fluid now, various employment types, flexible reward, flexible places to work, a stream of possibilities our clients have to harness and channel. Today's employees want to be in control of their careers, choose the way they work. They want Meaning. Purpose. A reason to live work well. They do not expect to be in one place forever. But they do expect to enjoy the feeling and conviction that what they do matters. Life and work are intertwined. That's why our people solutions are For Life and For Work.

Over 70 000 small and mid-size companies trusted SD Worx (and in our over 75 years of experience). We provide global HR and payroll solutions in 150 countries across the world and are taking care of pay slips for 4 millions employees. To underpin SD Worx's motto, international growth strategy and to support the global expansion of our customers with payroll and HR services, we have opened last year an operations center in Katowice – in one of the best office buildings in the City: .KTW.

Our new localization was created to follow our customers to ensure proximity and the delivery of flawless payroll services across Central Europe. The continued growth of Katowice, in terms of economy, infrastructure and life standard, plus the excellent skills on the labour market her created a perfect mix for our company.

Lalit Gupta,
Managing Director – Eastern Europe

We have started our journey in Katowice over a year ago and have been growing tremendously, not only with number of employees but also with our portfolio and services which we offer in Polish, HR and Payroll Market. We get an amazing support from KTW city office and different initiatives which we work together on. As a growing company here in the city and Poland, we are very excited on what waits in the future. One of the key factors for us is customer intimacy and delivering an excellent services hence we are keen to grow and work with new Polish and European companies within Poland.

Sopra Steria Group operates in 30 countries worldwide, and Poland is one of its the most strategic location. The service center of Katowice was created in 2007 to develop in the field of IT Infrastructure. Employees in Katowice center deliver IT services mainly in English, French, German but also in Spanish, Italian and Portuguese. Over the past 14 years, this project has proved to be a real success that has created a strong local delivery capacity with a quality of service recognized by many customers. In parallel to this success, an application services activity: programming and testing, was born within the center, serving internal needs and a handful of external customers in public and private sector.

Marzena Rybicka-Szudera,
Director of Global Delivery Center Sopra Steria Poland

As a result, the whole centers workforce overcomes the 1.100 employees delivering both Infra Services and Apps Services and constantly growing. We realize many ambitions projects including cloud services, data science, automation, cybersecurity – said Marzena Rybicka-Szudera, GDC Poland Director, in the company from the beginning of its existence. We are attracting interesting projects and hiring specialists with competences in cloud solutions, operational systems, data bases, applications support, Java, .Net and Service Now. Our strategy is to leverage on both activities as DevOps compliant service center, aiming to assist clients in their digital transformation. People are key to us. Sopra Steria is one of the top-performing companies in the market when it comes to diversity. We promote diversity that is a part of our DNA: we give opportunities not only for experienced specialists in top IT fields but also for young graduates. We hire over 60% of woman including on top managerial positions. We want to create a friendly workplace where we feel appreciated and constantly expand our competences. This is recognized by the awards we receive: Great place to work® and Forbes Poland's Best Employers 2022, which we get for the second time in a row. It is an honor for us and a motivation for further work.

7 THE LABOR MARKET

FIGURE 7.1
BASIC DEMOGRAPHIC INFORMATION ABOUT KATOWICE AND THE METROPOLIS

	KATOWICE	METROPOLIS
Population	290,600	2,229,800
Working age population	168,400	1,306,000
Working and mobile age population*	101,600	792,600

* Age range contained within the working age bracket and comprising persons (aged 18-44) who are able to move to a different position or place of work, or can re-train.

Source: Central Statistical Office (as on December 31, 2020)

FIGURE 7.2
NUMBER OF STUDENTS, GRADUATES AND UNIVERSITIES FOR KATOWICE AND THE METROPOLIS

	KATOWICE	METROPOLIS
Number of students	50,834	89,907
Number of graduates	12,410	22,002
Colleges and universities	11	19

Source: Prepared by ABSL on the basis of data received from the National Information Processing Institute at the National Research Institute

FIGURE 7.3
KATOWICE: STUDENTS BY SELECTED CATEGORIES OF STUDIES

	KATOWICE	METROPOLIS
Business and Administration	4,862	14,806
Information and Communications Technology (ICT)	5,204	13,846
Languages*	5,987	6,993
Technical and Engineering	640	7,331

* Foreign philology studies: English; Arab; Belarusian; Chinese; German; French; Spanish; Italian; Russian.

Source: Prepared by ABSL on the basis of data received from the National Information Processing Institute at the National Research Institute

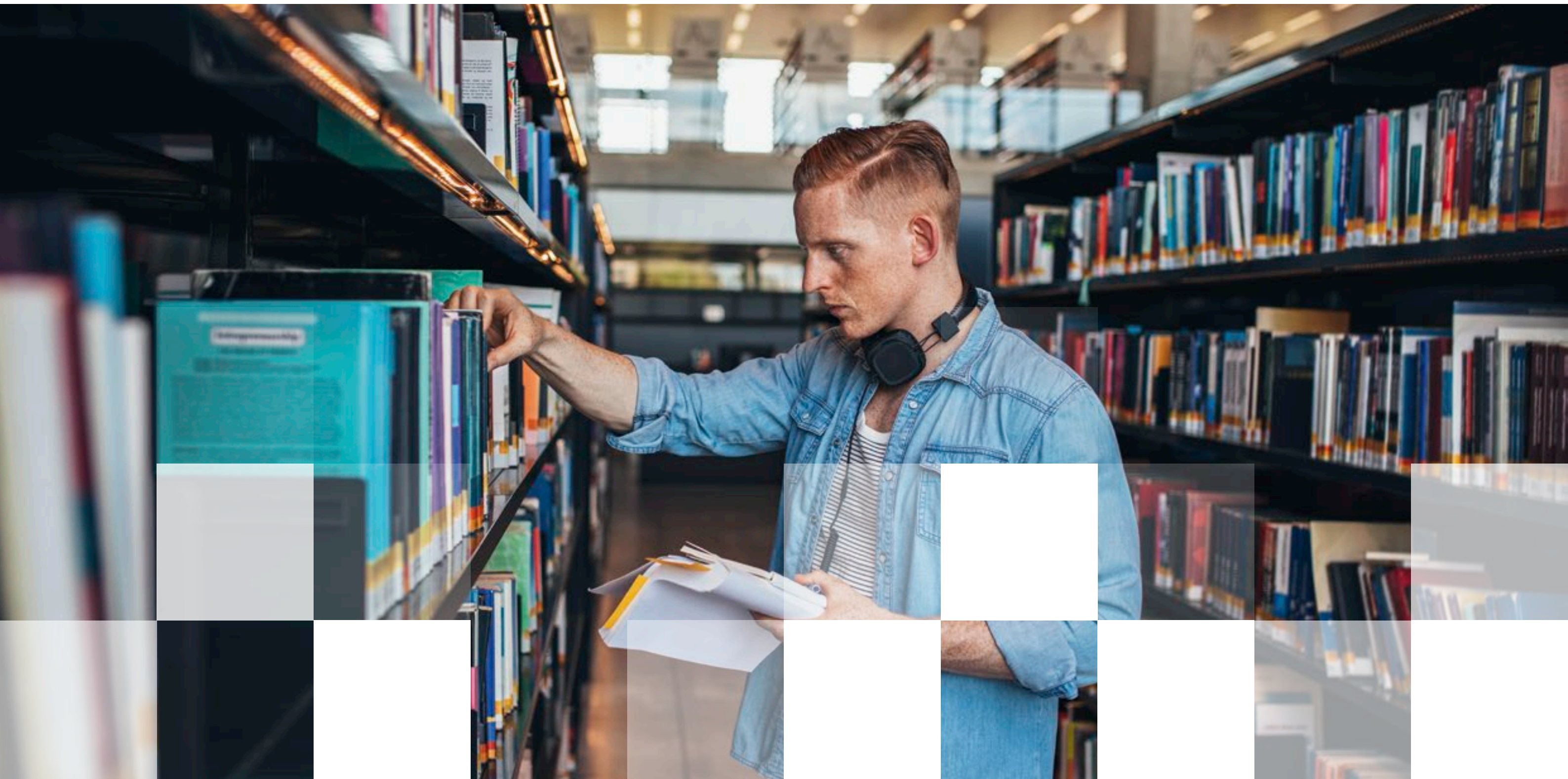


FIGURE 7.4

PAY INCREASE IN SELECTED CATEGORIES OF SERVICES

The specification of pay increases was drawn up on the basis of analysis of remunaration offered in recruitment processes in the business services centers in the following areas: Finance (GL, AP, AR); Customer Service, Procurement, HR, IT (Network Support), R&D carried out by Randstad and Randstad Sourceright. The comparison covers data for 2018-2021.

	Human Resources	IT	R&D	Finance	Customer Service	Procurement
2021/2019	20%	17%	17%	15%	12%	7%
2019/2018	10%	6%	4%	10%	4%	3%

Source: Randstad data based on completed projects

FIGURE 7.5

LANGUAGE BONUSES PER MONTH IN EUR GROSS

	Danish	Norwegian	Swedish	Dutch	German
Min.	350 EUR	350 EUR	350 EUR	250 EUR	180 EUR
Max.	420 EUR	420 EUR	420 EUR	400 EUR	300 EUR

	French	Hungarian	Italian	Portuguese	Czech
Min.	180 EUR	180 EUR	180 EUR	180 EUR	150 EUR
Max.	300 EUR	220 EUR	220 EUR	220 EUR	180 EUR

	Slovak	Spanish	Russian
Min.	150 EUR	150 EUR	130 EUR
Max.	180 EUR	180 EUR	150 EUR

Source: Randstad data based on completed projects and expectations of candidates in Silesian region

TABLE 7.1

GROSS MONTHLY SALARY (IN PLN) AT BPO, SSC / GBS, IT, R&D CENTERS FOR EMPLOYEES WHO SPEAK ENGLISH

F&A: GL	Min	Opt	Max
Junior Accountant (1-2 years' experience)	5,500	6,500	7,500
Accountant (2-3 years' experience)	6,500	7,500	8,000
Senior Accountant (over 3 years' experience)	7,500	9,000	10,000
Team Leader (team of 5-15 people)	10,000	12,000	14,000
Manager (team of up to 50 people)	13,000	17,000	20,000
F&A: AP / AR	**Min**	**Opt**	**Max**
Junior Accountant (1-2 years' experience)	5,000	6,000	7,000
Accountant (2-3 years' experience)	5,500	6,500	7,500
Senior Accountant (over 3 years' experience)	7,000	8,000	9,000
Team Leader (team of 5-15 people)	9,500	11,000	13,500
Manager (team of up to 50 people)	12,000	16,000	19,000
F&A: FP&A	**Min**	**Opt**	**Max**
FP&A Analyst (2-3 years' experience)	6,500	8,000	9,000
Senior FP&A Analyst (over 3 years' experience)	8,000	9,500	11,000
Team Leader (team of 5-15 people)	9,500	12,000	14,000
Manager (team of up to 50 people)	13,000	17,000	20,000
Customer Service	**Min**	**Opt**	**Max**
Junior Specialist (no experience)	4,000	5,000	6,500
Specialist (over 1 year's experience)	5,000	6,500	8,000
Team Leader (team of 5-15 people)	8,000	9,500	12,000
Manager (team of up to 50 people)	12,000	14,000	17,000
Procurement / Order Management	**Min**	**Opt**	**Max**
Junior Specialist (up to 1 year's experience)	4,500	5,500	6,500
Specialist (1-3 years' experience)	5,500	6,500	8,000
Senior Specialist (over 3 years' experience)	7,500	9,000	12,000
Team Leader (team of 5-15 people)	9,500	12,000	15,000
Manager (team of up to 50 people)	11,000	15,000	20,000

HR processes	Min	Opt	Max
Junior Specialist (up to 1 year's experience)	4,500	5,500	6,500
Specialist (1-2 years' experience)	5,000	6,000	7,000
Senior Specialist (over 2 years' experience)	6,000	8,000	8,500
Junior Payroll Specialist (up to 1 year's experience)	4,500	5,500	6,500
Payroll Specialist (1-3 years' experience)	5,500	6,500	7,500
Senior Payroll Specialist (over 3 years' experience)	7,000	8,500	10,000
Team Leader (team of 5-15 people)	9,500	12,000	14,000
Manager (team of up to 50 people)	11,000	15,000	20,000

IT	Min	Opt	Max
1st Line Support (2 years' experience)	6,000	7,000	8,000
2nd Line Support (2 years' experience)	7,500	9,000	10,000
3rd Line Support (2 years' experience)	8,000	9,000	12,000
IT Administration (3 years' experience)	8,000	10,000	14,000
Network / Security (3 years' experience)	9,000	11,000	16,000
Business / System Analyst (3 years' experience)	7,500	12,000	14,000
Developer (3 years' experience)	12,000	16,000	20,000
Tester (3 years' experience)	8,000	11,000	15,000
Team Leader (team of 5-15 people)	10,000	12,500	15,000
Project Manager (team of up to 50 people)	12,000	16,000	20,000
Data Science Engineer	12,000	15,000	17,000
Cloud Developer	14,000	20,000	27,000
DevOps Engineer	12,000	15,000	20,000

R&D	Min	Opt	Max
Technologist (over 2 years' experience)	6,000	7,500	9,000
Design Engineer (2-4 years' experience)	6,000	7,500	9,000
Product Development / NPI Engineer (2-4 years' experience)	6,000	7,000	8,500
Quality Engineer (2-4 years' experience)	6,000	8,000	10,000
R&D Manager (team of up to 50 people)	15,000	18,000	21,000

Source: Randstad data based on completed projects and expectations of candidates in Silesian region

FIGURE 7.6

AVAILABILITY OF TECH TALENT IN KATOWICE

Talent pool size (supply) describes availability of candidates in Katowice catchment area. Demand category indicates number of job offers for a provided skillset published online in 04-05/2022. Recruitability shows the level of difficulty in recruitment of indicated volumes of candidates.

Skill	Talent pool size (supply)	Demand	Recrutability within 3 months		
			5	10	20
Java Developer	medium	high			
.net	high	medium			
Phyton	high	low			
Data engineering	medium	high			
Workday	low	low			
SAP	low	high			
Data science	medium	medium			
Cloud	medium	high			
Automation / RPA	low	low			
Machine learning	low	medium			
C++	high	medium			

	Talent pool size (supply)	Demand
low	0-1,000	0-200
medium	1,001-2,000	201-1,000
high	2,001-up	1,001-up

Talent recruited easily

Somewhat difficult

Difficult

Source: Randstad database and social media

8 THE OFFICE MARKET

FIGURE 8.1
OFFICE MARKET INDICATORS Q1 2022

		Forecast for 2022
Total modern supply	715,000 sq m	↗
Vacancy rate	19.8%	↗
New supply	116,500 sq m	↘
Office demand	29,400 sq m	↗
Flex space supply	12,500 sq m	↗
Office space under construction	86,400 sq m	↘
Prime asking rents (EUR / sq m / month)	EUR 13.00-16.95	→

Source: Colliers

The total office stock in Katowice at the end of Q1 2022 amounted to 715,000 sq m. Since the beginning of the current year the existing modern office space has increased by 19%. Growth in supply in the local market is cyclical – usually after years with a lot of new openings, there is a reduction in the activity of developers allowing the absorption of existing office space. As for comparison – in 2021, developers have delivered only 13,500 sq m of new office space.

In the Q1 2022 there were five office projects delivered to the market with the record new supply of 116,500 sq m. Among the new projects there are two largest office projects in history of the local market – Global Office Park complex consisting of two office towers (55,200 sq m) and .KTW II – the tallest office building in the entire Górnośląsko-Zagłębiowska Metropolis.

Existing office buildings are clustered around the main traffic arteries, such as Chorzowska street, Korfantego avenue and Murckowska street and Górnośląska and Roździeńskiego avenues. The skyline of the city changed a lot due to recent completion of high-rise buildings.

In April 2022, approximately 86,400 sq m of office space has been at the construction stage with scheduled completion date for 2022-2024. Local and international developers such as Ghelamco, GPP, Opal Maksimum and Trigranit continue development projects that will be completed gradually in coming years.

The demand registered in the first three months of 2022 accounts for 29,400 sq m which constitutes 55% of the annual demand from 2021. New contracts dominated the take-up and reach for as much as 92% of it, 8% constituted renewals.

The average transaction volume amounted to 2,700 sq m and is 2/3 higher than in 2021. The largest deals signed in 2022 include the new transaction of PwC relocating to .KTW II (12,900 sq m) and new contract of Keywords Studios in Global Office Park A1 (9,300 sq m).

The flex office space supply grows dynamically in Katowice. The Q1 2022 has brought increase to 12,500 sq m with a signed transaction of RISE in .KTW II.

Vacancy rate rises as the market will need time to absorb the wave of new office deliveries. The tenants will move to some of the buildings with recently granted usage permit in the end of the current year. The vacancy rate amounted 19.8% in the end of Q1 2022, which translates into over 140,000 sq m of available space.

Rental rates in the city's best buildings in modern A-class projects have increased with delivery of new high-rise projects. In central zone they reach the level of EUR 13.00 to 16.95 sq m / month and EUR 10.00 to 13.00 sq m / month in non-central zones.

9 | DETERMINANTS OF LOCATION ATTRACTIVENESS

Investment attractiveness can be investigated from various perspectives. The investor's preferences impact the assessment of a specific location, on top of the nature of the activity carried out by the shared services center and the structure of the entity's motives. It is advisable to confront the potential and actual attractiveness (measured by the scale of the current activity or the dynamics of new investments). Analyses of investment attractiveness are a kind of beauty contest, a mirror in which everyone can and wants to look at themselves and compare their position with competitors. They are part of a broader discussion on competitiveness and competing. Cities compete for investors; their activity contributes to the competitiveness of those cities. Several subjective and objective factors determine the location of centers. A review of the literature, including both the theoretical and (above all) empirical layers, as well as discussions among experts, allow us to identify the following stylized facts:

- a higher level of spatial characterizes centers of knowledge-intensive business services concentration than other business services,
- urban locations are preferred, especially in major cities, according to the hierarchical system, especially capital cities (Deza & López, 2014),
- cities are also preferred due to the external effects of urbanization, including the benefits of the so-called co-location (investors locating their sites in the immediate vicinity) (Muller & Doloreux, 2009),
- companies benefit from the "monitoring advantage", being closer to competitors to observe them and transfer tacit knowledge through direct interactions (neighborhood of other corporations' headquarters),
- the availability of a diverse and deep market of services is essential to enabling people to get to the specialists they need faster and cheaper (Davis & Henderson, 2008),
- reallocation of the key center of a given corporation to a smaller urban center is unlikely; it is more likely in the case of an entity optimizing its employment costs, especially those realizing the most straightforward business processes,
- the possibility to lease office space of an appropriate standard is of paramount importance,
- centers prefer locations that allow them to take advantage of the benefits of urbanization, including abundant restaurant facilities and a rich nightlife. The prestige factors of the location build the reputation of the center as well as the overall image of a particular neighborhood play a significant role (Yamamura & Goto, 2018),
- wage costs, availability of a pool of college-educated individuals, and corporate tax rates are key (Falk, 2012),
- there is the effect of geographical proximity; according to the law of gravity, locations close to the border with the country where the leading investors come from are preferred. Not only geographical proximity or immediate neighborhood is essential, but also cultural, legal, institutional, and linguistic community,
- the overall knowledge potential represented by the region's talent pool (human capital resources) is of great importance for location and predestines powerful academic centers,
- proximity to a major airport, a hub of international importance, with a dense network of air links, including transcontinental to major global air hubs is of great importance for the choice of location (Strauss-Kahn & Vives, 2009),
- agglomeration effect (Kumar, 2001) reinforces the imitation effect.

Photo: Jeremi Astaszow / Katowice City Hall

10 | POSITION OF KATOWICE & GZM IN ABSL'S LOCATIONS' ATTRACTIVENESS RANKING

A part of the ABSL annual survey is devoted to assessing factors that impact the attractiveness of doing business in particular locations in Poland. This subjective assessment is performed by managers of the companies taking part in the survey.

In the case of companies in Poland operating more than one center, the three centers where they employ the most significant number of people were assessed. We obtained information from respondents from 17 Polish cities. As in previous years, given the need to analyze a sufficiently large number of responses, we examined the seven cities for which we obtained an adequate number of observations allowing us to perform the analysis: Warsaw, Wrocław, Kraków, Poznań, Tri-City, Katowice & GZM, and Łódź. As a result, we have received 220 responses concerning these cities. Compared with the previous annual assessment, three new categories of attractiveness assessment were added: availability of flex/coworking office space, quality of the local natural environment, and location of office premises relative to the city center (attractive place in the city center). We applied a Likert scale, which enabled us to present a more comprehensive assessment of individual cities.

The responses given by the respondents took values according to the Likert scale:

+2 extremely satisfied,

+1 very satisfied,

0 somewhat satisfied,

-1 not very satisfied,

-2 not at all satisfied.

Thus, the total variability of the ratings took values from -2 to +2. Location-specific index values were calculated using the arithmetic mean, assigning equal weight to each manager's rating. Thus, no employment size weighting was applied, favoring managers of the largest entities.

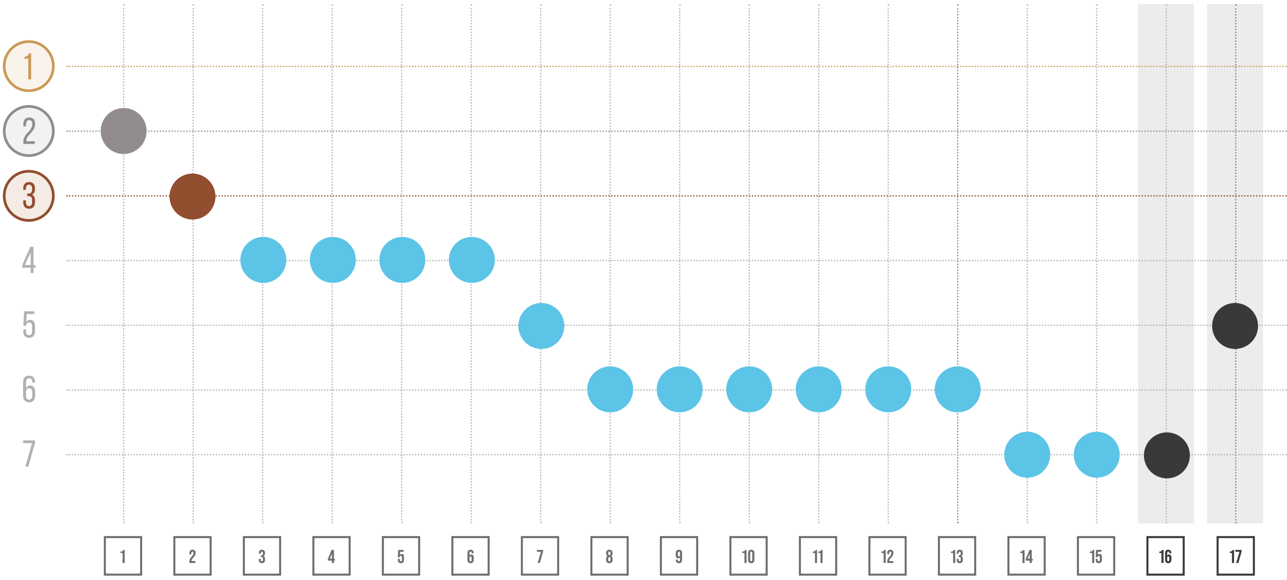
In the 2022 ABSL ranking, in one of the categories assessed, Katowice & GZM took the 2nd position (cooperation with local universities). As far as the wages level is concerned, it is placed in the 3rd position. In the case of four categories (city accessibility by road, city accessibility by train, cooperation with a local investor support office, and the cost of renting office space), Katowice & GZM rank 4. In contrast, in terms of city accessibility by the airport, the location ranks 5. In the remaining categories, the ranks are 6 and 7.

As pointed out by the survey respondents, in 2022, ABSL's subjective ranking Katowice & GZM take the 5th position in the category "overall assessment of a location as a place of doing business." This position of a city ranking reflects the opinion of the managers.

In this year's edition of the subjective ranking, we have introduced an additional overall scoring. It has been elaborated by ABSL and averages the scores of particular locations in all the assessment categories, except "overall position in the subjective ranking by managers." This alternative approach enables handling the situation in which a particular city ranks low in most attractiveness assessment categories while obtaining high scores in the overall position. In this alternative approach, Katowice & GZM take the 7th position.

FIGURE 10.1

POSITION OF KATOWICE & GZM IN THE INDIVIDUAL CATEGORIES OF THE SUBJECTIVE ABSL 2022 RANKING



1	Cooperation with local universities
2	The level of wages in the location
3	City accessibility by road
4	City accessibility by train
5	Cooperation with a local investor support office
6	The cost of renting office space
7	City accessibility by airport
8	Availability of talent pool / highly qualified staff
9	Quality of public transport in the city
10	Perception of the general quality of life
11	Availability of modern office space
12	Quality of the local natural environment
13	Location of office premises relative to the city center (attractive location in the city center)
14	Quality of local universities
15	Availability of flex/coworking office space
16	**The overall position in the ranking based on the above**
17	**The overall position in the subjective ranking by managers**

Source: ABSL's study is based on the ABSL 2022 survey

The information presented reflects the opinions of the representatives of centers, and is subjective, deriving from many factors such as, e.g., the type of business conducted, preferences of the parent company, and perceptions of the importance of agglomeration benefits. Therefore, it is worth emphasizing that a given position in the ranking does not necessarily reflect the actual situation of the subject matter under analysis. Furthermore, the results may also be tied to the geographic distribution of the respondents' locations .

In 2021, ABSL published "*Investment potential of Polish cities. Location benchmark of the business services sector"*. The report includes the objective ranking of the attractiveness of cities, which is based on statistical analysis. The ranking considered several characteristics of a given category to objectively assess the location's positions in ABSL "City Attractiveness Matrix"©. The objective ranking includes over 15 urban centers. It shall be underlined that scores in the 2021 objective ranking shall not be directly comparable with those in the 2022 subjective ranking. They include a different number of locations and a different number of sub-categories.

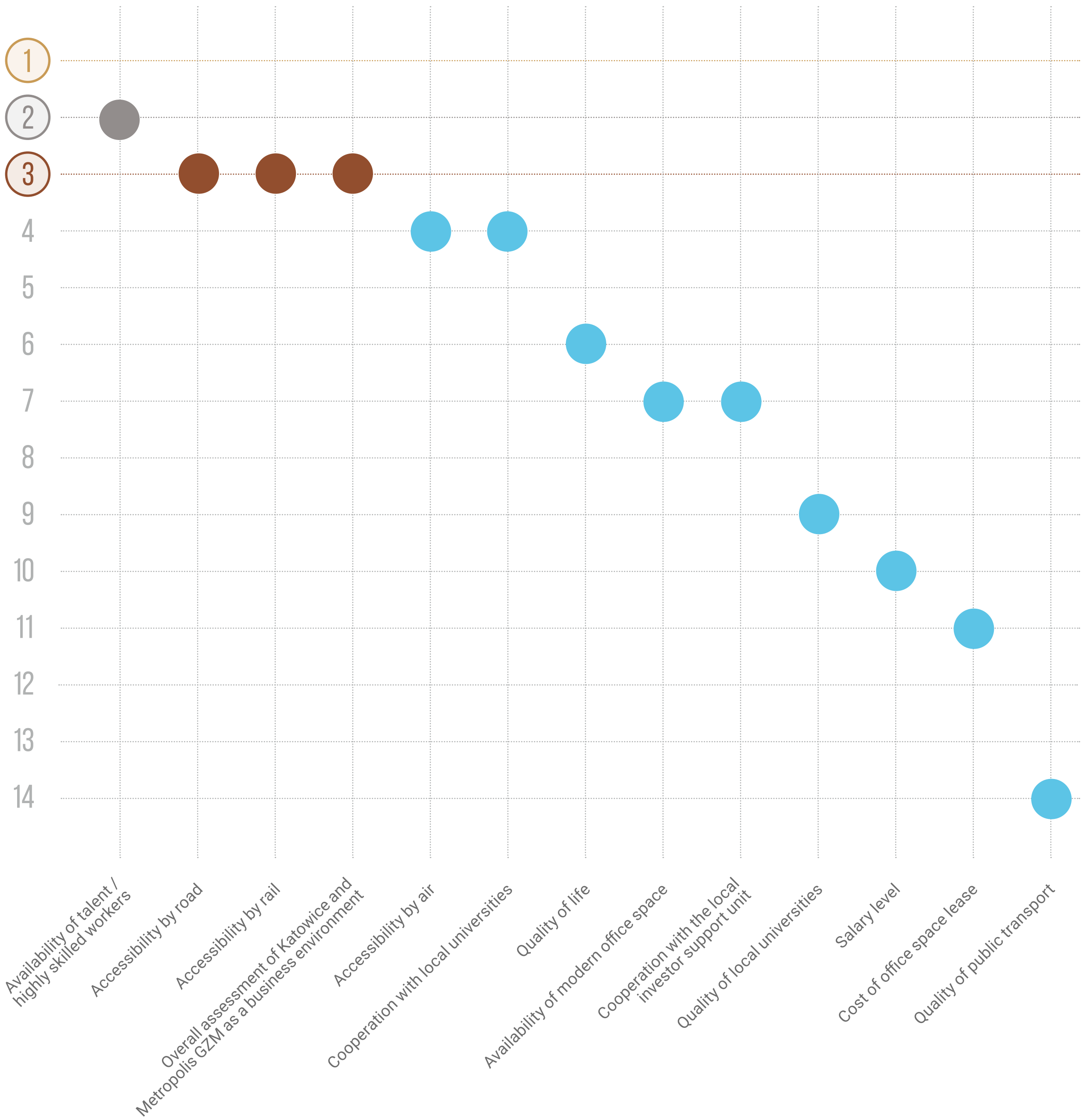
A multivariate linear ordering analysis based on Hellwig's economic development index (Hellwig 1968), derived from taxonomy and linear ordering using the TOPSIS index (Hwang & Yoon 1981), was used to construct an objective ranking used. The categories included in the ranking were determined based on a review of location theory and empirical research concerning investors' location preferences and discussions among experts-practitioners who accompany investors in making decisions about choosing places to do business in Poland and other countries. Weights were used, which makes it possible to differentiate the strength of influence of particular categories (and features within a category) on the resulting ranking. It was assumed that it is possible to determine the preferences of the so-called average investor. In the practice of making location decisions, the preferences of individual investors differ, just as opinions on the location of already conducted business differ.

Differences between objective and subjective rankings may indicate:

- » idiosyncratic perception of managers regarding the importance of individual factors in choosing the location of business. For example, managers could determine the weights assigned to the categories included in the ranking in a different way
- » different understanding of the determinants of business location
- » being guided by their subjective evaluation of individual parameters
- » consequences of the way and intensity of promotion of particular locations.

FIGURE 10.2

POSITION OF KATOWICE & GZM IN THE INDIVIDUAL CATEGORIES OF THE OBJECTIVE ABSL 2021 RANKING



Source: ABSL (2021) Investment potential of Polish cities. Location benchmark of the business services sector, Warszawa

Photo: Jeremi Astaszow/Katowice City Hall

11 | SUMMARY, COMPARATIVE ADVANTAGES OF KATOWICE & GZM

CLASSIFICATION OF CITIES AND AGGLOMERATIONS ACCORDING TO ABSL

Tier 1	Kraków, Warsaw and Wrocław
Tier 2	Tri-City, Katowice & GZM, Łódź, Poznań
Tier 3	Bydgoszcz, Lublin, Rzeszów, Szczecin
Tier 4	Białystok, Opole, Olsztyn, Radom, Kielce, Tarnów, Elbląg, Płock, Rybnik and others

Comparative advantage is the ability to produce a product at a relatively lower cost or produce a relatively greater amount from a given factor resource than competitors. Specialization in production and exports – consistent with the logic of comparative advantage – is beneficial.

Katowice & GZM's comparative advantages predisposing it to occupy a key position in the sector are:

›› metropolitan/agglomeration status, which translates into the high talent pool availability,
›› cooperation with local universities,
›› the level of wages,
›› city accessibility of road and by train,
›› cooperation with a local investor support office,
›› cost of renting office space.

The actual attractiveness of a specific location may be indicated by the number of existing centers (current situation), the number of new centers (increase), the number of people employed at the centers in a particular location (current situation), or the change of that number. Regarding the number of services centers at the end of Q1 2022, the first place is held by Warsaw (330 units). Urban centers with 100 or more centers also include Kraków (261), Wrocław (208), Tri-City (184), Katowice & GZM (126), Poznań (25) and Łódź (101). Katowice & GZM are one of the locations where, like in Warsaw, Tri-City, and Łódź, the most significant number of new centers appeared in 2021 and until the end of Q1 2022.

Katowice & GZM are among Poland's five most important hubs of business services centers. From 2017 until Q1 2022, the employment growth rate at centers in Katowice & GZM was 68% (5 p.p. higher than the overall rate for Poland). It indicates that the actual attractiveness of Katowice & GZM has increased. In Q1 2022, the share of Katowice & GZM in the overall employment in the sector is 7.4%. Employment in Q1 2022 equals 29,700; since 2017, the number of jobs created has been 12,000.

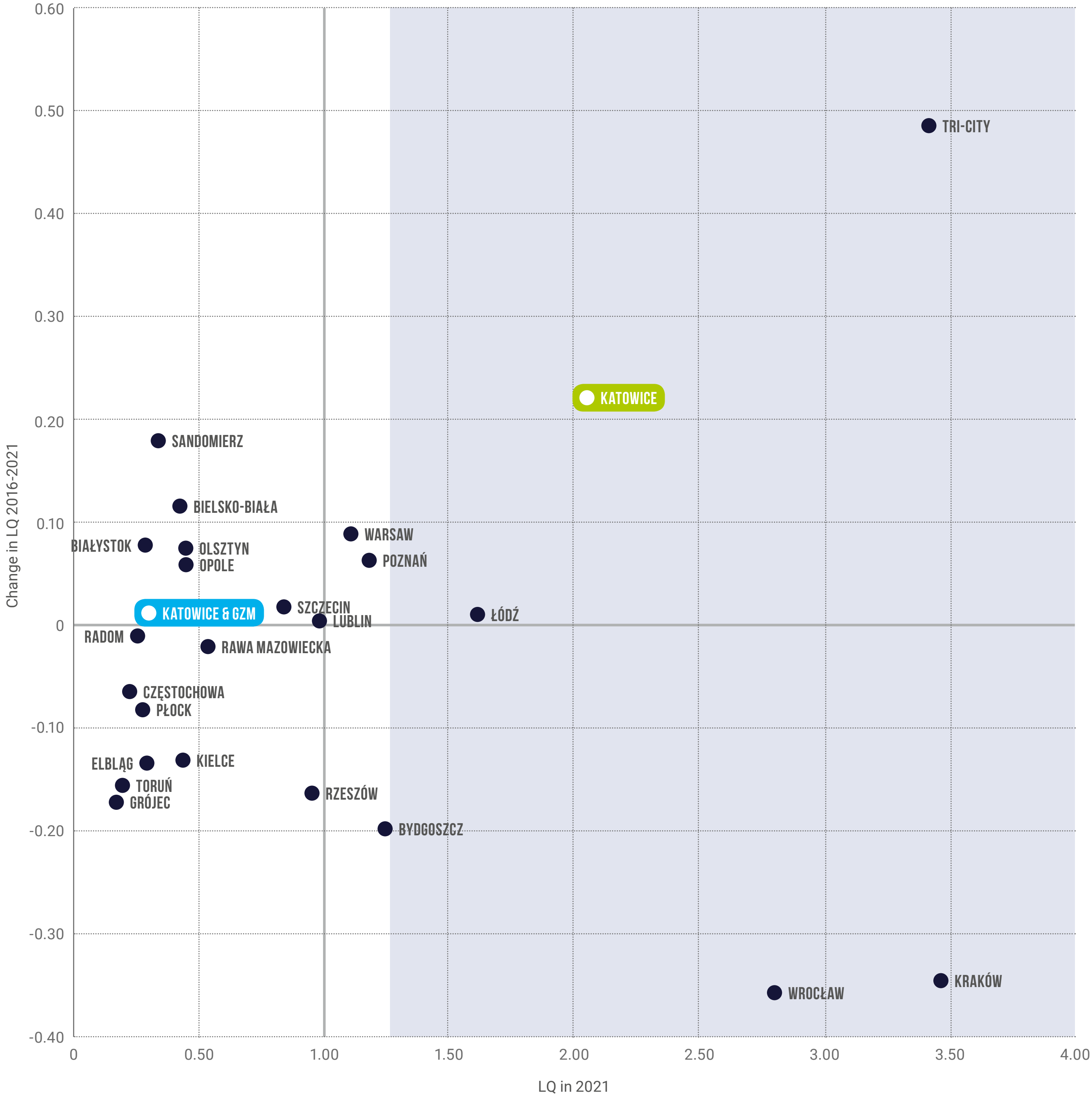
Katowice is the leader within the GZM agglomeration. This is proved both by the number of centers and by headcount. According to the logic of regional development and agglomeration processes, Katowice is a part of a large agglomeration that has a distinctly positive impact on the city’s attractiveness. It affects, for instance, the availability of the talent pool, but it also brings about many positive effects caused by the interactions of many people within the agglomeration. In the long-term perspective, the increasing cooperation of the cities within the Metropolis will further improve the location’s attractiveness. Attractiveness will also increase due to the improving condition of the natural environment in Silesia and the progress of transformations in the mining industry.

A look into the location quotient (LQ) index depicts the position of the KIBS sector in Katowice & GZM. LQ for Katowice & GZM is 0.30, while it is much higher (2.03) and increasing for Katowice itself. It reveals that the KIBS sector is growing faster in Katowice than other sectors of the economy. The location index LQ was calculated based on the number of employees. Its position in the upper right quadrant indicates Katowice's strong and still growing specialization, in contrast to other Tier 1 and Tier 2 centers.

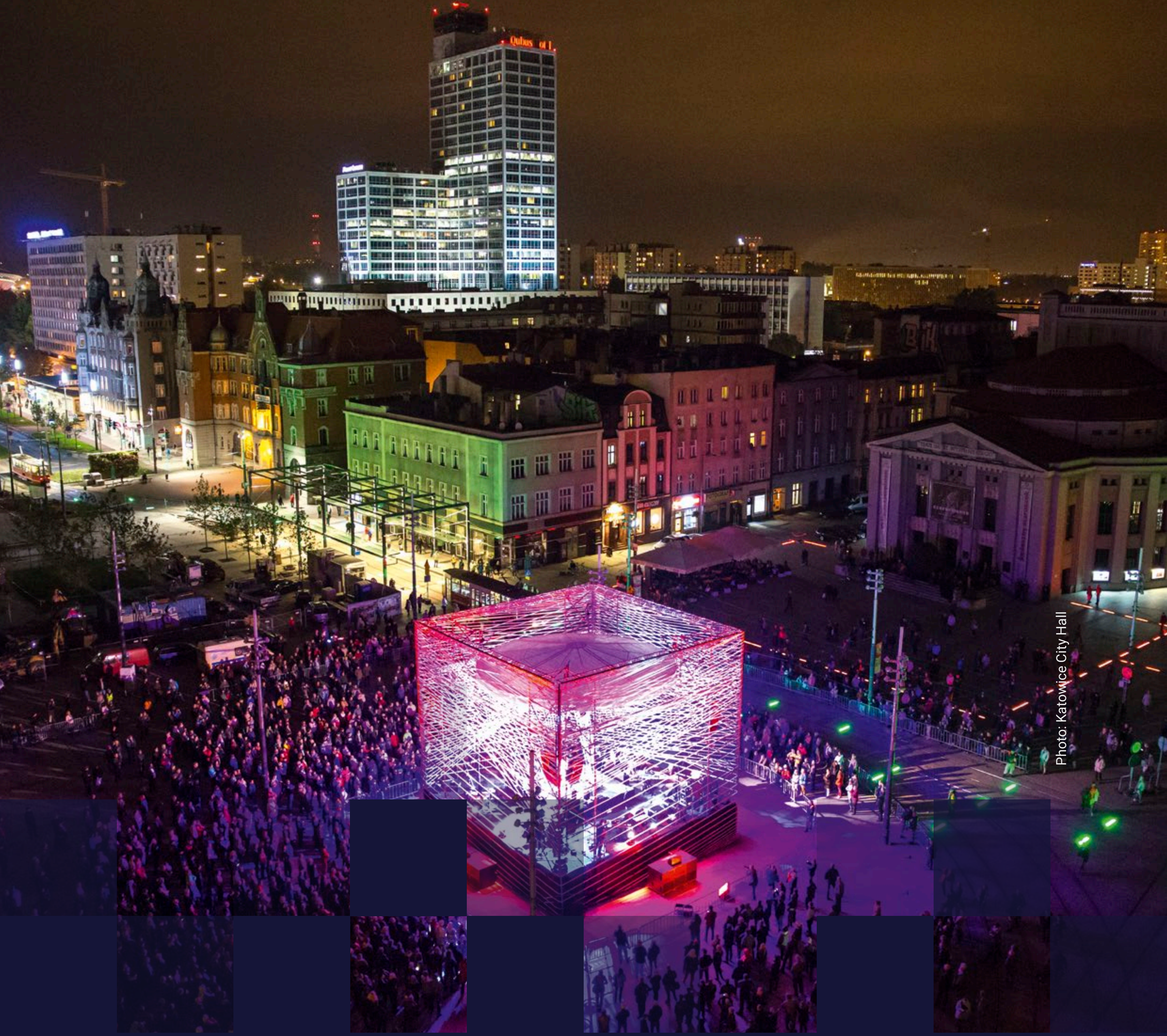
$$LQ = \frac{\dfrac{\text{headcount at business services centers in a given location}}{\text{employment in a given location}}}{\dfrac{\text{total headcount at business services centers in all locations under analysis}}{\text{employment at all locations under analysis}}}$$

FIGURE 11.1

LOCATION QUOTIENT FOR THE BUSINESS SERVICES SECTOR IN 2021 AND ITS CHANGES IN RELATION TO 2016



Source: ABSL's study is based on the ABSL database & Statistics Poland BDL database



12 | QUALITY OF LIFE AND BUSINESS FACILITIES

FIGURE 12.1

SELECTED INFORMATION ON CULTURAL FACILITIES AND HOTEL AND CONFERENCE FACILITIES IN KATOWICE

7
Cinemas

50
Cinema screens

8
Museums (incl. branches)

4
Theaters

12
Art galleries

35
Mass events

17
Properties with conference facilities

26
Hotels

Photo: Radosław Kazimierczak / Katowice City Hall

Source: ABSL own study based on: GUS (2021), Booking.com (2022)

KATOWICE – EUROPEAN CITY OF SCIENCE 2024

CITY OF KATOWICE HOSTS 11TH SESSION OF THE WORLD URBAN FORUM (WUF)

1ST PLACE

in the Forbes Ranking for the most ecological city in Poland (2018-2019).

1ST PLACE

for activities for air quality in the „Europolis" report: Green cities, Polish cities for the climate, environment and residents health.

2ND PLACE

in the „Electromobility Cities Ranking" prepared by Polityka Insight in cooperation with the Electric Vehicles Promotion Foundation. Katowice was also appreciated for public transport and clean air.

2ND PLACE

in Green Cities Ranking in „Europolis" report: Green cities, Polish cities for the climate, environment and residents health.

Katowice was among the winners of the jubilee edition of the prestigious „Top Municipal Investments of the Decade" plebiscite – the Culture Zone was awarded. Additionally, in this year's edition of the competition, the project of swimming pools construction located in districs was awarded

Over 183,3 km

Bike paths.

82 sq km

Green areas.

Source: Katowice City Hall

THE MOST IMPORTANT INFRASTRUCTURE PROJECTS IN KATOWICE CURRENTLY UNDER CONSTRUCTION

Key investments in active urban mobility and sustainable transport

- Development of environmentally friendly urban transport and urban bicycle network: 20 electric buses; 177 charging points for electric cars (68 stations); City by bike – 107 bike stations with over 866 bikes, over 183 km of cycle infrastructure.
- Cycling infrastructure in Katowice – continuation of the development of the basic cycling infrastructure network; planned expenditure – PLN 38.1m.
- Extension of national road 81 from the A4 motorway junction with national road 86 to the constructed junction with Armii Krajowej Street – Stage I (completion); planned expenditure – PLN 334.1m.
- Building a new tram line along Grundmann Street – the first new tram line in Katowice in 75 years – an investment by Tramwaje Śląskie; planned expenditure – PLN 39.7m.

Revitalisation and development of business infrastructure

- „Dzielnica Nowych Technologii – Katowice Gaming and Technology HUB" – the investment is located on the site of a decommissioned mine, in the Nikiszowiec district. It will bring together entrepreneurs from the computer games industry, e-sport, creative sector and related technology companies. Apart from the necessary infrastructure, recreational, exhibition and event areas with catering are planned. In February 2022, a competition to develop an architectural and urban design concept for the first stage of the investment was completed. The winner will develop a project for the adaptation and revitalisation of the existing buildings together with the development of adjacent areas and answers to the transport issues of the area; the planned expenditure for the development of project documentation – PLN 14.3m.

Attractive leisure activities

- Building of a sports complex in Asnyka Street – football and athletics stadium, baseball, handball and basketball court, two beach volleyball courts and a street workout area; planned expenditure – PLN 42m.
- Building of a city stadium in Katowice with a sports hall, 2 training grounds, a car park and road infrastructure (continued); planned outlay – PLN 248.9m.
- Jerzy Kukuczka Himalayan Centre – the planned functions of the facility are exhibition, recreation and museum related. In December 2021, a competition for the development of an architectural and urban concept was completed; the winner will develop project documentation; the planned expenditure for the development of project documentation – PLN 2.4m.
- Katowice Music Education Centre „Kilar's House" – the planned function of the building is, among others, a presentation of Wojciech Kilar's work, music education, multimedia exhibition; planned expenditure – PLN 10.2m.

Green city

- Building and modernisation of city parks in Katowice – revitalisation and extension of a park in Wełnowiec, construction of a park in Leopolda/Le Ronda Street, modernisation of a park in the Ślepiotka river valley, construction of a park in Wantuły Street, and recreational and leisure development of the area around the Starganiec pond. It is planned, among other things, to create educational zones, to maintain zones of high natural value for the protection of natural animal habitats, and to provide proper rainwater retention; planned expenditure – PLN 44.8m.
- Greening of Warszawska Street in Katowice – restoration of greenery in the city centre and creation of a more pedestrian and cyclist friendly space; planned expenditure – PLN 12m.
- Building of the „Katowice Valley of the 5 Ponds in Szopienice" – as part of the investment, the following facilities will be created: swimming pools with back-up facilities, a promenade, a water connection between the Morawa and Borki ponds, bicycle paths, a skating route, resting places; planned expenditure on drawing up project documentation – PLN 2.8m.


Photo: Rafał Klimkiewicz / Katowice City Hall

INVESTORS SUPPORT

Exemption from corporate income tax (CIT)

The Katowice Special Economic Zone, the largest such zone in Poland in terms of investment value and employment, is an appropriate solution for businesses wishing to utilize public assistance in the form of CIT exemption, calculated on the basis of investment outlays incurred or new jobs created.

Real estate tax exemption

Katowice City Hall offers real estate tax exemptions as part of *de minimis* assistance, as well as real estate tax exemptions as part of regional investment assistance.

Moreover, a resolution of the Katowice City Council is in force in the city of Katowice, which provides real estate tax exemptions on buildings and parts thereof built before 1945 within the city of Katowice, whose facades have been renovated. The resolution is addressed to both natural persons and entities conducting business activity.

Adjustments to public transportation

In Katowice, there is an option for providing additional bus stops (or bus connections) for the future passengers of a strategic investment.

Services of the Poviat Labor Office

We offer the following forms of support to investors creating new jobs: internships, subsidized jobs, reimbursement of the costs of equipping or upgrading work stations, individual training, grants for creating teleworking stations, reimbursement to employers of expenses incurred for social security contributions for the unemployed aged 30 and under, who are starting their first job. Costs are covered by the Poviat Labor Office.

Marketing support

Katowice offers assistance in organizing a marketing campaign about investments in Katowice using city advertising media, such as outdoor, social media and press advertisements. The city of Katowice offers support in organizing press conferences by making conference spaces available, inviting members of the media and distributing promotional materials.

Networking

Katowice supports connecting companies from the business services sector with the start-up sector by organizing joint events, conferences among others at the Rawa.Ink City Business Incubator.

Investors Assistance Department Katowice City Hall

- Serving domestic and foreign investors, supporting investment projects and providing post-investment assistance.
- Assisting with procedures related to investing in the city of Katowice and selecting appropriate locations for investments, providing information on investment conditions, advising investors (among other things, preparing detailed information about available staff, costs, quality of infrastructure, and nationwide macroeconomic indicators).
- Working to attract investors to Katowice in cooperation with: The Polish Investment and Trade Agency (PAIH), the Katowice Special Economic Zone, the Silesian Investor and Exporter Assistance Center, Metropolis GZM, Polish and foreign chambers of commerce and industry, advisory firms, and other institutions acting as intermediaries in serving investors.
- Organizing information-gathering visits and creating new forms of cooperation with businesses.

Investors Assistance Department Katowice City Hall

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