CEE INVESTMENT REPORT 2018

NEW FRONTIERS OF GROWTH

CBRE 大成 DENTONS pwc SKANSKA

ABOUT THIS REPORT

The CEE Investment Report covers the key economic and business trends which influence the office markets in five countries: Poland, the Czech Republic, Slovakia, Hungary and Romania. The 2018 edition of the report, titled “New Frontiers of Growth”, concentrates on emerging economic tendencies which will shape economic growth and the office markets in the future. While the competitive advantages and strengths of the CEE region are well known to investors, this report sheds light on the factors which may play a central role in the medium and long-term perspective.

How are business models in CEE changing in the wake of rising wages and ageing populations? What will the new sources of demand for office space be? In which ways will new technologies affect investment decisions? Those and other questions are addressed in this report.

Green2Day, Wroclaw | Skanska

KEY DATA FOR CEE COUNTRIES

4.2%

GDP growth in H1 2018

1.4 million sqm

Net absorption of office space in 2017

69%

of companies in modern business services sector in CEE plan to move knowledge-based operations to the region

6.3 mln

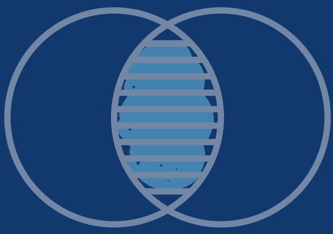
employment of high-skilled people in CEE, growing at almost 3% a year

250%

increase in flexible office space in Warsaw over the last three years

5.8 billion euro

forecasted investment volume in the office market in CEE in 2018



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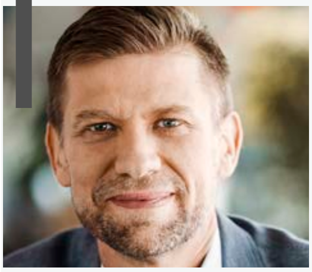
Head of Divestments, CEE | Skanska



Over the last 10 years Central and Eastern Europe has evolved from the position of an emerging market to a mature market. The recent upgrade of Poland by FTSE Russell to "developed market" status in the annual classification for 2018 is an example of CEE countries becoming highly ranked alongside the US, the UK and Germany. It's great news for the whole region and its international perception. For the commercial real estate sector CEE has been a key target for several years now. It's a profitable, safe and stable region for doing business in. Together with our CEE Investment Report partners we would like to share with you our annual analysis, observations and future trends of the CEE region's landscape. We hope you have a good read!

DANIEL BIENIAS

Managing Director | CBRE

The stable economies and political environment, high level of services provided by employees and positive margins compared to Western Europe are the main incentives for investors coming to the CEE region. The inflow of investment in real estate breaks records every year and this year's total volume could exceed EUR 12 billion. In our report we present the current macro- and micro-level conditions, which will surely convince you that you should be here as well.

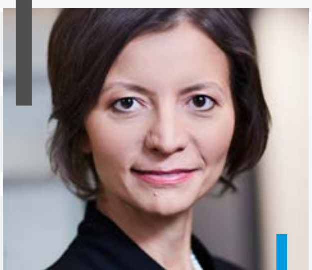
PAWEŁ DĘBOWSKI

Chairman, Real Estate (Europe) | Dentons

The positive momentum in Central and Eastern Europe is well-grounded, with international investors maintaining their robust appetite for transacting in the commercial real estate markets. CEE is perceived as a safe, attractive region to invest in by a growing number of investors from the UK, Germany, the US and, increasingly often, Asia. Investor confidence in the region, underpinned by favorable legislation and sustainable economies, is invariably high. Poland holds top position in the region. It is seen as the most diversified and mature market in CEE, outperforming Western Europe in terms of attractive yields at low risk with relatively high liquidity.

KINGA BARCHOŃ

Partner | PWC



The current changes on the BPO/SSC market and the increasing expectations of the qualified workforce regarding better locations with a higher number of amenities, will undoubtedly shape the demand for office space in years to come. The office has become one of important arguments used when attracting top talent and constitutes a differentiation tool between companies. Our analysis of the property market using geolocation and big data and the outcomes of interviews for the Emerging Trends in Real Estate report confirm the trend. Developers need now to listen more than ever to their tenants who, being employers, need to respond to rapid shifts in the expectations of today's modern workforce.

NEW FRONTIERS OF ECONOMIC GROWTH

01

RECORD LOW UNEMPLOYMENT IN CEE LEADS TO BUSINESS TRANSITIONS

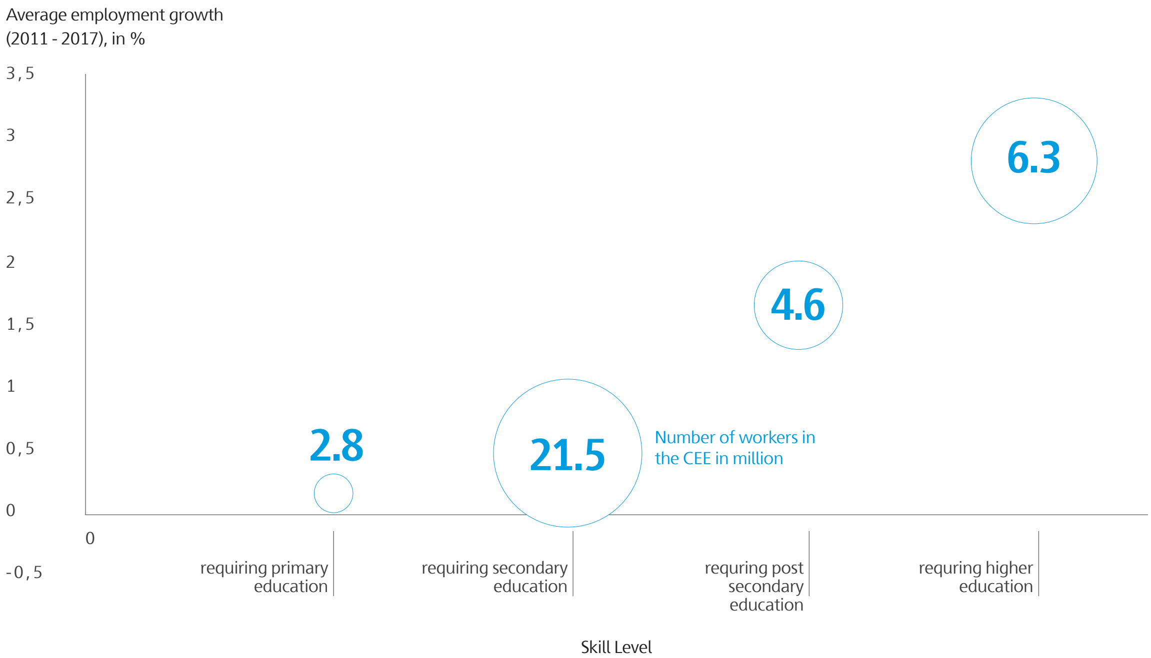
CEE has maintained its position as the fastest growing region within the European Union, with its growth rate of 4.2% in H1 2018 being double the average for the whole of the EU. **At the same time, CEE is in the midst of a very important business transition: from economic growth which is based on wage competitiveness to growth which is based on knowledge.**

Unemployment in CEE has never been lower than it has recently – 3.7% in Q2 2018 – which has caused consumer optimism to rise. In most countries in CEE indices of confidence are much higher than during the pre-crisis peaks of 2008. **But record low unemployment also causes changes in growth models, which are analyzed extensively in this report.**

Companies can't base their growth strategies on low labor costs alone, because low unemployment brings higher wage growth. Foreign companies still find local wages very attractive, but many of them are moving their operations in CEE higher in the productivity hierarchy, to reflect the improved skills and growing demands of local workers. Domestic companies must adjust to scarcer labor supply by merging and using economies of scale, investing in technology and upgrading human capital. Governments, on the other hand, are looking for ways to increase immigration.

Thus CEE is maintaining its key competitive advantage, which is a combination of high skills and attractive wages, but the weight of those two factors is very gradually shifting towards higher importance of skills.

Figure 1. Employment growth in the CEE at the different levels of skills required for a job – the size of the circle indicates the total number of workers within a skill group in CEE (source: Skanska's own calculations, based on Eurostat)



GROWTH HEADLINES[1]

POLAND

Poland recently **regained its position as the fastest growing CEE economy.** It surprised investors and rating agencies with its fiscal and external stability in the wake of large social transfers introduced by the government in 2015 and 2016. Moreover it was upgraded to "developed country" status by FTSE Russell, a provider of stock market indices.

KEY DATA

GDP growth in H1 2018	**5.2%**
Inflation (June 2018)	**1.4%**
Unemployment (June 2018)	**3.8%**
Rating	**BBB+(S&P)**

ROMANIA

Romania was the fastest growing EU economy in 2017, with an astounding growth of 7%. **It has cooled a bit in 2018, but that may be regarded as a positive development, because growth of around 4% should be much more stable.** Today Romania is one of the EU leaders in terms of inward FDI to GDP ratio (2.4% in 2017).

KEY DATA

GDP growth in H1 2018	**4.2%**
Inflation (June 2018)	**4.7%**
Unemployment (June 2018)	**4.6%**
Rating	**BBB-(S&P)**

CZECH REPUBLIC

The Czech Republic is the most developed and best rated country in the CEE region. **In recent quarters low unemployment has led to a sharp acceleration in wages, with wage growth reaching 8% y-o-y, the highest rate since 2008.** The strength of the economy is underlined by the fact that the Czech National Bank has been one of the first central banks in Europe to start raising interest rates.

KEY DATA

GDP growth in H1 2018	**3.2%**
Inflation (June 2018)	**2.4%**
Unemployment (June 2018)	**2.2%**
Rating	**AA-(S&P)**

HUNGARY

Hungary **has regained both economic growth and investor confidence over recent quarters and years.** Between 2006 and 2013 the country's economy stagnated due to mismanagement of public finances and capital outflows induced by the global financial crisis. Since 2013 Hungary's GDP has started growing again and in 2018 the growth reached 4.5% to 5%.

KEY DATA

GDP growth in H1 2018	**4.5%**
Inflation (June 2018)	**3.2%**
Unemployment (June 2018)	**3.7%**
Rating	**BBB-(S&P)**

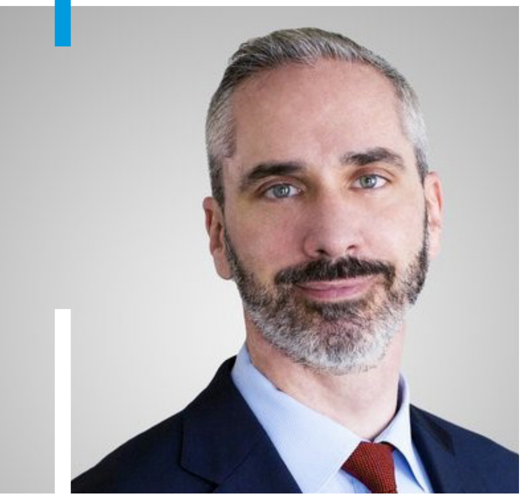
SLOVAKIA

Slovakia is the only member of the Eurozone in the CEE region (analysed in this report). **It is a highly stable manufacturing powerhouse,** with low fiscal and current account deficits and the second highest investment rating in the region. The country, however, draws less attention from business services investors than its regional peers.

KEY DATA

GDP growth in H1 2018	**4.2%**
Inflation (June 2018)	**3.1%**
Unemployment (June 2018)	**4.5%**
Rating	**A+(S&P)**

[1]Source: data from Eurostat, ratings from S&P, country assessment by Skanska



DAN BUCSA

CEE CHIEF ECONOMIST
UniCredit

CEE has many strengths, but in order to maintain strong growth in the long run it needs to improve along various frontiers. The first strength of the CEE is that it is still cheaper and draws large FDI flows. Second, it is a major recipient of EU funds. Third, the quality of its labor force is much better than in other emerging markets. Fourth, it has managed to move up in the global value chains to mid-range manufacturing (from low-range in the ·90s). But something that is not happening at a large scale yet is creation of technology, although, we do see this in some places, for example car manufacturers have developed a few R&D centers in Romania, Hungary and the Czech Republic. So we can hope that those will create spillovers.

KAREN VARTAPETOV

DIRECTOR, LEAD ANALYST SOVEREIGN RATINGS
S&P GLOBAL RATINGS

After nearly a decade of external deleveraging, the CEE households and banks are starting to borrow and lend and borrow again on the back of a buoyant labor market, pushed higher by the region''s increasing integration into Western European manufacturing supply chains. Despite strengthening domestic demand, external performance also remains solid – the Czech Republic, Hungary, and Poland – are all operating external surpluses, not just on merchandise, but also on services. But 2018 is likely to mark the peak of Eastern Europe''s strong cyclical recovery. In the future, we expect a deceleration of growth, albeit to still- firm levels.

There are four principal risks to our projection of what amounts to a comfortable landing scenario. First, overheating risk. This is already a clear and present danger in Romania, where fiscal and monetary settings are both highly accommodative. At the same time, there are reasons not to not be overly alarmed by wage trends in the rest of the region. Second, the risk of rising global trade tensions. The secondary effects of a global trade war on generally small and very open CEE economies could be sizable. CEE has a particularly large exposure to the automotive sector. Third, capital outflows risk. Monetary policy normalizzation in advanced economies could drive another round of even more intense withdrawals from emerging markets in the remainder of this year, although the CEE region seems to be shielded from any generalizzed emerging market capital flight. Fourth, reduction of EU funds. Under the current proposal for EU funding post-2020, many CEE sovereigns could face sizable cuts in cohesion funds, eliminating programs that were instrumental in supporting growth during 2010-2014, when private-sector deleveraging was at its most intense.

COMPANIES BUILD KNOWLEDGE-BASED OPERATIONS

Rapid economic growth in the CEE has stemmed mainly from the swift integration of regional economies with global value chains (GVC). Large manufacturing and services companies have relocated parts of their operations to the CEE due to two crucial factors: institutional stability and the availability of a well-educated and relatively cheap workforce. Those companies not only added direct value to local economies, but also co-operated with local entities, enabling those local firms to learn about new technologies and methods of production. The real estate industry is a litmus paper this trend. According to Skanska analysis, business services entities are the second most popular tenant in CEE. They stand up for 53% of office space leased in Skanska buildings in the region.

Now that the economies of CEE are well integrated into the global trading system the main challenge for them is improve the position within the value chains, which means gradually advancing up the hierarchy of production. This process can be described as a path from entering to upgrading in the value chains.

For example, the Czech Republic entered the offshore services industry via the establishing of BPO (business process outsourcing) activities, and subsequently quickly upgraded into R&D segments of vertical industries, particularly in the automotive, aerospace and IT sectors.[2] Other countries have followed a similar path, although they have specialized in different segments of production.

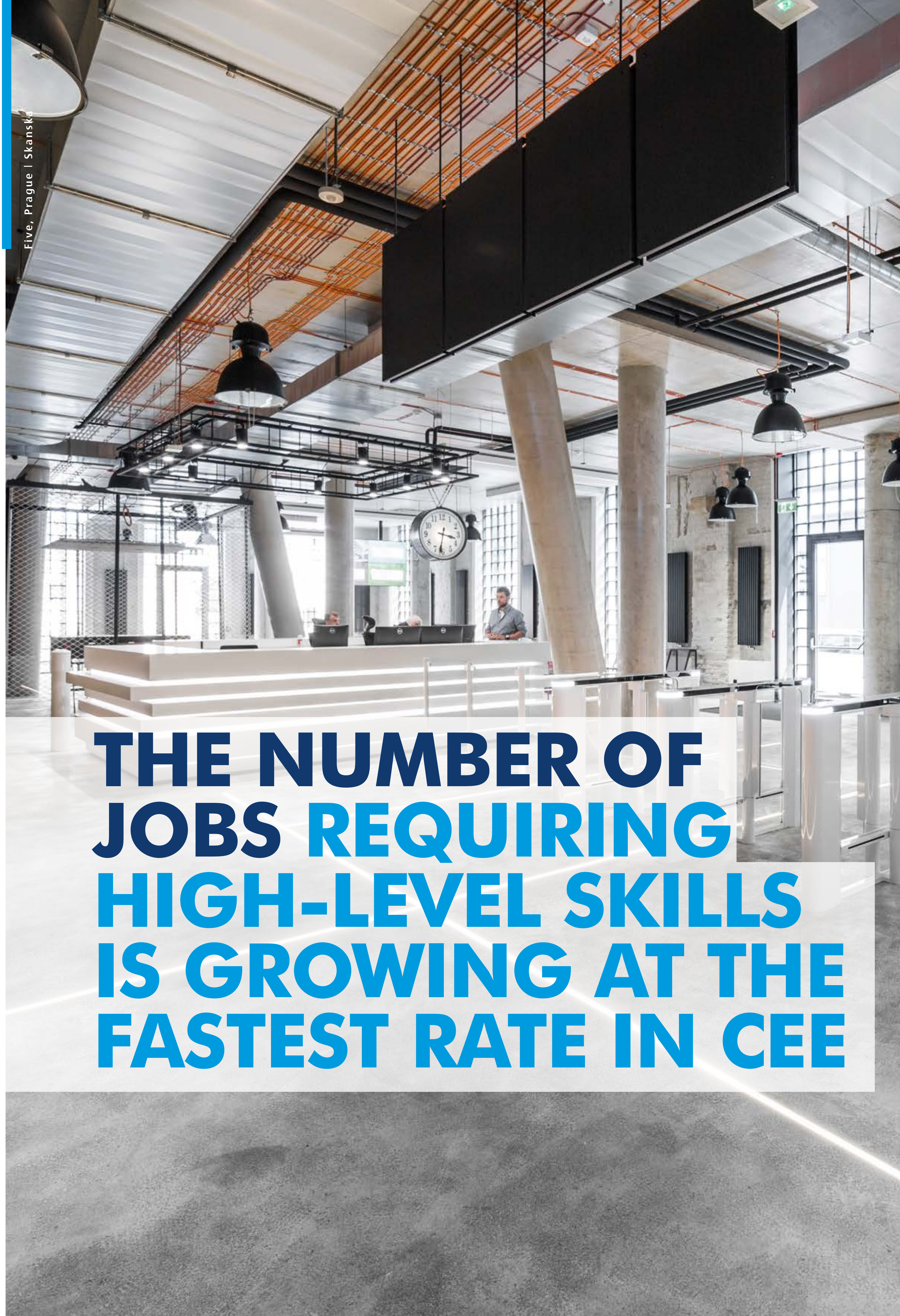
This upgrading process can be seen in the demand for skills. The number of jobs requiring high-level skills is growing at the fastest rate in CEE, whereas jobs requiring only elementary capabilities are stagnating. The higher the skill level required for a job, the stronger the growth in demand for staff.

JANUSZ MACHNICKI

Head of Group Function
Real Estate Poland | ABB

ABB has chosen the CEE as a location for our shared services center because the region offers a labor market and office standards comparable to Western Europe. An interesting fact about the CEE is that it is gradually becoming an attractive place not only for foreign investors, but also for foreign workers. In the ABB Global Business Services Center located in the Axis building in Kraków a number of the employees come from Italy, Spain and Portugal. They come to Poland because of good offers from the market and because living standards are rising dynamically. We certainly agree that modern office space is also an important way for companies like ours to attract talent. When the labor market is very competitive, working environment plays an important role in negotiations between employees and employers.

[2]Fernandez-Stark K., Bamber P., Gereffi G., "The offshore services value chain: upgrading trajectories in developing countries", Int. J. of Technological Learning, Innovation and Development, 2011 Vol.4



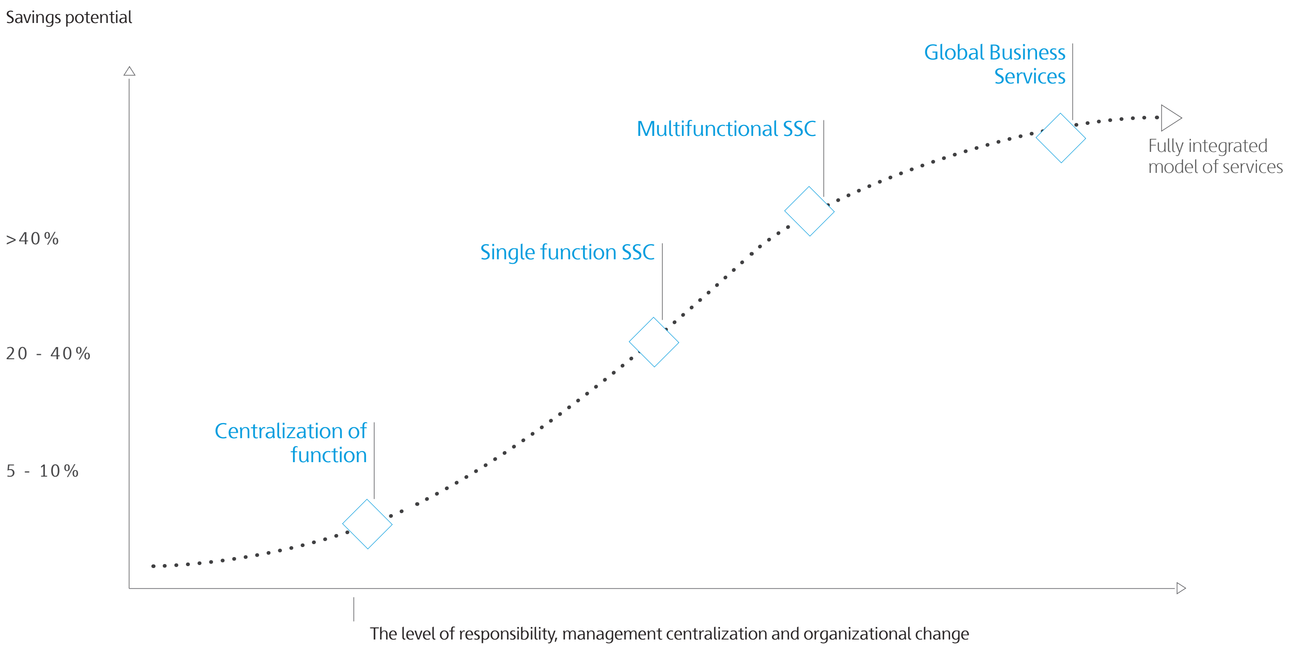
THE NUMBER OF JOBS REQUIRING HIGH-LEVEL SKILLS IS GROWING AT THE FASTEST RATE IN CEE

Five, Prague | Skanska

ADVANCING UP THE VALUE CHAIN IN MODERN BUSINESS SERVICES

For nearly two decades the sector of modern services for business has been one of the fastest growing and fastest changing branches of the economy in Central and Eastern Europe. Although the origins of that date back to the late 1990s, it was not until the accession of our region to the European Union that rapid growth took place. The ceasing of that growth has been announced many times, but its end is still not visible.

Figure 2. The evolution of operations in business services centers (source: PWC)



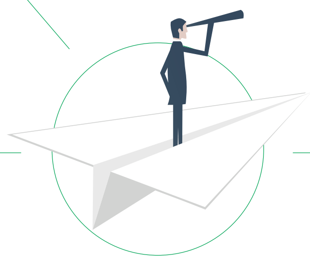
At first mainly transaction processes were moved to our region, and not in their entirety, but rather specific elements of such processes, usually those of the most repetitive nature and of low added value. However, those times have already gone; especially over the last five years, the typical profile of this activity has changed.

Nowadays, the average service center in our region still focuses on broadly defined transaction processes, but the level and engagement process has changed. They are no longer single jigsaw pieces but whole groups of processes for which the service centers are responsible from beginning to end.

Increasingly the centers provide processes of significant added value, requiring not only knowledge and experience, but also decision making. It was unthinkable even a decade ago that fully fledged controlling, internal audit and strategy departments, providing services for entire companies, would be located in Poland or in Hungary. Now it is slowly becoming the norm.

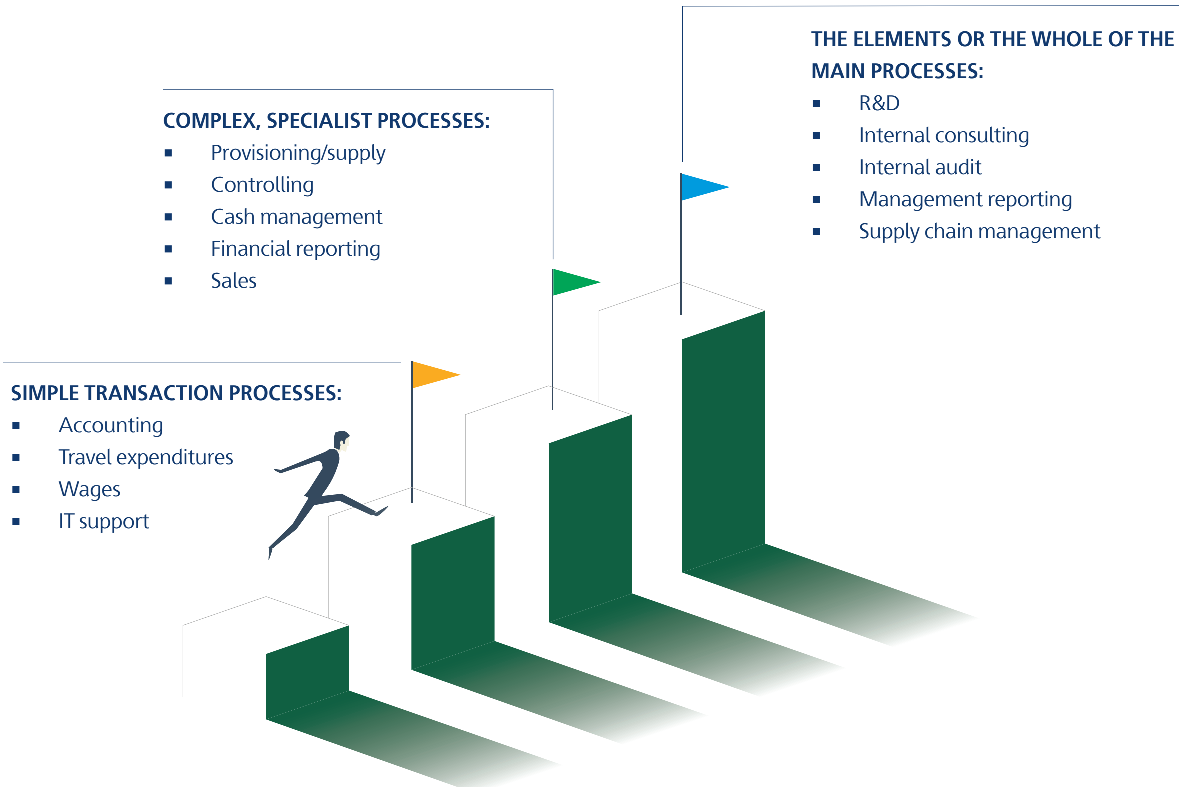
There are a few reasons for this situation:

- A general maturity, both operational and managerial, enables firms to extend the range of centers here with additional, more demanding functions.
- Proof of the value and abilities of the staff, which can be seen not only by the change in functions, but also their management (even a decade ago each new center was managed by expats who came here for short-term contracts, now an increasing number of local managers and directors are people who "matured" and gained experience together with the market).



- Placing more emphasis on the processes of continuous improvement and increasing process effectiveness – which is possible, but much harder to do in a decentralized environment.
- Still significantly lower operational costs (not only wages, but also rents and office up-keep) than in Western Europe.

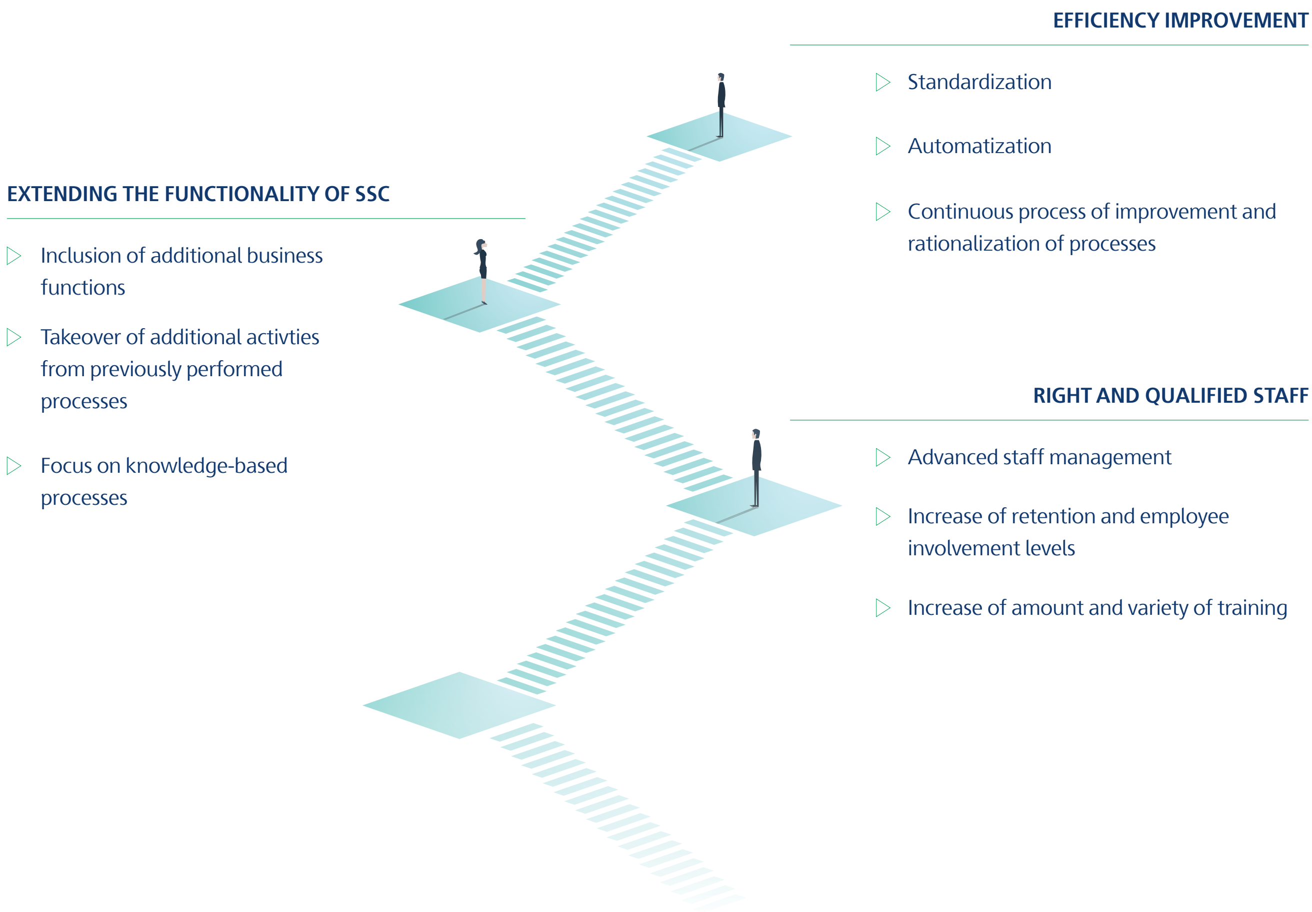
Figure 3. Process complexity in business services centers (source: PWC)



In the first quarter of 2018 the number of persons employed in the business services sector in Poland was in excess of 279 000,[3] more than three times the number employed in the mining sector. In 2020 this number may exceed 340 000 in Poland and 500 000 in the entire region of Central and Eastern Europe. The vast majority of these staff are very well-qualified young people who can speak more than one foreign language. According to a recent report by ABSL, as many as 74% of all these employees are people under the age of 35.

Almost 80% of companies active in the region have announced increases in employment levels. What is most important is that the main driving force behind of this increase is the planned expansion of operations here to include new, often more complicated processes. As many as 69% of the companies from the sector that took part in a survey by PwC said they would move knowledge-based and decision-making processes to centers here within the next two years.[4]
Just as still the main aim of introducing new service centers is the reduction of operational costs and improvements in quality, it is necessary to note that companies increasingly use the introduction phase to adjust the general business objectives and ensure a better use of economies of scale. Service centers have also become key elements of business strategies.

Figure 4. Challenges and the future (source: PWC)



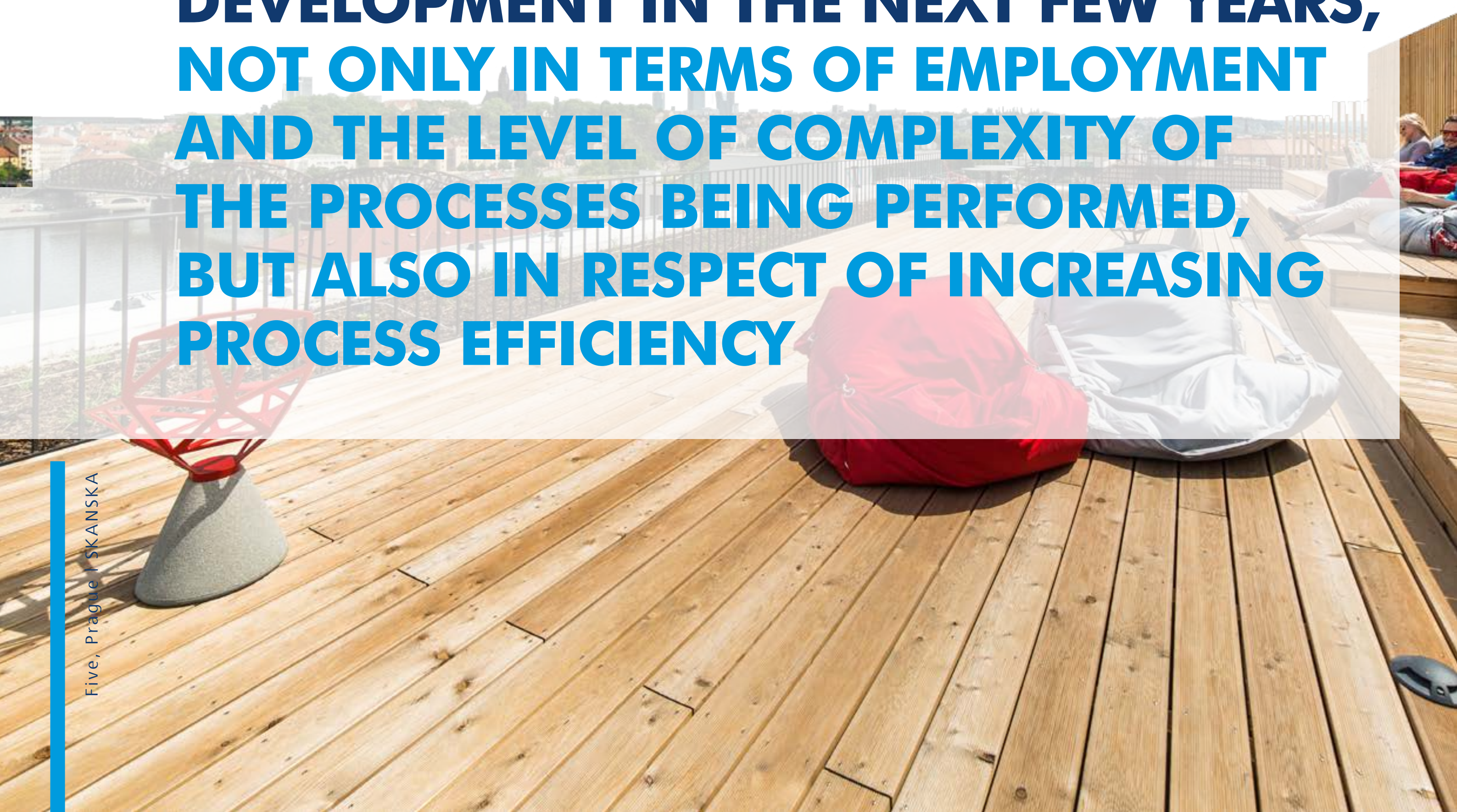
[3] "The sector of modern services for business in Poland 2018", ABSL 2018
[4] Report titled "Shared Services: Multiplying Success", PwC 2016

The only invariable thing in the environment of shared services centers is change. At first it means accepting consecutive migration phases, stabilization of processes and continuous project management. After a year or two a change in work culture and its organization comes – the project work is off, it's time to focus on stabilization and improvement of the first phase. Just after that, but sometimes simultaneously, there is a beginning of new migrations, often connected with starting new, more advanced functions. That is why the crucial challenges each center faces include change management, standardization and process improvement.

The next step and challenge in the cycle of constant change is the automation. There are many types of automation – from introducing macros and scripts allowing the user to perform a given process faster, to using additional modules of existing ERP systems, e.g. aggregating data for the user. The next stage is robotics. We are not talking about physical metal robots that we can imagine standing by the production lines, but rather new types of applications, which can work on many tasks at a time (multi-tasking) and use various IT tools, imitating the human work. They were created to automate repetitive processes that are based on predefined rules and can use all the above-mentioned types of automation. The robotics allows to achieve a new level of optimization of process efficiency, but also to increase to level of retention of employees by delegating them to perform more complex and satisfying tasks.

To sum up, contrary to the opinions that one sometimes hears, the sector of shared services is going to experience further development in the next few years, not only in terms of employment and the level of complexity of the processes being performed, but also in respect of increasing process efficiency through optimization and automation (including robotics).

THE SECTOR OF SHARED SERVICES IS GOING TO EXPERIENCE FURTHER DEVELOPMENT IN THE NEXT FEW YEARS, NOT ONLY IN TERMS OF EMPLOYMENT AND THE LEVEL OF COMPLEXITY OF THE PROCESSES BEING PERFORMED, BUT ALSO IN RESPECT OF INCREASING PROCESS EFFICIENCY



Five, Prague | SKANSKA

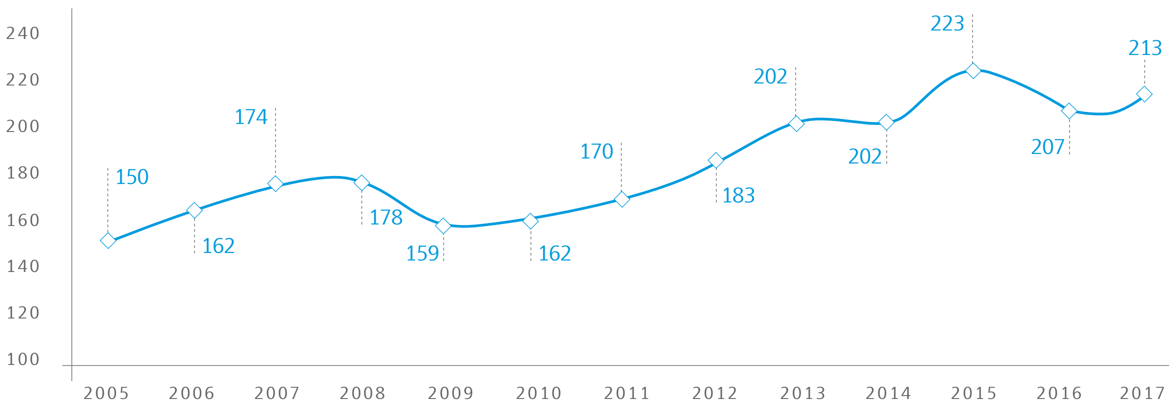
LOCAL BUSINESSES GROW, DIVERSIFY AND GAIN IMPORTANCE

CEE's family-owned companies are just in the course of the first succession wave. This generational change will lead to various business transformations, such as consolidation, faster foreign expansion, increased investments in technology or better management techniques. This trend will have a direct impact on the office market in the long term. Various family companies have recently entered the modern office building market as tenants. Those include Polish companies such as TDJ (an investment house), Ochnik (a garment producer), VOX (a furniture producer), Komputronik (a retailer), Comarch (a software developer) and LPP (a retailer and garment producer).

Family-owned companies are assumed to be oriented for longevity: that is one of their most important values and features. Such companies from Poland and other CEE countries are mostly only 20 to 30 years old and are at the beginning of their path, which enables one to say that their importance is only going to grow. According to a report by PwC titled "Research on Family-Owned Companies 2016" "72% of those surveyed in Poland and 39% in the world said they want to pass on the control of the enterprise to members of the younger generation".

According to a study conducted by the Family Business Institute[5] more than 90% of Polish companies are potentially family-owned (the majority of shares belonging to natural persons). Due to the characteristics of the CEE markets, and their origin and history, the situation is similar in the entire CEE region. Furthermore, the share of private companies in the group of the biggest companies in Poland has been growing year by year.

Figure 5. The number of Polish private companies on the List of 500 (a ranking of the largest companies in Poland, source: Rzeczpospolita)



[5] "A family business is a brand", Instytut Biznesu Rodzinnego

Family-owned companies in Poland and those in other CEE countries are characterized by significant levels of optimism. These enterprises foresee increasing sales and development of their companies. **According to the PwC "29% of those surveyed are convinced that the companies they represent will grow quickly and aggressively (in the next five years). This result is noteworthy: in the rest of the world only 15% of respondents share that opinion". Trends observed among family-owned companies that could translate to more interest in renting of office space include the following points:**

Development

Family-owned companies in this region often started out as "garage companies" which focused on winning through prices, but as they developed and gained the scale that has changed. Now they focus on innovation, development, and expansion, which is why they have to invest in infrastructure, and also because of the company's prestige in the eyes of its customers and employees.

"45% of the respondents perceive a constant need to be innovative in order to stay in the market as one of the most important challenges (new business models)".

Diversification

Family-owned enterprises are usually created where the owning family lives – as a result they are often located in small towns and villages. To a great extent they are based in their own locations, which are further extended as needed, both in terms of production and office space (especially in the production sector). As their scale grows, a need arises to set up branches in bigger cities or diversify the activity. Holding groups of family-owned companies are founded, which include both production enterprises and service companies.

The increasing role of services

Nowadays in CEE there are an increasing number of family-owned companies providing services (e.g. IT, new technology), which are usually located in big and medium-sized cities and due to their development dynamic they often decide to rent offices instead of building their own premises.

Generational change

This is defined as the difference between the generations of the founder and the successor, and also as the entry of the new generation of companies' employees and customers to the market. The new generation, often referred to as Millennials, are people with very ambitious professional plans and specific expectations, both as employees and as consumers. Millennial-successors are people who want to modernize family businesses by diversification in terms of products and market and by developing new sales channels. Millennial-employees are innovators who seek flexible employers which will let them grow and develop themselves; while Millennial-customers reverse the current sales methods, first looking for offers on the Internet.

CEE CHANGES FROM SUPPLYING HIGHLY SKILLED STAFF TO ATTRACTING SUCH PERSONS

The countries of CEE are starting to face labor shortages, a problem that hasn't been seen in recent history here – on the contrary, the region rather tended to suffer from excessive unemployment and large outward migration flows. Recent labor shortages are the result of negative demographic trends and very strong demand for workers. **The CEE is gradually changing from being a supplier of workers to being a region which attracts foreign staff. This is a monumental shift that will alter various public policies and require a new approach from governments.**

Public policy makers have started to react. The governments in CEE are gradually introducing policies aimed at attracting foreign workers. Poland is the unquestioned leader in this field, opening its borders to more than a million workers from Ukraine in recent years. The Polish government also plans to introduce measures to make it easier for local companies to employ people from Asia. Other countries are following suit. In 2018 Romania increased the number of work permits issued to persons from outside the EU by more than 100%.

Figure 6. Work permits for non-EU citizens issued by the Romanian government (source: Romania Ministry of Interior)

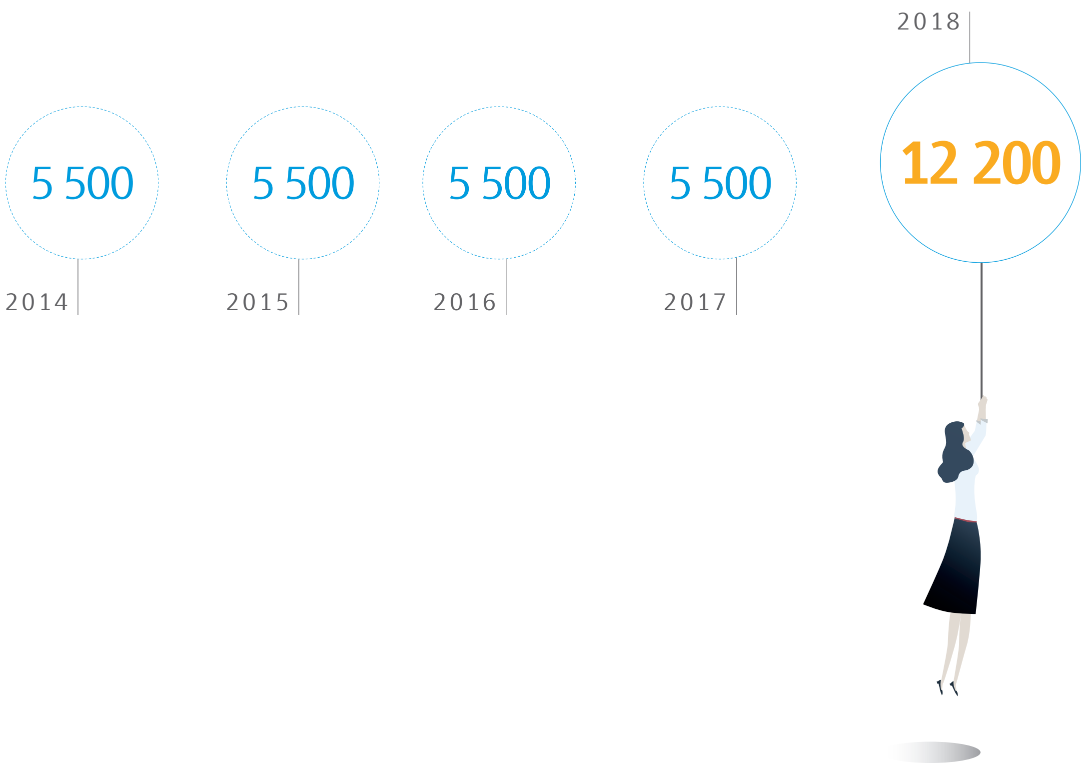
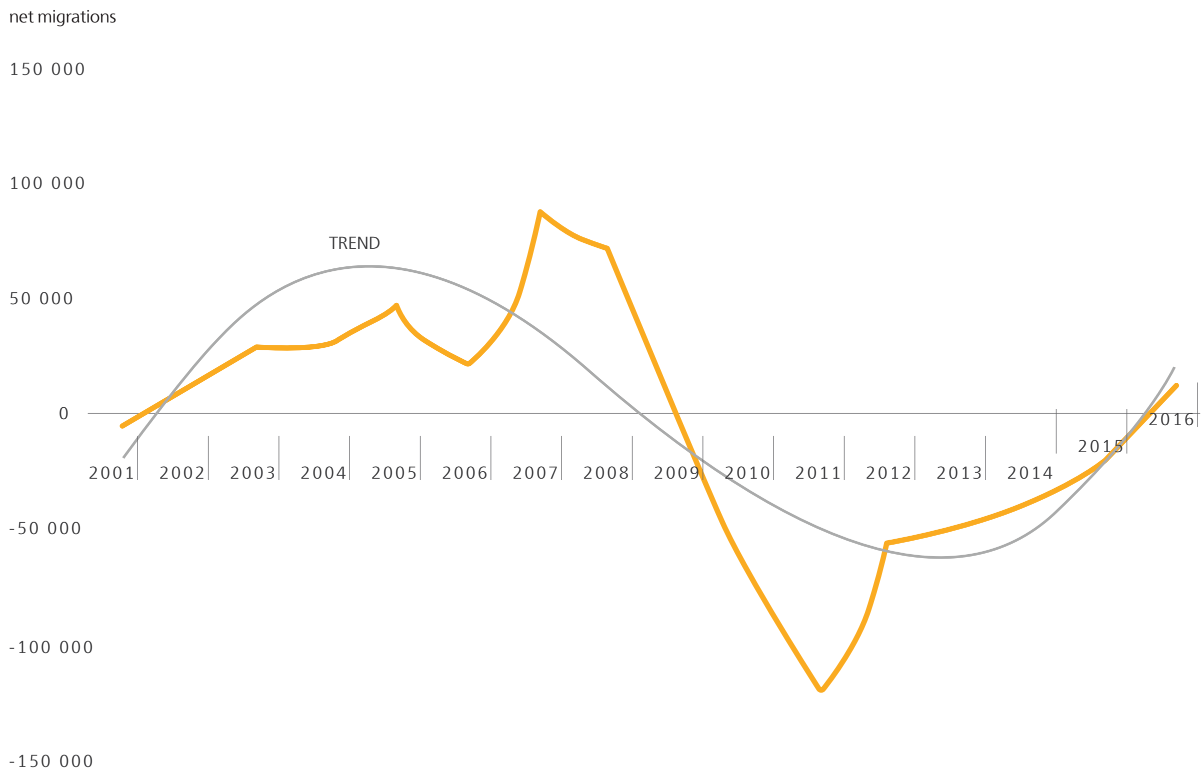


Figure 7. Net immigration to CEE countries (excluding Romania, for which there is a lack of data), positive figures mean that immigration to CEE is larger than emigration from CEE (source: Skanska's own calculations based on Eurostat)



INTERVIEW

PIOTR KALISZ
Head of CEE Economics at Citi Research

HOW ARE CEE ECONOMIC PERSPECTIVES INFLUENCED BY DEMOGRAPHIC TRENDS?

Countries in this region face a serious challenge: the ageing of the societies here can result in a shrinkage of the labor force and therefore in lower employment. Unless those tendencies are reversed or counterbalanced by substantial increase in productivity dynamics, GDP will slow down. For example, the European Commission predicts that within a decade a potential economic growth in the CEE might one percentage point lower.

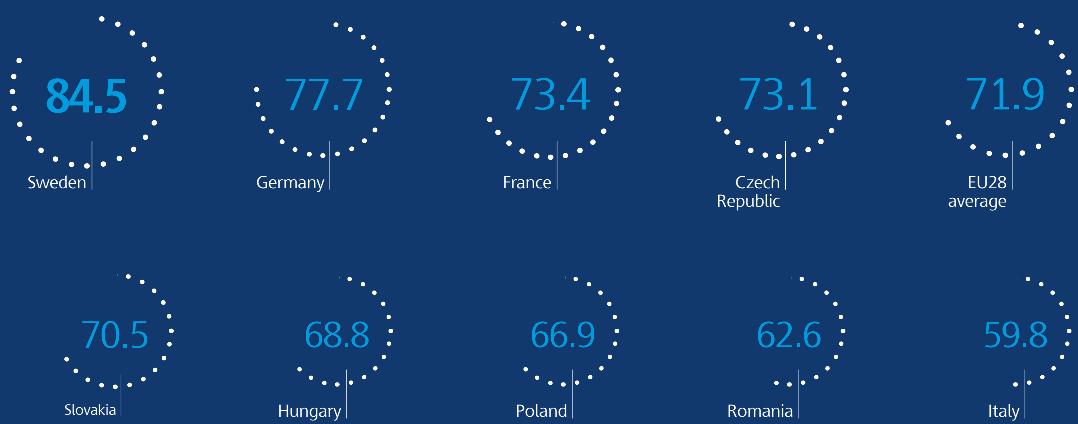
HOW CAN THOSE TRENDS BE REVERSED?

CEE countries do have hidden labor force reserves, which could be released and mobilized to counterbalance the effects of ageing. For example, in most countries female activity rates are much lower than in Western Europe. Moreover, the share of labor engaged in agriculture is still very high in many countries (except Slovakia and the Czech Republic). Therefore, increasing activity rates or relocating labor from sectors with lower productivity to modern sectors can partially solve the problem of the shrinking labor force. However, it is going to be a gradual process.

WILL CEE BE MORE OPEN TO IMMIGRATION?

Opening the doors to larger immigration flows could be an important factor for labor market policies. Poland has allowed more than a million workers from Ukraine to enter its labor market and the Czech Republic is going in a similar direction, though on a smaller scale. In Hungary the linguistic barriers are higher and migration flows from Ukraine much lower. In the future the main challenge for CEE will be to more open to migrants from other continents. Potential migration from Eastern Europe is limited.

Figure 8. Female activity rates in selected EU countries. CEE has a potential to increase labor force by increasing activity rates. (source: Skanska's own calculations based on Eurostat; activity rate is the percentage of people in working age who work or are looking for a job)



Silesia Business Park, Katowice | Skanska

NEW FRONTIERS IN OFFICE MARKET DEVELOPMENT

02

WHAT DRIVES THE DEMAND FOR OFFICES – TRADITIONAL AND NEW SOURCES OF GROWTH

Since accession to the European Union in 2004 almost all countries in the CEE region have witnessed huge development and leaps forward in almost every area of life and business activity. The strong economic growth, infrastructure development supported by EU funds and high-quality labor force led to the inflow of a wide range of investors, both occupiers and real estate companies. Due to the high requirements of international corporations the quality of office space improved rapidly. **Although the business services sector is one of the largest sources of demand for office space, the demand structure is significantly more varied.**

IN-DEPTH DEMAND ANALYSIS HAS ENABLED US TO IDENTIFY THE FOLLOWING DEMAND DRIVERS ACROSS THE REGION:

1. The business services sector (SSC, BPO, ITO, R&D)
2. Expansion of international corporation (it, media, finance)
3. The public sector
4. Expansion of domestic companies
5. Occupiers of C-class space

The business services sector

Since the end of sub-prime crisis, the whole region has benefited its status as a top destination for outsourcing services instead of manufacturing processes.[6] Due to the high-quality staff and competitive remuneration compared with Western Europe, the CEE countries are leaders in Europe in terms of attractiveness for near-shoring and outsourcing processes.[7] **Although unemployment rates here have fallen to the lowest levels among all European Union countries (for example 2.3% in the Czech Republic, 3.5% in Poland and 3.6% in Hungary), the supply gap has been closed by staff from Ukraine, Italy, Spain and India.[8]** Those are the main countries of origin of foreigners working in business services centers in CEE. The high unemployment rates among young people in the countries of southern Europe and the wide range of job opportunities across CEE are the major factors behind the flow of young people from that region to CEE; the unemployment rate among people aged under 25 exceeds 30% in both Italy (30.8%) and Spain (33.4%).[9] **Moreover, the countries of CEE could become the major beneficiaries of Brexit with regard to mid- and back-office processes.** It is utterly essential for the future of the sector that the entire region competes with Western Europe based mainly on the high quality of the services provided, not on labor costs only. It is worth noting that there are still many newcomers here every year, which shows that there is a still room for development of the sector. Considering the significant complexity of processes moved to CEE and the high quality of provided services, the business services sector is not a short-term trend but has become a permanent feature of the economies of the countries of CEE.

[6]Source: ING EMEA Economics and Strategy Team, Central and Eastern Europe's FDI proposition: Ready, aim, invest, 2018
[7]Source: A.T. Kearney, Global Services Location Index, 2017
[8]Source: ABSL Report 2018
[9]Source: Eurostat, July 2018

The public sector

Due to the fact that the vast majority of office buildings in the region here have been erected since the fall of communism, the office stock here is relatively young and high quality. International corporations mostly occupy modern office space; however, most public sector entities are still in old-fashioned and un-refurbished buildings.

Recently, in search of the best employees, public entities have begun to move their headquarters to new modern office buildings. This change can cause the public sector to become one of the major players on the market, because its need for office space is substantial.

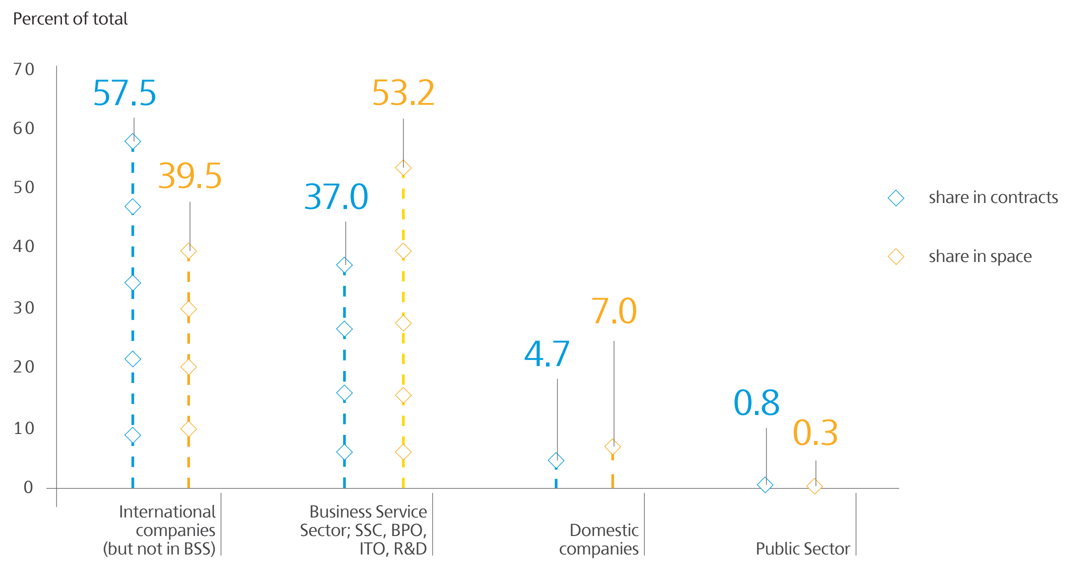
Expansion of international corporation and domestic companies

The whole region remains on a growth path which significantly exceeds the rate of development in the entire Euro Zone. Since the last financial subprime crisis the aggregated rate of GDP growth in CEE countries ranges from 18% to 29% (depending on the country). The economic output of the Euro Zone in the same period increased by 11%. This robust development relates directly to the expansion of the real estate sector and demand for office space has been increasing year by year. Unlike the developed markets in Western Europe, the vast majority of tenants in this region are planning for expansions during their relocation processes. **More and more domestic enterprises are expanding their office footprints as well, which is supported by strong domestic consumption, economic development and increased worldwide expansion.**

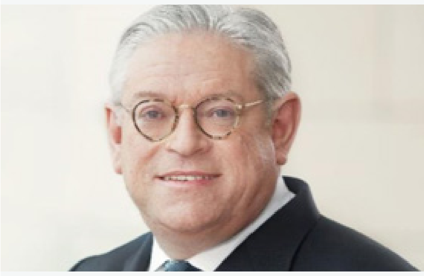
Occupiers of C-class space

CBRE has not classified C-class office space as modern office stock in the conducted analyses. However, many state-owned companies and the largest domestic companies operate in old and inefficient office space located in poorly connected sites or on the outskirts of cities. Due to the high requirements of employees and using the office as an employer branding tool, many occupiers of C-class properties are deciding to move to better located, higher quality premises. The potential of these companies is still high.

Figure 9. Type of clients in office buildings developed by Skanska in CEE (source: Skanska)



CEE INVESTORS' VIEW



ANDREAS QUINT

CHIEF EXECUTIVE OFFICER
CA IMMO

As CA Immo, we have been investing in CEE since 1999; today we´re focusing our activities as a prime office investor, developer and asset manager on our core cities: Warsaw, Prague, Bucharest and Budapest. We see that the CEE region is becoming increasingly interesting to investors as standards continue to approach western levels. Until a few short years ago, the CEE was classified as 'emerging' in European terms, associated with a sense of risk-prone otherness. Today the region can point to highly dynamic economic development, based on strong fundamentals, low unemployment and a rising standard of living. The capital cities, and in particular Warsaw and Prague, are attractive places to do business, with modern (office) infrastructures and standards barely distinguishable from those of western cities. The same goes for prime yields, which are falling steadily and likely to match western European levels in the years ahead. For us, our CEE portfolio is a good complement to our very dynamic development activities in German cities like Munich and Berlin, showing very stable and high occupancy rates. In recent years, we have continually invested around € 700 m in our CEE core cities; this year, we´ve already acquired two properties from Skanska in Prague and Bucharest – the prime office buildings Visionary and Campus 6.1, both developed by Skanska – which are a valuable addition to our portfolio and will be clearly supporting our overall financial goals.

BALÁZS PÁZMÁNY

HEAD OF THE BOARD
ERSTE ASSET MANAGEMENT

The Budapest office market is in a very dynamic growing phase, which is reflected also in the high number of new developments. As this booming market is supported by strong fundamentals and significant economic growth, we think that prime real estate assets, such as Promenade Gardens and Mill Park (acquired recently by Erste Funds), remain a desirable target for CEE investors. As all new developments are planned and constructed with not only sustainability, but also smart solutions in mind, Hungary is going to have a high-level product scale in this sector. The expectations of major multinational tenants also support the sophisticated integration of solutions enhancing employee well-being. The growing number of new companies entering, and existing tenants expanding in, the market ensure the continuation of the current landlord-friendly market.

NICHOLAS BRINCKMANN

MANAGING DIRECTOR
HANSAINVEST

For our investments in eastern Europe, we are focusing on office properties in Poland. As an EU member state, Poland has long been an attractive market for international investors. The market also continues to offer significant growth opportunities, especially as it is expected that large companies will relocate more jobs to the region as a result of the upcoming Brexit. Poland has already established itself in Europe as home to numerous business service centers. Vacancy rates are an issue predominantly in older office properties. Hence only new buildings are worth considering for us. Only the market in Warsaw is of interest to us at present and we are focusing on the best locations in the CBD. We have recently acquired our second property there.

DATA MAP
CEE'S ECONOMIES AND OFFICE MARKETS

COUNTRY	Poland	Poland	Poland	Poland	Poland
CITY	Warsaw	Kraków	Wrocław	Tricity	Poznań
POPULATION	1 764 600	767 300	638 600	747 600	538 600
UNIVERSITIES	69	21	27	19	21
UNEMPLOYMENT RATE	1.70%	2.50%	2.00%	2.80%	1.30%
STOCK [SQM]	5 411 100	1 159 300	1 011 400	747 000	456 500
LEASING ACTIVITY [SQM] 2017	820 500	200 600	167 500	114 100	79 400
LEASING ACTIVITY [SQM] H1 2018	425 700	77 200	58 500	25 900	35 700
NET ABSORPTION [SQM] 2017	390 900	149 000	74 400	78 800	45 100
NET ABSORPTION [SQM] H1 2018	189 800	59 300	91 000	56 100	5 700
VACANCY RATE [%]	11.1%	9.3%	9.7%	6.7%	7.7%
PRIME RENT [EUR/SQM/MONTH]	24	14	15	14	14
U/C [SQM]	742 200	293 260	190 400	153 700	116 900
FORECASTED COMPLETIONS BY 2021 [SQM]	1 195 500	397 900	406 500	334 500	201 500
OFFICE INVESTMENT VOLUME H1 2018 [EUR MLN]	447				**569**
PRIME YIELDS [%]	4.75%	5.85%	6.00%	7.00%	6.5%
CAPITAL VALUES [EUR/SQM]	6 063	2 800	3 000	2 700	2 800

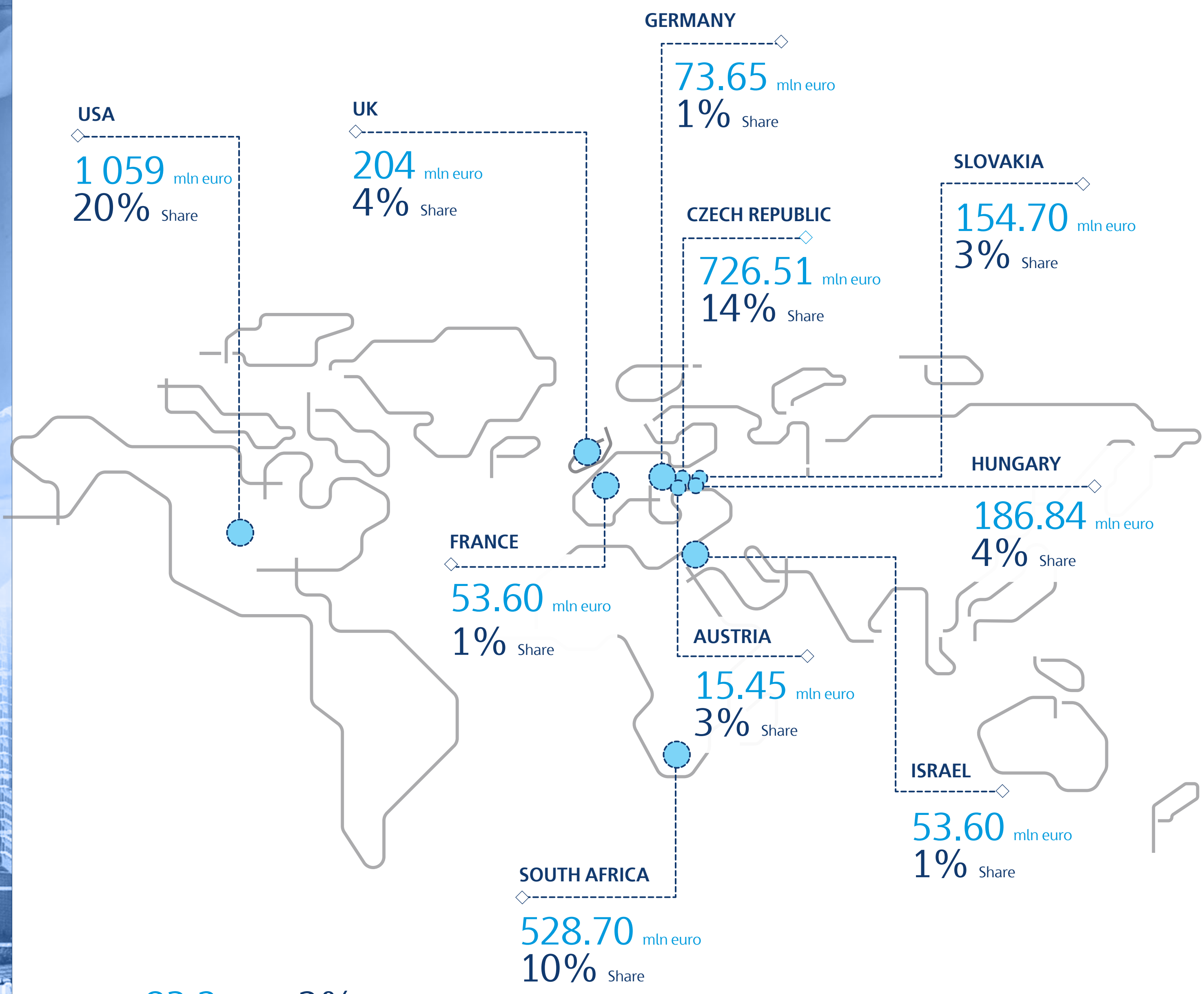
*Katowice agglomeration (Katowice, Bytom, Chorzów, Dąbrowa Górnicza, Gliwice, Jaworzno, Mysłowice, Piekary Śląskie, Ruda Śląska, Siemianowice)

Poland	Poland	Czech Rep.	Hungary	Romania	Slovakia
Katowice	Łódź	Prague	Budapest	Bucharest	Bratislava
1 810 390*	690 400	1 280 000	1 753 000	2 112 500	427 700
20	20	30	36	33	12
2.00%	5.90%	1.70%	2.90%	1.48%	3.10%
477 400	439 300	3 408 900	3 503 200	2 794 000	1 735 300
33 400	62 500	538 900	474 800	352 600	185 100
23 900	28 000	230 900	252 600	148 700	79 600
26 200	54 600	172 800	127 700	177 500	102 900
18 400	9 300	79 700	79 800	53 800	20 400
10.8%	9.00%	6.9%	7.6%	8.00%	5.80%
13	13	21	23	19	17
61 300	103 700	339 233	468 700	596 600	205 000
92 000	185 400	997 130	855 400	1 032 700	305 000
		524	118	277	140
7.5%	7.00%	4.75%	6.00%	7.25%	6.00%
2 600	2 550	5 255	2500-3500	3 062	3 264

source: CBRE

DATA MAP
CEE'S CAPITAL MARKET

Figure 10. Investors' origin in CEE in H1 2018 (for all sectors; source: CBRE)



OTHER: 83.2 mln euro, 2% share

UNKNOWN: 2 004 mln euro, 38% share

Figure 11. Investment volume in the office market in core CEE locations (source: CBRE)

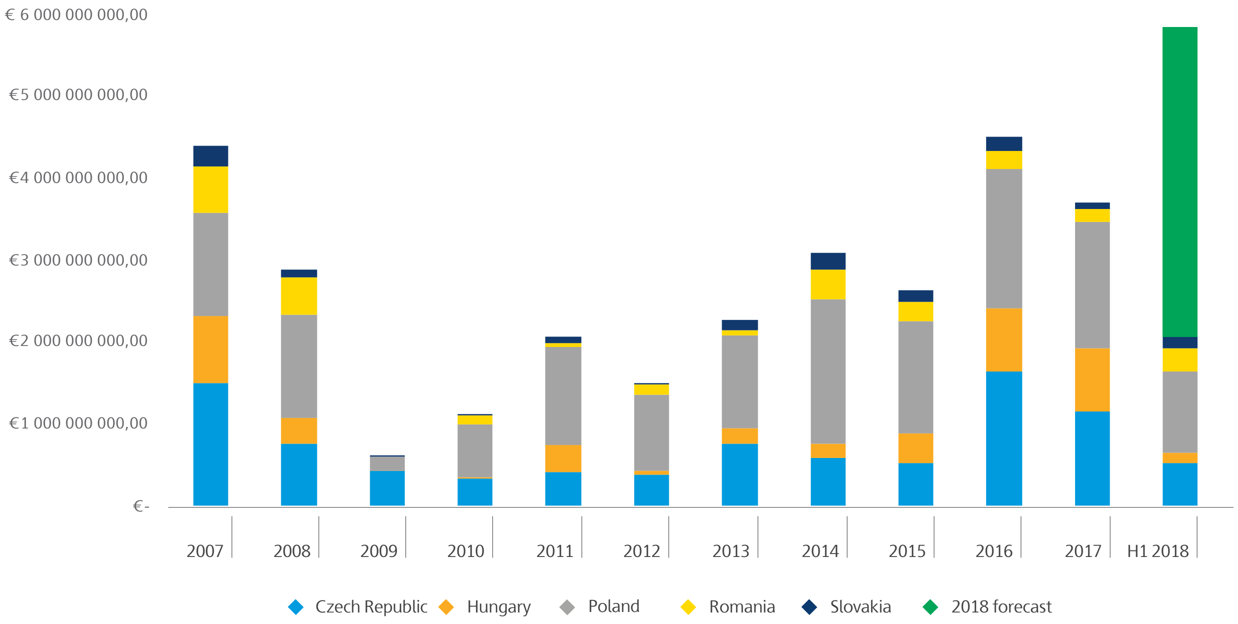
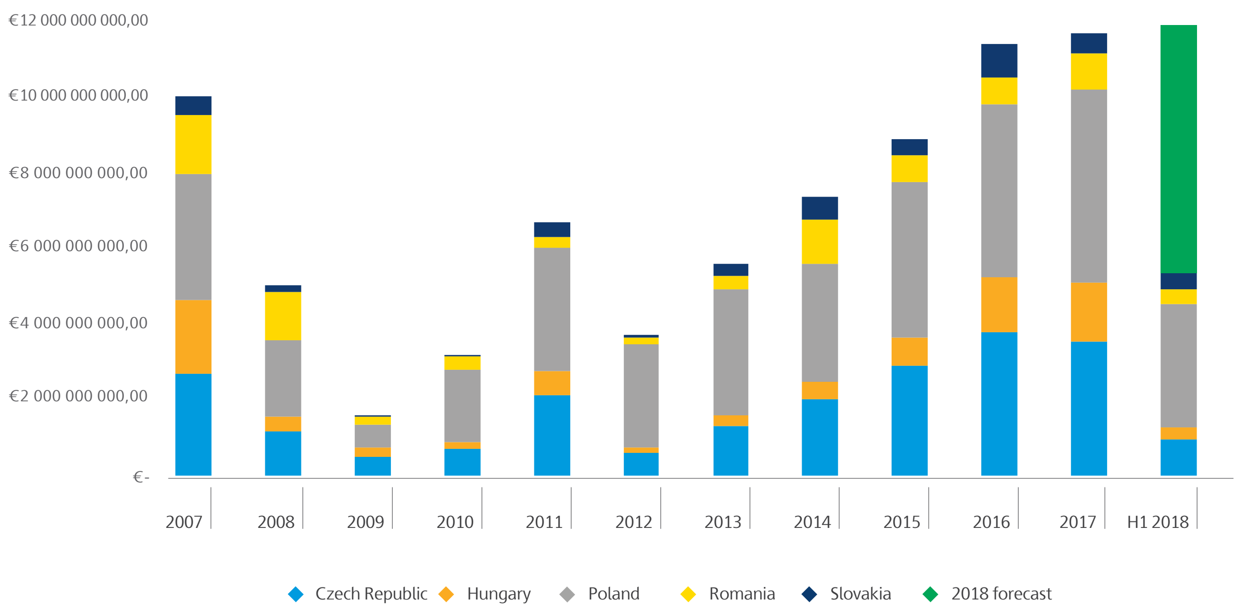


Figure 12. Total investment volume in the real estate in core CEE locations (source: CBRE)



FLEXIBLE OFFICES:
PERMANENT DISRUPTION OR A SHORT-TERM TREND?

FLEXIBLE OFFICES: A GLOBAL TREND COMES TO CEE

Over the past five years flexible office space operators have expanded rapidly in all major global cities. **This trend has been particularly intense in Poland, which has led to a 250% increase in flexible offices in Warsaw over the last three years.**

FLEXIBLE OFFICES: WHAT ARE THEY?

Flexible office has become a catch-all term to describe any office space leased for a short period of time, whether on a per desk basis or on a larger scale. Broadly speaking, the sector can be split into five different formats: traditional serviced and managed offices on the one hand and newer formats (co-working, incubators and accelerators) on the other. Increasingly, hybrid versions have emerged, incorporating co-working space with managed or serviced offices to capture a greater range of tenants. It is estimated that globally co-working and hybrid space now make up a third of all flexible space.[10] As these formats converge, it becomes more meaningful to talk about flexible offices as a broad and largely interchangeable set of products rather than treating them individually, not least because of the ease of reconfiguring space from one format to another, or simply altering the terms and design of otherwise conventional office space.

What is a flexible office space?

Managed offices

An office leased and fitted out by an operator to the occupier's specification, who then pays a monthly licence fee.

Co-working space

On a membership or per desk basis, co-working offices provide a sociable working environment where users can network, collaborate and do business with each other.

Accelerators

These spaces hold accelerator programs in which start-ups spend time working with a group of mentors over a set timeframe, often with the opportunily for seed funding at the end of the program. Space is typically open-plan with plenty of collaboration space.

HYBRID

Serviced Offices

Private offices leased on flexible terms, fully fitted out space inclusive of service charge and rates, usually with reception services.

Incubators

Similar to accelerators, incubator spaces accommodate start-ups, but are focused on a specific sector with sponsorship from larger firms and public institutions. While the space types are similar, the underlying tenant is typically different.

[10] Instant Group, "The Year of the Serviced Office", 2017

PERMANENT DISRUPTION OR A SHORT-TERM TREND?

The three fundamental shifts have permanently disrupted the way many businesses and industries operate and how they use real estate. The increasing prevalence of technology, the rise of knowledge-based employment and consequent behavioral changes in the labor market have all contributed to this change. Existing flexible office operators are meeting the changing needs of companies by offering new types of space and procurement methods, thereby disrupting more traditional office markets. Among other things, they provide corporations looking to expand into new or growing markets a new alternative, which in some cases is a quicker, simpler solution.

Critics argue that the industry is not yet cycle tested – which it isn't – and that it could be left heavily exposed in an economic or occupational market downturn, such as a slump in the technology sector.

LANDLORD RESPONSES

Some landlords have responded to occupiers' demand for greater flexibility with self-delivery initiatives, which give them greater control of the service and experience that customers receive. The best example of this is the acquisition of Business Link by Skanska in Q2 2017. Mainly focused on Warsaw at the time of acquisition, the new investor is developing the entire platform across CEE, utilising Skanska's building portfolio. Similar solutions are being introduced by other companies, which have launched their own flexible office platforms in addition to development activities.

On the other hand, there is a large group of firms for which a flexible office platform is their core business activity. The entire CEE region is a destination for many operators and new investors have entered the market in recent years. IWG (Regus, Spaces, etc) and WeWork are the biggest players which have developed networks or launched platforms on the Polish market. **It is worth to noting that the annual share of flexible office platforms in Warsaw's take-up has risen from 0.7% to 8.3% since 2015. This trend has increased the share of flexible offices in total stock by 1.1 pp. to 1.8% over the last three years.** The development of instant offices is even more significant in other CEE markets, where its share in total leasing activity is expected to range from 8% in Budapest to 15% in Bratislava in the next few years.

More generally, landlords have already changed their attitude to flexible office operators over the past five years. The benefits include reinventing older spaces to create more appealing working environments, and the ability to draw in occupiers from a more diverse range of scales and sectors. This diversification in occupier base ultimately helps to reduce financial risk for the landlord, subject to the track record and management capabilities of the operator.

Visionary, Prague | Skanska

THE OFFICE AS AN ADVANTAGE IN THE LABOR MARKET

Looking at the labor market, CBRE noted far-reaching demographic and social trends which are driving the growing interest in modern workplaces. Firstly, people are living and working longer. Staff aged 50+ put a higher value on non-financial factors. Secondly, declining health and increasing healthcare costs are among the most serious issues today's society faces. Another trend to be considered is the growing awareness of stress and mindfulness. According to Skanska and infuture hatalska foresight institute "Living Buildings" Report, wellbeing will be one of the fastest developing trend in the following years. Spending around 90% of our time in buildings, employers will be more obliged to promote health, work-life balance and wellness programs for employees. What is more, in many global economies there's a shortage of skills and talent is at a premium. All of those trends are driving the growing interest in wellness, which has evolved into a core pillar of corporate real estate strategy. **According to the EMEA Occupier Survey 2018 prepared by CBRE Research, four out of five occupiers have, or plan to introduce, wellness programmes and an even higher proportion have some degree of preference for wellness enabled/capable buildings. These buildings should offer a range of health and wellness features, as well as services designed to promote mental and physical wellbeing.** Among those solutions are advanced lighting, biophilic air treatment, advanced water purification, hydration stations, and stretching and relaxation areas. In fact, about 80% of employees agree that a company's wellness offering will be crucial in recruiting and retaining them over the next 10 years. In response to the needs of millennials, employers are hiring Wellbeing Officers, who are responsible for sustaining high-level of wellbeing in companies.

These days employers focus more and more on the young generation, the Millennials, who make up from 19% to 29% of the population in CEE countries. Born between 1980 and 2000, Millennials have come of age during a rapid period of technological advances and political changes. They are the first generation of new technology early adopters, with access to all of the information they need at the press of a button or the swipe of a screen. However, they also reached adulthood under the shadow of the global crisis. These moments will shape their attitudes and priorities, their outlook and the way they act. Typically viewed as a generation who want it all, and want it now, Millennials have been described as ambitious and self-confident with high expectations. They are, after all, one of the best educated generations in history. All in all, needs of this group of people should be seriously considered when planning an office space. Their working environment is important for Millennials and is a key take-away for office providers. Many feel that good design has a positive impact on employees. Expanding on the recent trend for bike racks, showers and coffee bars, some are now calling for on-site convenience stores, wellness areas and relaxation facilities, while green spaces in a building or on the roof are felt to be under-provided. Additionally, Millennials say they have a low tolerance for long commute times; 30 minutes is the longest tolerable commute for most of them. Due to these requirements of millennials, central locations and diversified, multimodal transportation services will be the key drivers during planning future investments.

Although a good level of public transportation is essential, the alternative amenities, such as cycling services (bike racks, changing rooms, showers, etc) or car-sharing applications, should be considered as well.

Figure 13. Millennials' longest tolerable commute to office – percent of respondents indicating given time limit (source: CBRE)

MILLENIALS' LONGEST TOLERABLE COMMUTE

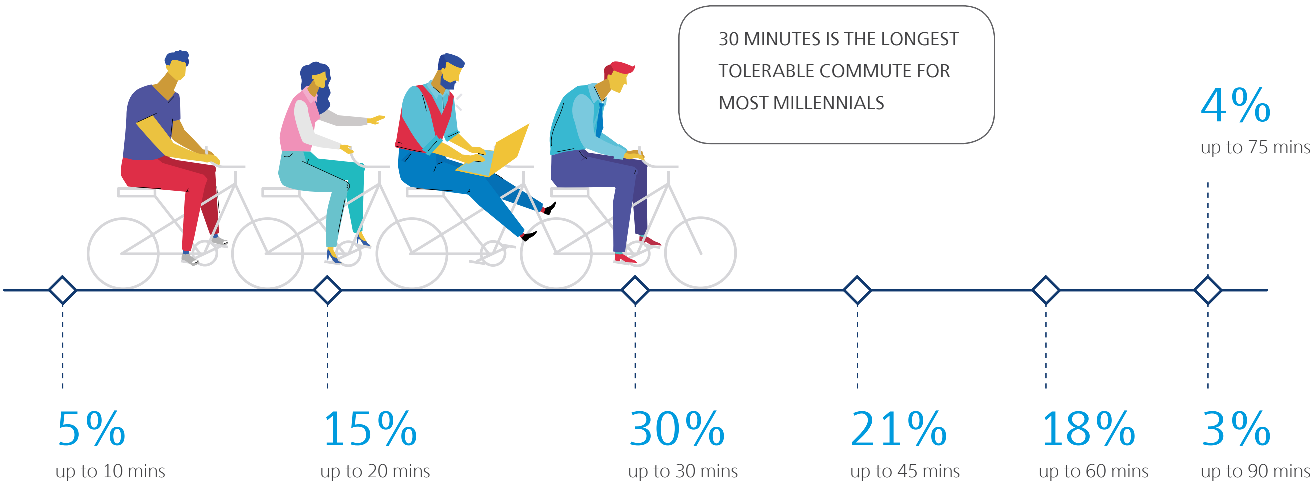
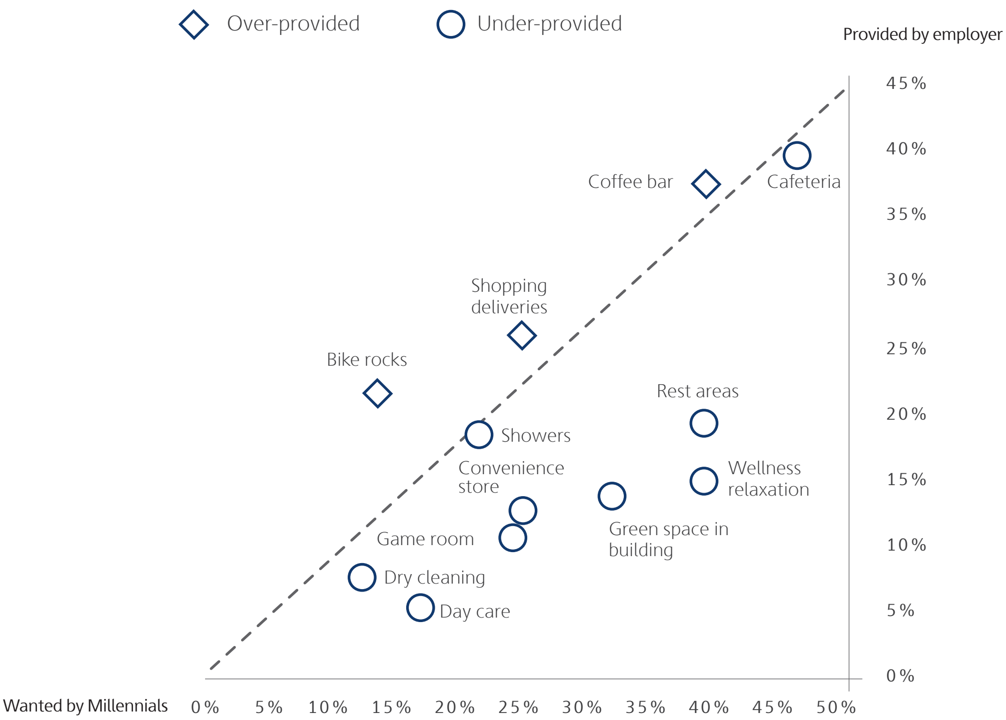


Figure 14. What Millennials want (source: CBRE)

CURRENT VS DESIRED FACILITIES



CEE VS WESTERN EUROPE
LEGAL AND TAX COMPARISON MATRIX

	Poland	Czech Republic	Hungary	Romania
Type of Real Estate interest	▪ Ownership (freehold) ▪ RPU ▪ Condominium ownership	▪ Freehold ▪ Condominium ownership ▪ Co-ownership ▪ Building rights	▪ Ownership ▪ Co-ownership ▪ Condominium ownership	▪ Ownership ▪ Co-ownership ▪ Condominium ownership ▪ Building rights ▪ Easements
Acquisition of Real Estate by foreigners	▪ European Economic Area ▪ Non-EEA foreigners require official consent *Exemption: agricultural land and forest*	No distinction between countries of origin *Exemption: state-owned agricultural land (non-EU, EEA, Switzerland)*	▪ European Economic Area (including agricultural or forest land) ▪ Eligibility criteria	▪ European Economic Area ▪ Non- EU, non-EEA foreigners – as regulated by international treaties, on a reciprocal basis
Types of transaction	▪ Asset ▪ Shares ▪ Enterprise	▪ Asset ▪ Shares ▪ Enterprise	▪ Asset ▪ Shares / Quotas	▪ Asset ▪ Shares ▪ Transfer of business
Title certainty (Public Register)	Public faith warranty principle	Public warranty principle (for asset deals) offers stronger protection than previous good faith principle	Legal presumption of the correctness of registered rights (former owners can challenge)	Land Book registration – currently results only in title's opposability toward third parties. Upon completion of land mapping, title over property will be acquired upon registration. Restitution claims still numerous although cut-off dates for regular claims expired
Notary and notarial fees	▪ To be valid and enforceable, notarial form is required for legal agreements for the sale of real estate and the transfer of perpetual usufruct rights to real estate (asset and enterprise deals) ▪ Notarial fees for the sale of real estate and the transfer of perpetual usufruct rights to real estate (asset and enterprise deals) are usually PLN 10,000 (€2,200) + VAT ▪ For the transfer of shares, an agreement has to be made in writing with signatures certified by a notary public. The notarial fees are approx. PLN 1,000 (€300) per signature	▪ Legal agreements for the sale of shares, sale of real estate and the transfer of perpetual usufruct rights to real estate do not need to be in notarial form to be enforceable ▪ Common practice for a notary, attorney or local municipalities to verify the signatures on such agreement / letter ▪ Notarial fees: approx. €1.50 per signature	▪ Neither the property sale and purchase agreements, nor the share sale and purchase agreements need to be notarized, though strict formalities apply and involvement / countersigning of a licensed attorney is required ▪ Mortgage and other security agreements are often signed in a notarized form to ensure simpler enforceability	▪ Mortgages, transfers of real property and granting other in rem rights must be notarized by a notary public ▪ The fee charged for the service rendered by the notary public in case of real property transfers, is generally 0.5% depending on the acquisition price
Transaction exit	▪ VAT and transfer tax issues must be considered in case of asset deals (if asset deal is exempt or outside the scope of VAT it is subject to 2% transfer tax). ▪ In case of asset deal, the gain is subject to 19% CIT. ▪ Capital gains on direct and indirect disposal of shares in a Polish company may be subject to CIT in Poland (subject to Double Taxation Treaties)	▪ Complicated and complex regulations on the sale of real estate transactions and VAT exemptions ▪ Reverse charge mechanism	▪ Share deals are subject to real estate transfer tax so no longer preferred by buyers	▪ Complicated and complex regulations on the sale of real estate; transactions and VAT exemptions ▪ Reverse charge mechanism ▪ Share deals outside the scope of VAT
VAT	▪ 23% applicable to rent ▪ Asset deals	▪ 21% ▪ Landlords elect to charge VAT ▪ Asset deals	▪ 27% ▪ Landlords elect to charge VAT ▪ Asset deals, domestic reverse charge may apply	▪ 19%

Germany	Spain	Italy	Netherlands
▪ Ownership ▪ Co-ownership ▪ Condominium ownership ▪ Heritable building rights (*Erbbaurechte*) (similar to ownership but limited in time)	▪ Ownership (main type of title) ▪ Administrative Concession	▪ Ownership (main type of title) ▪ Co-ownership	▪ Ownership (freehold) ▪ Apartment right Rights *in rem*: ▪ Right of leasehold (ground lease) ▪ Right of superficies ▪ Right of usufruct ▪ Joint / common ownership ▪ Right created by virtue of easement
No restrictions	No limitation or distinction applied to the acquisition of real estate assets by foreigners.	No distinction between countries of origin	No formal impediments for foreigners to acquire Dutch real estate
▪ Asset ▪ Shares ▪ Enterprise	▪ Asset ▪ Shares	▪ Asset ▪ Shares	▪ Asset ▪ Shares
Public faith principle in case of an asset deal: in favor of the person who acquires a right in a plot of land by way of an asset deal, the contents of the land register are presumed to be correct, unless an objection to the accuracy is registered or the inaccuracy is known to the acquirer	Legal presumption of the correctness of registered rights	Protection against third parties' claims	Title to real estate is registered in the Land Registry, which is a public register. However, there is no presumption of correctness of the registration
▪ Property purchase agreements require notarization to be valid ▪ In a share deal it depends on the type of company whether or not notarization is required (e.g. a transfer of interests in a German Partnership, e.g. a *Kommandit-gesellschaft/KG*, does not require notarization whereas a transfer of shares in a German limited liability company, *GmbH*, requires notarization) ▪ The notarial fees are defined by law and are non-negotiable. In general, they are calculated based on the value of the transaction ▪ For a purchase contract with a value of €60 m or more, the notarial fees will be a minimum approx. €80,000 + VAT plus ancillary costs; additional fees arise for the creation of land charges and other declarations and filings to be made by the notary in the context of the financing of the property ▪ The notarial fees increase if the contract to be notarized is not in German	▪ Mortgages, transfers of real property and granting other in rem rights must be notarized by a notary public ▪ Notarial fees are negotiable if the transaction value exceeds €6,010,121.04	▪ Mortgages, transfers of real property and granting other in rem rights must be notarized by a notary public ▪ The fee charged for the service rendered by the notary public is negotiable depending on the transaction value, and in case of real property transfers	▪ Title to real estate can only be transferred by means of a notarial deed ▪ The civil law notary will file a true copy of the deed for registration in the Land Registry ▪ The Land Registry will charge limited and fixed registration costs ▪ Notarial fees are based on an agreed fee and/or hourly rate, depending on the complexity and value of the transaction
▪ VAT as well as RETT issues to be considered in case of both asset sales and share sales ▪ An asset deal is in general subject to regular taxation whereas a sale of shares in a corporation is in general tax exempt (if the seller is a corporation) or partially (40%) tax exempt (if the seller is an individual)	▪ Both asset deals and share deals could be subject to taxation	▪ Complicated and complex regulations on the sale of real estate transactions (see transfer tax) ▪ Share deals are subject to registration tax for a lump sum of €200 and (if some requirement are met) to Italian Financial Transaction tax at a tax rate of 0.2%	▪ Capital gains are subject to Dutch corporate income tax (CIT) if the real estate is in the Netherlands. ▪ If the real estate is located abroad, tax treaty provisions will most likely allocate the right to levy taxes on these capital gains to the country of source. If so, capital gains will be exempt in the Netherlands. It is possible to claim a rollover relief for capital gains realized on the disposal of real estate, provided that (i) the company intends to replace the real estate within three years of disposal, and (ii) the replaced real estate has a function within the business of the seller similar to the disposed real estate
▪ 19% ▪ Landlords may elect to charge VAT with respect to commercial leases ▪ Sellers may elect to charge VAT in case of asset deals unless the sale is qualified as the sale of a going concern	▪ 21% applicable to rent of offices ▪ Asset deals (reverse-charge mechanism applicable if second or subsequent transfer) ▪ Share deals – in general, exempt from VAT and Transfer Tax	▪ 22% (general rate) ▪ Reduced 10% rate (if some requirements are met)	▪ 21% Acquisition: The supply of Dutch real estate is VAT-exempt, except in three cases: ▪ Supply of "building land"; ▪ Supply of newly constructed buildings no later than two years after first occupancy; ▪ Other supplies where seller and purchaser have opted for taxation; such option leads to taxation only if the purchaser uses the premises for activities that are at least 90 percent subject to VAT. Rental: The lease of Dutch real estate is VAT-exempt, except in the following cases: ▪ Lease of real estate property with respect to recreation (e.g. hotel business) ▪ Lease of parking space for vehicles or storage place for boats ▪ Lease of safe deposit boxes ▪ Lease of business premises for which the lessor and the lessee have opted for VAT taxation. Taxation may be invoked only if the lessee uses the premises (at least 90%) for activities that are subject to VAT (a threshold of 70% applies for certain designated lessees)

	Poland	Czech Republic	Hungary	Romania
CIT	▪ 15% applicable to small taxpayers (9% from 2019) ▪ 19% ▪ Capital gains property shares ▪ Subject to Double Taxation Treaties	▪ 19% ▪ 5% for investment funds ▪ Capital gains property shares ▪ Subject to Double Taxation Treaties	▪ 9% flat tax rate ▪ Capital gains property shares ▪ Share deal at Hungarian HoldCo level may be exempt from CIT ▪ Foreign capital gains on a share deal may be subject to 9% CIT subject to Double Taxation Treaties	▪ 16% ▪ (1% or 3% on micro-enterprises – annual turnover €1 million) ▪ Capital gains property shares ▪ Subject to Double Taxation Treaties
Withholding tax	▪ 19% on dividends ▪ 20% on interest on loans ▪ Subject to Double Taxation Treaties and Polish CIT regulations implementing exemptions under EU Directives	▪ 15% ▪ Subject to Double Taxation Treaties	N/a to corporations; only applicable to private individuals	▪ 16% ▪ Subject to Double Taxation Treaties
Tax losses	▪ Up to 5 years carried forward ▪ Max. 50% to be utilized in one fiscal year	▪ Carried forward up to 5 years	▪ Carried forward for 5 years ▪ Can be utilized up to 50% of the tax base in a given year	▪ Carried forward up to seven years
Property tax	▪ Land (area) ▪ Building (area) ▪ Constructions (initial value) ▪ Local authority	▪ Based on area of the building or land ▪ Local authority	▪ Building ▪ Land (in urban areas) ▪ Local municipality	Typically ▪ 1.5% on book value of building, although ranges from 0.25% to 1.8%
Transfer tax	▪ Depends on type of transaction (from PLN 19 - on capped mortgages to 2% on real estate acquisition if acquisition is outside the scope of VAT or VAT exempt) ▪ Share deals are subject to 1% transfer tax	▪ 4% on asset deals; paid by the purchaser	▪ 2% - 4% on asset deals capped at HUF 200 million (€620,000) per lot number, paid by the buyer ▪ Share deals too, if 75% of assets (of the SPV) is HU real estate	▪ Asset deals– registry fees and notary fee up to approx. 1% of value ▪ Share deals – Trade Registry duties
Other factors to note	▪ Starting from 2018 new interest limitation rules apply limiting the deduction of the excess of financing costs over interest income to 30% of tax-adjusted EBITDA ▪ Starting 2018 a "minimum CIT levy" applicable, among others, to owners of leased office buildings. The tax base is the gross (initial) tax value of the building decreased by PLN 10 m. The resulting amount is taxable monthly at the rate of 0.035%. The minimum CIT levy is deductible from due CIT calculated under the general rules	n/a	Asset deals may be subject to 2% local business tax	▪ Fire permits mandatory for certain buildings, systems, installations and fittings ▪ Right of first refusal for non-urban agricultural land, forest land and land leases ▪ 30-day "waiting" transfer period for transfer of shares to third parties in Romanian limited liability companies (LLCs) ▪ New PPP law enacted in May 2018 - aims to encourage joint ventures between public authorities and private investors ▪ Draft of new Construction Law under debate - aims to simplify procedures / paperwork and clarify regulations

Germany	Spain	Italy	Netherlands
▪ 15.825% ▪ 7 - 21% Trade Tax, if applicable ▪ Capital gains property shares ▪ Subject to Double Taxation Treaties	▪ 25% (15% for newly created companies if certain requirements are met) ▪ 1% for investment funds ▪ 0% for Spanish REITs ('SOCIMIs'), under certain requirements ▪ Capital gains property shares ▪ Subject to Double Taxation Treaties	▪ 24% CIT (in the case of "dormant companies" CIT applies at the higher rate of 34.5%) ▪ Capital gains on the sale of the property subject to ordinary CIT ▪ Subject to Double Taxation Treaties	▪ 25% (20% for profits up to €200k) ▪ Capital gains property shares Rental: ▪ Rental income is subject to CIT at the standard rate on a net basis, i.e., less deductible expenses (interest expenses, depreciation and maintenance expenses). ▪ It is expected that the CIT rates will be reduced as follows: 2019: 19% / 24% 2020: 17.5% / 22.5% 2021: 16% / 21%
▪ 25% ▪ Subject to Double Taxation Treaties ▪ Treaty/directive overriding rules to be considered	▪ 19% on dividends, interest and capital gains ▪ Subject to Double Taxation Treaties and Parent-Subsidiary Directive	▪ 26% on dividends (general rate), 1.20% (on dividends paid to beneficial owner resident and subject to tax in a European Economic Area), 0% (if Parent-Subsidiary Directive applies) ▪ 26% on interest on loans (general rate), 0% (in the case of cross-border loans that meet certain requirements) ▪ Subject to Double Taxation Treaties	▪ In principle, 15% on outbound dividends, unless a unilateral exemption or a Double Taxation Treaty applies ▪ No withholding tax on outbound interest
▪ Carried forward without limitation ▪ Max. €1 m can be utilized p.a. (minimum taxation)	▪ Carried forward with no time limitation ▪ Max 70% to offset the taxable income (50% if the net turnover is between €20 m. and €60 m. and 25% if the net turnover is higher than €60 m.) ▪ In any case, min allowance of tax losses up to €1 m.	▪ Carried forward indefinitely ▪ Max. 80% to be utilized in one fiscal year ▪ Special rules for the losses accrued in the first three years of business which may be carried forward indefinitely and set off in full against the taxable income	▪ Loss carry forward of up to nine years (expected to go down to six years) ▪ Carried back up to one year
▪ Tax rate depends on the levy rate of the municipality and the kind of real estate ▪ Calculated based on special values significantly that have not been changed for decades and are, therefore, considerably below the fair market value ▪ The Federal Constitutional Court has decided that new valuation rules have to be implemented; details are currently under political discussion	▪ Land ▪ Building ▪ Generally ranges between 0.4% and 1.1% of the cadastral value (which is an administrative value) ▪ Local authority	▪ Owning real estate properties (buildings, land suitable for building, rural land) in Italy is subject to Municipal Tax on real estate properties ("IMU") at 0.76% rate on income as entered in cadastral register increase of 5% and multiplied by a coefficient (depending on the nature of property) and to Annual tax for non-divisible local services ("TASI") at a 1‰ rate on the same IMU taxable basis	▪ Property tax is levied at an annual percentage of the so called WOZ-value of the property (specific valuation under Dutch law performed by Municipality)

▪ RETT 3.5% - 6.5% (depending on the location of the property) of the purchase price in case of asset deals
▪ RETT 3.5% - 6.5% (depending on the location of the property) of the property value in case of a share deal if 95% or more of the shares are transferred
▪ The legislative process for a tightening of the RETT rules for share deals (among others reduction of the relevant threshold to 90%) is expected to be started shortly
	▪ If applicable (i.e. only when VAT does not apply), generally ranges between 6% - 11% on asset deals	▪ In the case of asset deals– transfer taxes depends on the features of the transaction (i.e. nature of real estate property, nature of the seller / purchaser) and on the application (or not) of the VAT
		▪ Sale of residential real estate:
		  ▪ if VAT exempt and is subject to registration tax (at a 9% or 2% rate) on the sale consideration and to cadastral and mortgage taxes (at the fixed amounts of €50 for each tax);
		  ▪ if VAT applies is subject to registration, cadastral and mortgage taxes (at the fixed amounts of €200 for each type of tax)
		▪ The acquisition of commercial real estate whether the sale is subject to VAT or not (i.e. VAT exempt), is subject to registration tax (at the fixed amounts of €200) cadastral and mortgage taxes (at a cumulative 4% rate: 1% [cadastral] + 3% [mortgage])
		  ▪ in the case of share deal (if the contracts is executed in Italy before a notary or if executed abroad is presented to an Italian registration office or an Italian Court) is subject to a lump-sum registration tax of €200
		  ▪ If some requirement are met, the sale of the share could be subject to Italian Financial transaction tax at a tax rate of 0.2%
			▪ Real estate transfer tax is due on the acquisition of legal or beneficial/economic ownership of Dutch real estate or "fictitious" real estate (i.e. a substantial interest – defined by law – in a qualifying real estate company).
			▪ General rate is 6%
			▪ 2% applies to acquisition of residential property

n/a	▪ When acquiring a real estate asset (asset deal), Stamp Duty (generally ranges between 0.5% and 2.5%) applies on the fair market value of the asset if the acquisition is subject to VAT and is documented in a public deed ▪ Within an asset deal and provided a capital gain is generated, a local tax known as the Tax on the Increase of Value of the Urban Land would apply to the seller (a tax rate up to 30% would apply to the increase in value, which is calculated as a percentage applicable to the cadastral value of the urban land – depends on the municipality where the asset is located.)	n/a	n/a

source: Dentons

NEW TECHNOLOGICAL FRONTIERS

03

WHY IS PROPTECH IMPORTANT FOR INVESTORS?

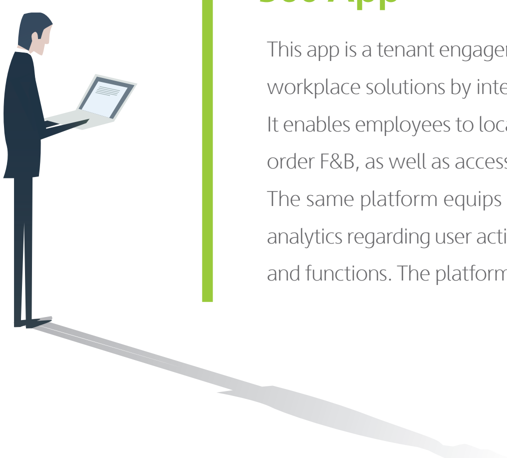
Real estate and technology are inevitably more and more closely connected. In the same way that cars are becoming more IT than pure mechanical machines, buildings are changing to become massive computers as well. However, the key to understanding the current change and the endless possibilities behind the technology in real estate is making a shift from building-oriented thinking (cost savings) to a user-centered approach (employees' experiences). Investors, having limited possibility to change buildings once purchased, can use technology provided by developers to position their assets and compete with new deliveries.

THERE ARE A FEW AREAS WHERE TECHNOLOGY CAN AFFECT NOT ONLY THE USE OF A BUILDING ITSELF BUT ALSO IMPROVE THE MANAGEMENT OF COMPANIES:

1. Communication and access to information (applications, virtual and augmented reality solutions (VR and AR)).
2. Comfort and efficiency – personalization of the workplace and automation of work (intelligent automatic assistants).
3. Measurement (beacons) and optimal design and flexible usage of space.
4. Building community, engagement and leisure at work via different platforms.

No one argues that the property of the future should be technologically capable of everything, from automated cleaning service notifications to tenant services. The key to success, however, relies on the user-friendliness of the tech world. There is a need for a bridge between people and technology in order to use it wisely and fully and to see a purpose for it.

In the whole CEE region still there is a huge gap between rapidly growing expectations and the availability of real proptech solutions in office buildings, particularly those related to user experience. Only a few developers have created building access applications; most of the innovations are more often being introduced by tenants on their own. According to CBRE's 2018 EMEA Occupier Survey, 62% of companies plan to increase their investment in real estate technology over the next three years, even if their business is not related to the property market. However, the need has been noticed and sooner or later buildings offering proptech solutions to occupiers, and their employees, will lead the market.



360 App

This app is a tenant engagement and experience platform that helps landlords and occupiers create customized workplace solutions by integrating property services and amenities with digital technology.
It enables employees to locate colleagues, navigate the workplace, reserve workspaces, learn about events and order F&B, as well as accessing basic building and high-end concierge services, all via a single smartphone app.
The same platform equips landlords with a building management console providing real-time reporting and analytics regarding user activity, the ability to set up noticeboards and send out notifications, and manage events and functions. The platform can be introduced in all buildings managed by CBRE.

WHAT IS THE FUTURE OF OFFICE SPACE…

While labor becomes more dispersed, the paradox will be that excellent places to live, work and play will matter more. Technology – hyperloops, autonomous cars, drones and AR/VR infrastructure – will change the distance game. In a world of frictionless geography corporations will promote their brands through excellent experiences across their flexible ecosystem of assets. Smart infrastructure will connect places across space. An individual's location preferences won't be driven by where he/she works, because he/she can work anywhere. Instead, they will be driven by the quality and authenticity of experience. The key will be for companies to take a more proactive approach to HQs, flexible space and home-working environments and a keener interest and participation in smart infrastructure and cities. Real estate will need to reflect this by being increasingly flexible, multi-purpose and rapidly adaptable.

New formats of assets, in highly interconnected systems, will emerge. **There will be radical changes in workforce structures, procurement and organizations that require companies to support labor in a variety of ways – including through real estate**. Locational networks will need to provide high quality experiences which support the training, brand immersion and collaboration of hyper-networked talent communities.

… AND WHAT DOES THAT MEAN FOR INVESTORS AND DEVELOPERS?

1. Landlords will have to embrace a change in the design and investment characteristics of real estate based on occupiers' permanent needs for adaptability and flexibility, with integrated systems and digital architecture to make that change possible.

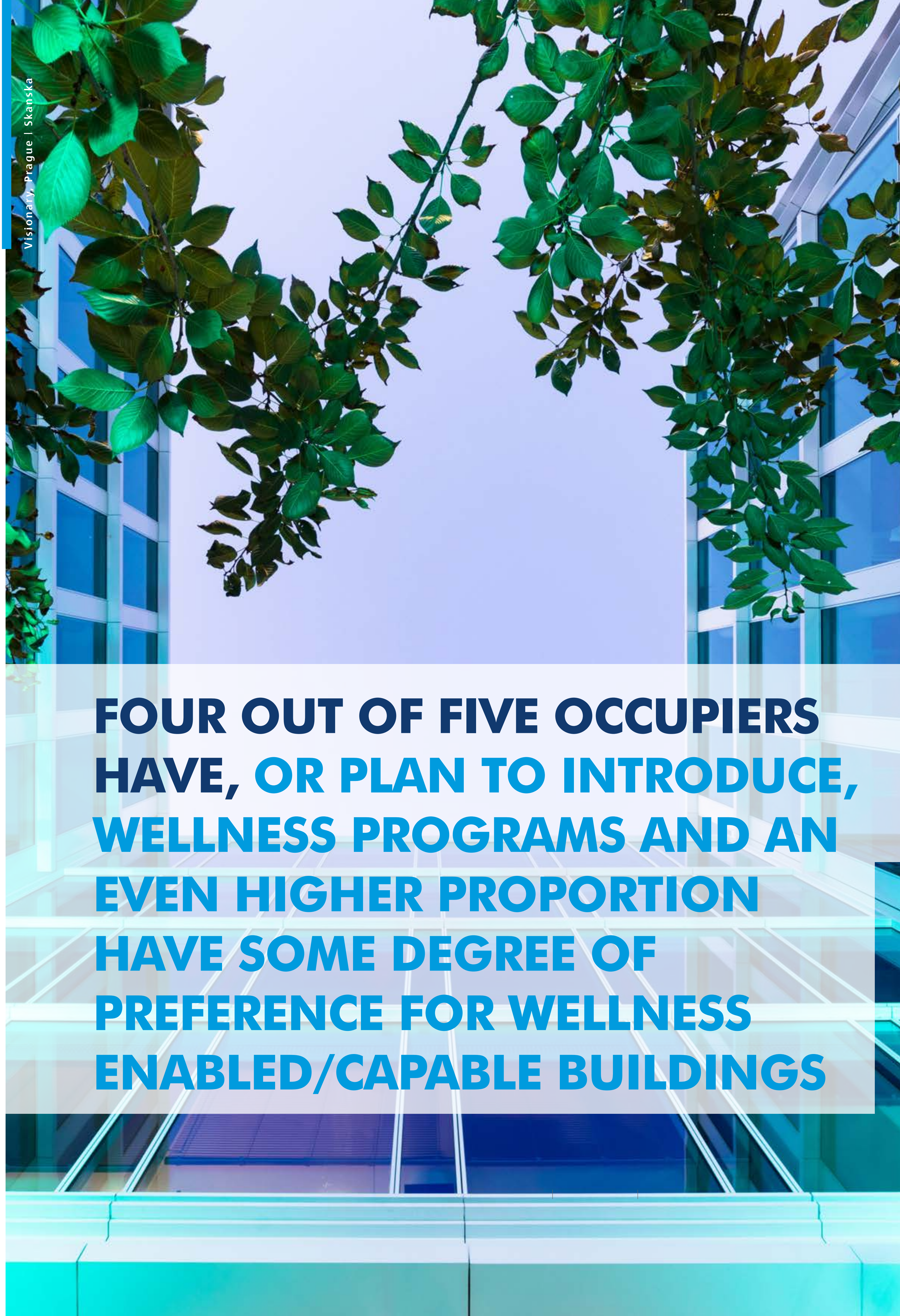
2. There will be a need to develop and refine new and responsive pricing structures, perhaps all-inclusive payments for on-demand space or fluid pricing based on real-time, number of users and dynamic market capacity.

3. This will create the need to provide a more curated and proptech-based user experience which extends beyond the constraints of the built environment and creates authentic and interconnected communities as part of a core space-as-a-service offering.

4. Investors will also have to reflect the desire for sustainable buildings and new approaches to energy consumption and management in their projects, where appropriate as part of a wider wellness agenda.

5. Portfolios of office buildings will no longer be viewed as a collection of fixed assets, but instead as a diverse range of adaptable capacity which can be shaped and repurposed in response to consumer demand. Spare or "just-in-case" capacity will be eliminated.

6. With long-term ownership seen as a hindrance, new forms of sharing, of assets, people and equipment, will be commonplace. Core portfolios will be smaller but smarter and more people-centric.



Visionary, Prague | Skanska

FOUR OUT OF FIVE OCCUPIERS HAVE, OR PLAN TO INTRODUCE, WELLNESS PROGRAMS AND AN EVEN HIGHER PROPORTION HAVE SOME DEGREE OF PREFERENCE FOR WELLNESS ENABLED/CAPABLE BUILDINGS

TECHNOLOGY AND BUILDINGS – HOW TO RECONCILE DIFFERENT DEVELOPMENT CYCLES

Office developers have for years been struggling with the speed of new technologies. While the innovation cycle in high tech lasts for around 18 months, the development process for office buildings still takes around five years. Key for achieving success on the office market is developing buildings that will be functional for many years, regardless of dynamic technological advancements.

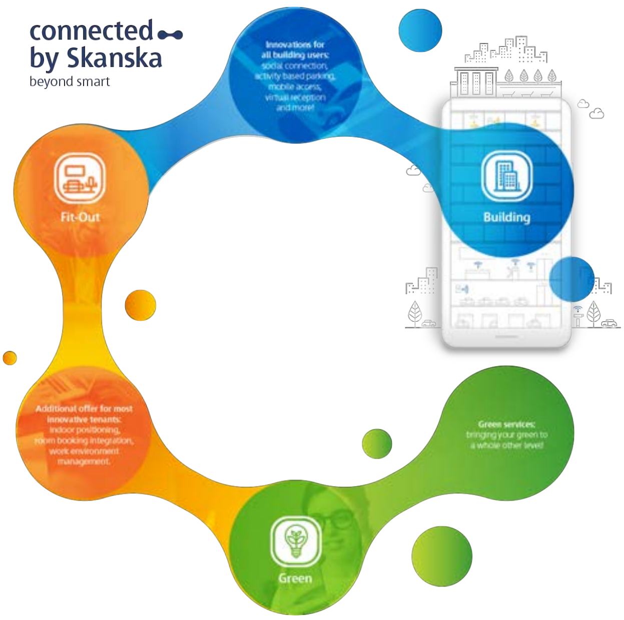
According to Skanska, new technologies will spread across the market and keeping up with them is necessary for buildings to be futureproof – protecting the investor from sudden changes in tenants' preferences with respect to building features. Although today tenants do not pay too much attention to the technological equipment an office has, that may change in the future and this will put pressure on both developers and investors. Representatives from all sectors believe that the industry will face a technological revolution over the next five years, which will significantly alter the competitive landscape.

The first building from the Spark office complex based in Warsaw, Poland is the first fully connected building in the CEE region, thanks to the complete implementation of Connected by Skanska package.

Office building users at the Spark complex can book meeting rooms throughout the building via a mobile app. The phone notes its position in the building and automatically connects a right point to control the temperature and lighting in a specific area. All functions "talk to each other", enabling the creation of a virtual pass for a guest or to reserve a parking spot while booking a room. All those features are available for all users and tenants.

Connected by Skanska

This is an all-in-one operating system for office buildings that includes a mobile application for everyday users and a web portal for and building administration. Every Skanska office project in CEE will have a smart infrastructure, beneficial for all tenants. It features solutions such as social connection via the app, activity-based parking, mobile access, virtual reception and office space management tools. Solutions that are included in the Connected by Skanska package work in similar way to smartphones; their features can be easily updated, just like apps we all use every day. Data gathered through Connected by Skanska tools is an invaluable resource for property managers. Based on the data provided by the Connected by Skanska solution, office spaces can be used in a more effective way as well as modified according to information obtained via the system.



BIG DATA IN LOCATION DECISIONS – HOW TECHNOLOGY WILL ENABLE BETTER URBAN GROWTH

The office market in Europe and CEE is undergoing a significant transformation, as can be seen in PwC's Emerging Trends in Real Estate Europe 2018 report ("ETRE"). One of the key points of that report is that the focus of occupiers and investors is moving towards:

1. **Better access to services, both public and private,** meeting the expectations of more demanding occupiers.
2. **Better accessibility through public transport,** allowing more flexible use of space.

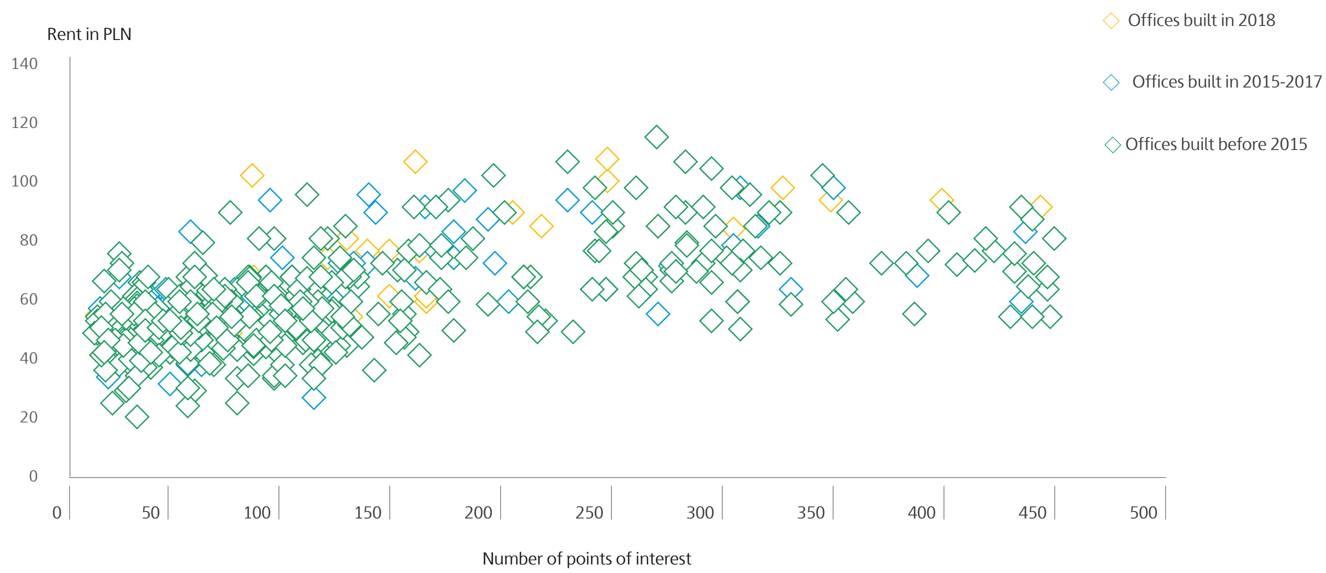
Both of the above points make mixed-use developments within inner city locations a more attractive investment asset, as was pointed out by one of the ETRE respondents. "Many occupiers are looking to create sustainable and secure places to work by offering their employees work-out, restaurant, retail and living options in close proximity," says a pan-European asset manager. "This will trigger a more mixed-use approach to new developments going forward. Lenders, investors and developers need to work together to deliver this next generation of mixed-use space for more demanding occupiers in the future."

PWC's research on the office market in Poland's capital Warsaw confirms the above observations. In order to understand how the location and surroundings of office buildings have changed,and to show impact of these changes on occupier and investment decisions during recent years PWC mapped:

1. **Office projects built in three time periods** (currently under construction, built in the years 2015-2017 and built before 2014).
2. **Points of interest (POIs), understood service points both public** (i.e. schools, public administration, healthcare services) and private (i.e. high street retail including grocery convience shops, restaurants, pubs etc.) for the same time periods.

The number of POIs for every office building was identified for catchment areas of 300 m, 650 m and 1,000 m from each location . The outcome of the work shows that office buildings being completed today have a better accessibility to services than buildings built in the last three years and older buildings, with the number of POIs higher by 10% and 20% respectively.

Figure 15. Rent vs Count of Points of Interest within 650 m (source: PWC)



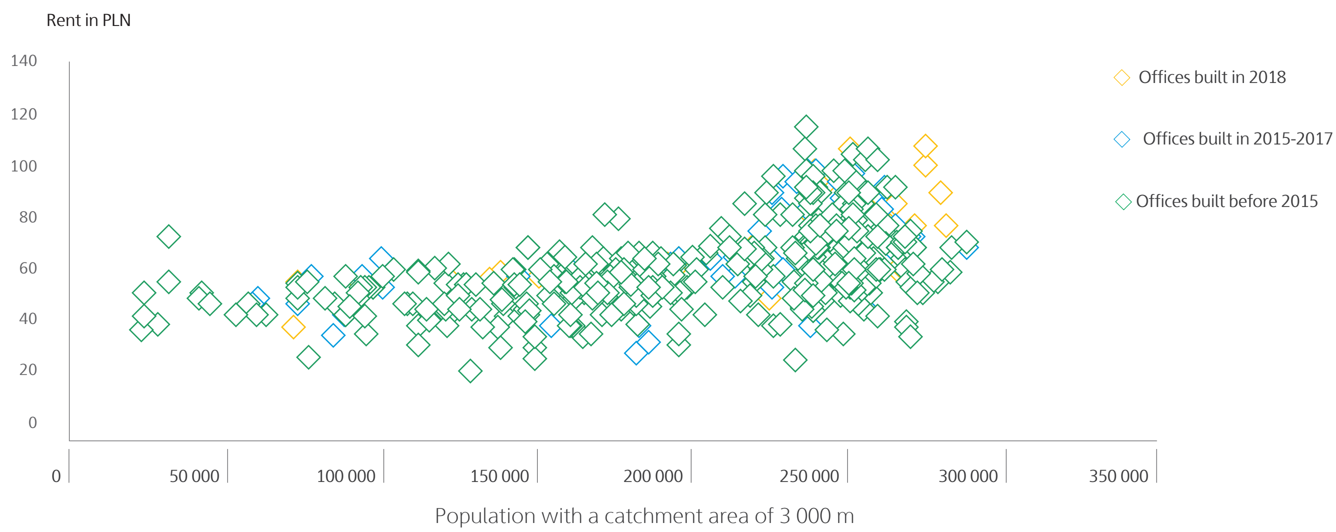
Moreover. the number of POIs in the immediate vicinity of an office building has a positive impact on the headline rents offered on the market.

The data analysed also shows the increasing number of developments in areas with high numbers of POIs. As shown on the graph on the above, buildings being completed in 2018 (marked with yellow dots) are much more present on the right hand of the spectrum as compared to buildings developed in 2015–2017 (blue dots) and before 2015 (green dots)

The focus on new development of office functions in areas with a high population and number of POIs is also visible when looking at the relationship between headline rents and population level with a catchment area of 3,000 m from each analysed location.

Housing in the vicinity of office locations is especially important for the upkeep of services, which are able to generate revenue after office buildings close their doors (i.e. food, fashion retail, convenience stores). Areas with higher population levels also have better access to green and publicly available recreational areas.

Figure 16. Rent vs population



Further growth in the attractiveness of locations for office development is expected along metro, tram and bus lines within urban and residential neighborhoods with a high number of POIs. The most interesting and promising locations from the perspective of property developers also include districts undergoing revitalization projects led by cities on the basis of public funding (including EU funds and lending institutions such as the European Investment Bank).

THE DATA SHOWS THE INCREASING NUMBER OF DEVELOPMENTS IN AREAS WITH A HIGH NUMBER OF PLACES SUCH AS SCHOOLS, SHOPS, RESTAURANTS AND PUBS

Skanska office, Spark, Warsaw | Skanska

LEADERS NOT ONLY IN ECONOMIC GROWTH

HUNGARY

Hungary has been placed third in the 2018 "Glass Ceiling Index", which surveyed the percentage share of female management in 41 OECD and EU member countries. The index, which is part of a larger study conducted by leading UK-based technology career and research platform Honeypot, measured the percentage of women holding senior, legislative and management positions. According to the survey, some 40.5% of Hungary's senior and managerial roles belong to women, meaning only Latvia and the United States finished ahead of it, with 44.4% and 43.5%, respectively, of senior/managerial positions occupied by women (source: OECD).

CZECH REPUBLIC

The Czech Republic the second highest share of contactless payments on total card transactions in the world – 91%. Australia ranks first world: 91%. This is according to data from card issuer Visa. Among neighboring countries, the Czech Republic is followed by Slovakia (74%) and Poland (73%). Visa anticipates a boom in digital payments, which are growing five times faster than physical card payments (source: Visa).

ROMANIA

Software firm UiPath has become one of the first unicorns (companies valued at USD 1 billion or more) in CEE. It raised 153 million dollars in new venture financing, which values the company at more than 1.1 billion euros (more than 1.3 billion dollars). UiPath produces robotic software to carry out repetitive tasks such as cancelling a lost credit cards or insurance claim processing, customer order fulfillment and human resources set-up functions (source: Reuters).

POLAND

In recent years Poland has become one of the world's leaders in producing computer games. Many mid-cap Polish companies have released blockbuster games which have reached the top places in prestigious rankings – for example, "The Witcher 3" is still, three years after release, ranked as the best game by gamesradar.com.[11] CD Project, a private Polish game developer listed at the Warsaw Stock Exchange (WSE), is currently valued at approximately 5 billion dollars and is among the 20 largest companies on the WSE.

[11] Delahunty-Light D., "The 25 best open world games to play right now and completely forget real life exists", GamesRadar.com, 26. July 2018

Five, Prague | Skanska

SUMMARY

04

SUMMARY

CEE has maintained its position as the fastest growing region within the European Union, with its growth rate of 4.2% in H1 2018 being double the average for the whole of the EU. At the same time, CEE is in the midst of a very important business transition: from economic growth which is based on wage competitiveness to growth which is based on knowledge.

CEE countries try to base their growth model on knowledge rather than low costs only. This upgrading process can be seen in the demand for skills. The number of jobs requiring high-level skills is growing at the fastest rate in CEE, whereas jobs requiring only elementary capabilities are stagnating. The higher the skill level required for a job, the stronger the growth in demand for staff.

Modern business services sector, which is the key driver of demand for modern office space, also transforms. Increasingly the business services centers provide processes of significant added value, requiring not only knowledge and experience, but also decision making. It was unthinkable even a decade ago that fully fledged controlling, internal audit and strategy departments, providing services for entire companies, would be located in Poland or in Hungary. Now it is slowly becoming the norm.

The demand for modern office space is very strong in CEE. Net absorbtion in major cities in CEE in the first half of 2018 was almost 700,000 sqm. Strong demand fosters strong development activity. The modern office stock is currently estimated at 21.1 million sqm and a further 6 million sqm will be completed over the next three years. That means almost 9% annual growth. Investment activity is also very high. In 2018, almost 5,8 billion euro will be invested in the CEE office market. Investors in the region come from all parts of the World – from US, to Western Europe, Israel and South Africa.

CEE has become a mature market not only in economic terms but also in legal terms. Transaction structures, tax rates and other costs in CEE are very similar to Western standards. In various aspects, such as CIT rates, CEE offers very favorable conditions.

Although the business services sector is one of the largest sources of demand for office space, the demand structure is significantly more varied. For example, recently, in search of the best employees, public entities have begun to move their headquarters to new modern office buildings. Moreover, more and more domestic enterprises are expanding their office footprints as well, which is supported by strong domestic consumption, economic development and increased worldwide expansion.

The annual share of flexible office the annual share of flexible office platforms in Warsaw's take-up has risen from 0.7% to 8.3% since 2015. The development of instant offices is even more significant in other CEE markets, where its share in total leasing activity is expected to range between 8% in Budapest to 15% in Bratislava in coming years.

In Poland and the whole CEE region still there is a huge gap between rapidly growing expectations and the availability of real proptech solutions in office buildings, particularly those related to user experience. Only a few developers have created building access applications. But that is changing rapidly. Technology has become one of the major hot topics in the real estate industry in the region.

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