CEE Investment Report 2019

Thriving Metropolitan Cities



Report by:







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 2019 edition of the report, titled "Thriving Metropolitan Cities", concentrates on cities, referencing their growing importance in global economy.

Cities are the core of economic growth based on knowledge, the destination of investments in a services sector. Most importantly, globalization of services increases competition between cities. Warsaw, Prague, Budapest, Bucharest, Bratislava and other cites compete for jobs with London, Paris or Madrid. CEE Investment Report should help investors understand the forces which make CEE metropolises global and modern.

Dynamism

Since 1990 the total real economic growth in CEE has been 270%.

Expansion

Today the value of the foreign sales of goods and services from CEE is close to 10,000 USD dollars per each inhabitant in the region. At the beginning of transformation process in 1990 that value was 500 USD dollars (the increase has been 1600%).

Standard of living

In 1990 the average worker in CEE earned ca. 2 500 USD dollars compared to ca. 17 000 USD today. When differences in prices are taken into account, the average person in CEE consumes ca. 70% of average consumption in the Western Europe, comparing to ca. 33% in 1990.

Stability

The economies of CEE are much less leveraged than developed countries. The average public debt ratio is 50% of GDP (compared to 96% in the Eurozone), and the private debt ratio is 80% (compared to 160% in the Eurozone).



Colliers International

Central & Eastern European economies have grown faster than Western Europe benefitting from the relocation of industry and services from Western Europe. Poland in particular is now seen as a mature market of Europe. In addition, Western Europe has suffered from a genuine lack of development over the past 10 years whereas, CEE has developed sustainable, well-being offices and logistics which has attracted global occupiers. Any liquidity concerns of a lack of local investors is quickly being erased by the rise of activity by Czech and Hungarian pension funds and with Poland looking to enter the REIT market, we are now seeing more North American, APAC and European capital enter the CEE targeting good quality buildings with stable income at higher yields and lower capital values to Western European cities. Many CEE cities have improved human capital and connectivity with the challenge ahead being how these cities become recognised 'smart cities' with world leading amenities, technology, transport hubs for the future occupier.

Richard Divall, Head of Cross Border Capital Markets | EMEA



Dentons

The amount of global capital on the market is enormous, even in this late-cycle phase. It needs to be invested, ideally in places with a secure legal system and high potential of economic growth, guaranteeing enhanced revenues. CEE countries with their metropolitan cities are invariably perceived as offering just such an environment. FTSE Russell's decision of September 2018 to upgrade Poland from 'emerging' to 'developed' economy placed the country in one basket with global economies like the US, UK, Germany, France, Japan and Australia. It put Warsaw and key Polish cities on the radar screen of out-of-region investors, including from South Korea, Singapore and Hong Kong. The Czech commercial real estate market, with Prague leading the way, is also witnessing robust interest, with multiple Asian investors allocating money in assets there. Capital cities in CEE are the answer to a growing number of investors who are looking for value.

Paweł Dębowski, Partner, Chairman of the European Real Estate Group



Skanska

CEE is the fastest growing region within the European Union, with GDP growth surpassing 4 percent a year, and its main cities are becoming global and connected metropolises. Warsaw, Prague, Budapest or Bucharest have never been closer to Milan or Berlin when it comes to business opportunities. It is visible in investors' approach who are introducing real estate investment strategies towards specific cities, not countries. They are looking for vital hubs of talents and entrepreneurship, which make part of a global network of complex business services. And they can easily find this kind of thriving places in CEE region. Together with partners, I would like to wish you a pleasant read.

Adrian Karczewicz, Head of Divestments at Skanska's commercial development unit in CEE

Chapter 1.

CEE metropolises – the most dynamic element of European economy

06



Contents



Cities are gateways to the future	07
The ranking of most dynamic metropolises in the EU	08
From accounting to management – how workers in CEE became almost as productive as their Western colleagues	10
Gates to the world - what air connections tell about global position of cities	12
Digital connections and the new waves of growth	14
Education determines growth and resilience	16
Case study: how Łódź redefined itsfelf	18
Macroeconomic outlook	20
View from McKinsey	21
Key numbers and economists' assessment	22
Legal and tax comparison: CEE vs. Western Europe	24

Chapter 2.

What determines the global role of cities

28

Chapter 3.

Office market dynamics

52





- key characteristics



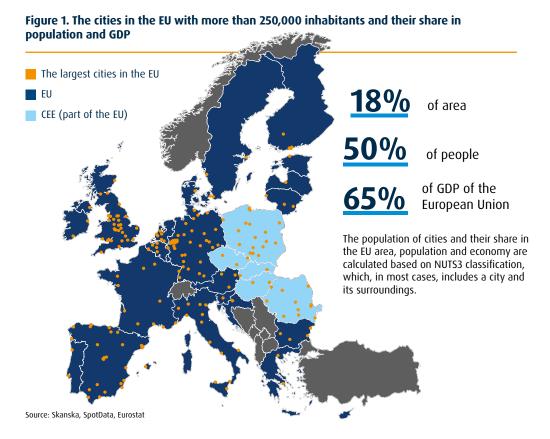
Chasing Amsterdam and Paris	53
Doubling again? The future of office space in CEE	54
Office market data	58
Investment market data	60
How Asian investments skyrocketed in the region	64
Investors' view	68
Summary	70



Cities are gateways to the future and a key to competitiveness

The service and knowledge-based economy thrives mostly in large metropolitan areas, especially those which are strong in terms of education, science, trade and finance. Whilst cities have been centres of trade since ancient times, in the 21st century unprecedented growth in technology-based services is set to transform economies further by accelerating urbanisation trends and increasing the importance of cities as centres for future growth. Michael Batty, a British geographer and a professor at University College London, predicts that "the coming century will see a transition to a world where everyone lives in cities".

The CEE region offers plentiful insights into mechanisms of metropolitan growth, because the metropolises of this region are among the fastest growing in Europe. Moreover, knowledge-based services in this region are growing faster than average. According to data from Eurostat, the share of high-tech sectors (i.e. R&D and science) in employment in the largest cities in CEE has grown by 1.3 percentage points over the last five years, compared with 0.7 percentage points for London and Paris.



The list of the most dynamic European cities

The cities of CEE dominate the list of the fastest growing metropolitan areas in the European Union. Of the 20 best performing cities, 16 are in CEE. The first of those 20 is Dublin, which has become one of the most important destinations for investments and also benefits from tax-optimisation operations by international companies. But the second place is taken by Prague, which has seen very rapid growth in educated population in recent years. And Wroclaw has taken the third place on the podium, mainly thanks to its spectacular growth in productivity.

The ranking of the fastest growing cities was prepared by the authors of this report and was based on criteria described at the next page - productivity (GDP per person), connectivity and human capital. The cities with more than 250,000 inhabitants were considered.

Figure 2. The list of 20 fastest growing cities in the European Union (200 cities were analysed for the ranking)

1. Dublin (Ireland)	11. Iasi (Romania)
2. Prague (Czech Republic)	12. Bratislava (Slovakia)
3. Wroclaw (Poland)	13. Kaunas (Lithuania)
4. Sofia (Bulgaria)	14. Gdansk (Poland)
5. Kosice (Slovakia)	15. Szczecin (Poland)
6. Bucharest (Romania)	16. Porto (Portugal)
7. Cluj-Napoca (Romania)	17. Warsaw (Poland)
8. Krakow (Polad)	18. Tallin (Estonia)
9. Timisoara (Romania)	19. Barcelona (Spain)
10. Vilnius (Lithuania)	20. Birminhgam (UK)

Source: Skanska, SpotData

Figure 3. Three factors which were measured in the ranking of the most dynamic cities in the EU



Productivity growth

- · Paul Krugman, economist and Nobel laureate, once said that "productivity isn't everything, but, in the long run, it is almost everything". The dynamics at which workers increase their ability to produce goods and services is the most fundamental indicator of any economy's long term strength and attractiveness for investors.
- The indicator that we used for analysis is GDP per worker dynamics in the last 5 years.



Connectivity growth

- The strength of cities and surrounding economies have always been related to the role they played in the global trade. That's why all important global cities were located on waterways. Today water is not as important as in the past, but global connectivity is still crucial for success. Michael Batty writes that: "Networks and flows are all-important in defining the functions of the city".
- The indicator that we used for analysis is aircraft passangers traffic at main airports in the cities in the EU.



Human capital growth

- · Cities with well-educated workforce can survive any economic shocks and turbulences. That is why New York or Boston were much less vulnerable to deindustrialization than Detroit - the former had much higher educated workforce shares. Educated workforce draws investments, promotes innovations and entrepreneurship, increases flexibility to sudden changes in economic conditions.
- The indicator that we used for analysis is the share of workers with tertiary education.

Figure 4. Map of the 100 most dynamic cities in the EU, divided into four equal groups according to their place on the list (size of circles is proportional to population of cities)



From accounting to management - how workers in CEE became almost as productive as in Western metropolises

American financial corporation State Street provides a good example of how CEE metropolises are gradually moving upwards in terms of quality of jobs performed by their inhabitants. The region has moved from being mainly a cheap location for outsourcing manual and repetitive tasks for Western European companies, to become an important global centre for knowledge intensive services.

State Street, which specializes in managing funds for clients, opened its first office in Poland in 2007 and employed mainly specialists in accounting and administration. Ten years later it expanded its activity in Krakow (southern Poland) to include fund management operations – much more complicated in terms of tasks performed. The shift that State Street made in its global operation is representative for a wider trend in CEE.

While the cost outsourcing element is still a key component for foreign investors (according to McKinsey, an educated worker

in the CEE region earns a quarter of the Western European wage, allowing large corporations to save billions of dollars

in operational costs, which is increasingly important in industries where margins are shrinking, e.g. investment banking), knowledge and soft skills are gaining weight. And not only foreign investors are making that change: local companies are following the same path. The share of jobs that require the highest level of education (a Master's degree or more) has increased from 13% in 2008 to 17% in 2018 in CEE, and in Poland it has jumped from 15% to 20%.

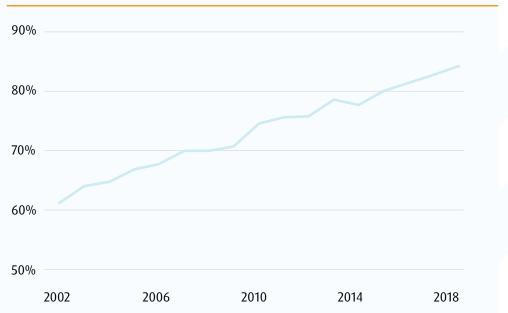
The average GDP per person employed in large CEE metropolises has increased from 65% of the average of the largest Western metropolises in 2004 to 85% today, according to data from the OECD (GDP is corrected for differences in prices, known as purchasing power parity adjustment).

These numbers reflect two important facts about the region. Firstly, productivity has been increasing dynamically in CEE, which in practice means that the share of workers who can perform the same tasks as their most skilled peers in the West is increasing. Secondly, the quality of life

The share of jobs that require the highest level of education (Masters degree or more) has increased from 13% in 2008 to 17% in 2018 in CEE, and in Poland it jumped from 15% to 20%.

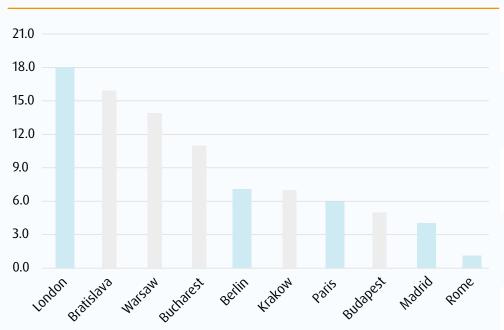
in CEE metropolises is gradually reaching Western levels. Few people realise that the quality of life in the largest CEE cities, like Warsaw, Prague and Budapest, is almost on a par with Western Europe: it is not as high as in Paris or London, but close to some of the other famous Western cities, such as Rome or Madrid.

Figure 5. GDP per worker in CEE metropolises as % of the level of Western metropolises



Source: own calculations based on OECD; CEE metropolises include: Warsaw, Wroclaw, Krakow, Prague, Budapest, Bucharest and Bratislava. Western metropolises include London, Paris, Berlin, Madrid and Rome.

Figure 6. Percent of people who say that it is easy to find a good job in the city



Source: Result of the survey made by Eurostat in 2015. The exact statement was: "In this city it is easy to find a good job", and people surveyed had four options: strongly agree, somewhat agree, somewhat disagree, strongly disagree. The numbers on the chart demonstrate option 1.

Gateways to the world: what airline connections say about the global positions of cities

"From classical Athens, through eighth-century Baghdad, to modern Nagasaki, cities have always been the most effective way to transfer knowledge between civilisations," wrote Edward Gleaser, a Harvard economist, in his book "The Triumph of the City". Prosperity is always linked to role in the global economic system. From ancient to modern times, economies thrive in places which connect various cultures and systems through trade and human transport. It is no accident that the largest cities in the world are located on rivers or sea-shores. Today it is air transport and digital connections that determine global connections. But the rule is still the same: economic activity concentrates mainly around hubs of trade and transport. As will be demonstrated in subsequent parts of this report, trade in services is increasingly important.

The economies of CEE have achieved their economic success largely due to their openness to world trade, facilitated by huge investments in transport infrastructure. And CEE metropolises are naturally their countries' gateways to other regions. There is no better

It is interesting to observe how air connections with Asia grow in CEE. The number of passengers on direct flights to East Asia grew by almost 400% over the last five years – from ca. 83,000 in 2013 to almost 390,000 in 2018.

way to demonstrate the vibrancy of their international role than by presenting the activity at their airports, the true gateways of our times. In 2004 the average number of passengers in CEE metropolises was slightly above a quarter of the numbers recorded by the main airports in Europe*. Today it is 50%, despite the fact that the cities of CEE are not as popular tourist destinations as London, Paris and Rome. And the growth in the

number of passengers over the last five years is sky high.

It is interesting to observe how air connections with Asia are growing in CEE. The number of passengers on direct flights

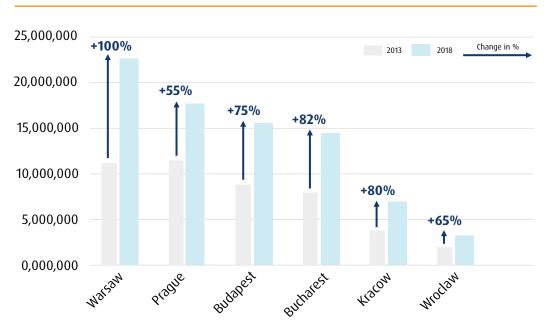
to East Asia has grown by almost 400% over the last five years, from approximately 83,000 in 2013 to almost 390,000 in 2018. Some of that increase can be explained by tourism, but it largely business travel that has pushed airlines to provide direct

flights linking Warsaw and Prague to Beijing, Singapore and Seoul. Trade in goods and services between CEE and Asia has grown by a staggering 60% over the same period (i.e. the last 5 years), according to Eurostat, and physical connections have followed that increased trade activity.

 $^{^{*}}$ weighted to take into account the number of inhabitants in the metropolises near to the airports



Figure 7. Number of air passangers in main CEE cities and five-year change



Source: Skanska, SpotData, based on Eurostat data and data from airports

... and how digital connections allow CEE to ride new waves of growth

For centuries, it was water that connected regions and civilisations. Then came railways, highways and air corridors. They all made it possible for the products of agriculture, artisanship and, since the 18th century, industry to be exchanged on a large scale. But today the nature of global relations is gradually changing: digital connections are becoming important and the globalisation of services is growing more quickly than the globalisation of trade in goods.

This trend might be advantageous to CEE, because human capital, which the countries of the region have in abundance, takes precedence over monetary capital, which the regions is still lacking. And it is clear that CEE has found its niches in the global exchange of digital services.

For years the main outsourcing centre for the Information and Communication Technologies (ICT) sector was India, which offered, in cities such as Bangalore, very high-quality IT workers for low prices. But as complexity of trade in digital services grew, the orders moved to locations which offer

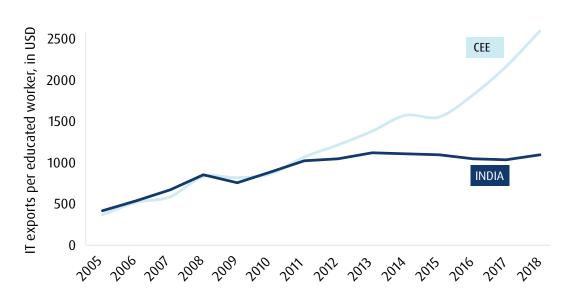
higher productivity, better connections and easier communication. When time zone, language and skills matter, CEE has an advantage over Asia.

This is the reason why since 2012 CEE has outpaced India in terms of ICT exports per (educated) worker. The price of labour is much higher in CEE than in India, as the region gradually moves from being an emerging to developed market, but the quality of work is also much higher. As we will show in the next chapter, CEE is competing for jobs not with Asia but with Western metropolises.





Figure 8. IT services exports weighted by the number of highly educated workers



Source: Skanska, SpotData, based on data from World Bank and World Trade Organization





Education determines growth and resilience

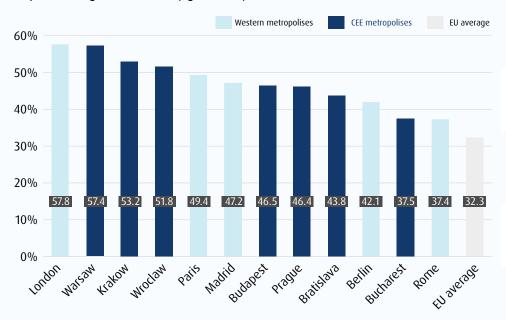
Education is important for economic growth, as it increases both human capital and income. But it also plays another important and more nuanced role. When a society, at a city or country level, is well-educated, it adapts rapidly to changes in economic environment and is less vulnerable to sudden shifts in global flows of goods and services. Well-educated societies are not only more productive, but also more dynamic and flexible. We show this on the next page, with a case study of Łódź, the former industrial powerhouse of Poland.

It is good education that allowed CEE countries to switch from being a supplier of industrial goods to the Soviet Union, and the entire communist bloc, to having a role as an important element in Western supply chains in the 1990s. First in industry, and in recent years also in advanced services.

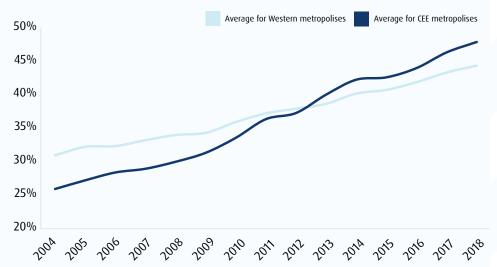
A close look at the education profile of the largest metropolises in Europe and CEE shows how this success has been possible. Today, Warsaw, Prague and Budapest have higher percentages of workers with higher education than Berlin and Rome and similar levels to those found in London and Paris. And the rate of growth in that percentage has been faster than in major Western metropolises. All investors in the sector of modern business services point to human capital as the single most important factor drawing their interest to the region.

Figure 9. Share of population with higher education





People with higher education (aged 25-64), in %, between 2004 and 2018



Source: Skanska, SpotData, based on data from Eurostat

Case study:

how Łódź redefined itself

There are numerous cities in the world which had boasted their prominence in the industrial era but lost their status due to changes in global production patterns. Detroit, with its failing car factories, is the most (in)famous example. Some of those cities managed to redefine their roles and switch their economies from manufacturing to services. Birmingham is a prime example of such success: its industrial economy weakened in the second half of 20th century due to competition from low cost countries, but later the city re-emerged as one of the most dynamic places in the UK due to a growing services sector. It is still very high on our list of the most dynamic metropolises in the EU.

Economists often argue that the reason why

Łódź – the city in central Poland, one of the industrial powerhouses of the country in the past – is a good example of successful transformation. some cities decline and other flourish is education. Manufacturing in the past depended

heavily on low-skilled workers and cities which were dominated by low-skilled inhabitants struggled to adjust to the realities of the services-dependent economy. And, by contrast, cities with high numbers of well-educated workers switched more easily between different eras of development.

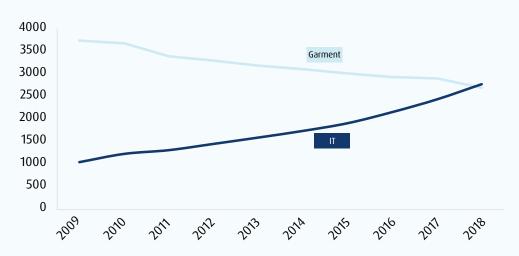
Łódź, a city in central Poland and one of the nation's industrial powerhouses in the past, is a good example of successful transformation.

Łódź was a centre of garment and textile production, the city and its suburbs are still full of the red brick buildings of old factories. But when Poland was opened to international trade in the early 1990s, the competition from China and other low-cost countries gradually destroyed the city's traditional economy. Unemployment rose, many companies collapsed and Łódź became a text-book example of a falling city. The negative trend began to change in the middle of the first decade of this century, when a flow of foreign investments in the services sector started. The number of companies involved in modern services increased substantially, unemployment fell and empty factories were redeveloped to become offices, hotels and shops. Today Łódź has an unemployment rate of just 5%.

Why was this transformation possible? Łódź is in the top quantile of European cities in terms of increase in the percentage of highly educated workers. The city has good universities and technical schools and one of the world's most famous film-schools. Moreover, it still has relatively low wages compared to Warsaw, Krakow and Wroclaw. The combination of those two factors allowed the city to flourish.



Figure 10. Number of companies in the garment and IT sectors in Łódź



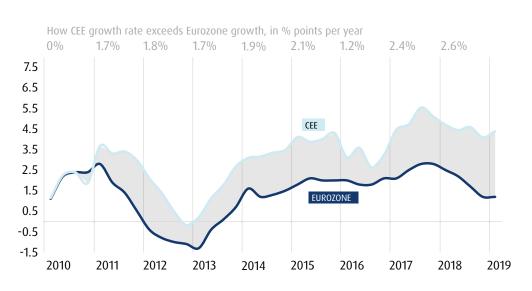
Source: Central Statistics Office of Poland

Macroeconomic outlook for CEE

The recent years have been particularly good for the CEE region. GDP growth has remained strong, even in the wake of the slowdown in the Eurozone.

In 2018 the growth difference between CEE and the Eurozone was the biggest since the financial crisis. Why was that possible? One explanation is the very good growth in consumption, which itself has been due to strong wage growth. Another explanation is the relocation of production from Western Europe to CEE, both in terms of industry and services. Most forecasts indicate that CEE can maintain high growth rates, albeit not as high as last year.

Figure 11. GDP growth in %



Source: own calculations based on Eurostat

Digitization will be the new engine of growth

Jurica Novak
Managing Partner
in Central Europe
McKinsey &
Company

Since the transition to a market economy almost three decades ago, Central Europe (CE) has enjoyed a golden age of growth.

Ten CE countries – Bulgaria, Croatia, the Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia – recorded on average a 114 percent increase in GDP per capita between 1996 and 2017, compared to an increase of just 27 percent in the European Union's "Big 5" economies: France, Germany, Italy, Spain, and the United Kingdom.

The CE region has become one of the most attractive places to invest in globally. This fact has enabled CE countries to partially close the economic gap to Western Europe, and their populations to enjoy

a significant rise in living

standards. Growth in CE
has been driven by a
number of factors,
including traditional
industries,
dynamic exports,
investments from
abroad, laborcost advantages
and funding from
the European
Union.

But now these drivers are beginning to weaken. CE economies are generally undercapitalized compared to their more advanced European peers. The capital stock, measured as total gross fixed assets per employee, is 60 percent lower than the average for the EU Big 5. Workforce costs are also rising and there are limited labor reserves left to plug into the economy, with unemployment at record low levels – on average 6.5 percent in 2017, compared to 7.6 percent in the EU. Labor productivity improved but still lags behind Western Europe. And on top of it all, the inflow of EU funds to CE countries is likely to slow down after 2020.

Clearly, CE needs a new engine to drive its future economic growth. We believe that digitization can be the answer to this challenge, becoming the region's new growth engine. Our analysis, published in a recent report titled The Rise of Digital Challengers, shows that digitization can bring up to €200 billion of additional GDP by 2025.

The current level of digitization in CE is almost on a par with the largest EU countries. The pace of development of the digital economy and the existence of key enablers of digitization, such as high-quality primary, secondary, and higher education, digital infrastructure almost as good as in Digital Frontrunner countries, a milder "technology lock-in" than in Western and Northern Europe and a vibrant digital ecosystem, mean that CE countries are well positioned to take advantage of the potential of digitization to boost their productivity – and, in so doing, increase the prosperity of their populations.

Figure 12. Key macroeconomic variables and their forecasts

					forecast European C	
			2017	2018	2019	2020
	GDP growth	%	4.4	2.9	2.6	2.4
	Inflation	%	2.4	2	2.4	2
Czech Republic	Unemployment	%	2.9	2.2	2.2	2.3
сгесп кериинс	Current account balance	% of GDP	0.3	0.1	-0.5	-0.6
	Fiscal Balance	% of GDP	1.6	0.9	0.2	-0.2
	Government Debt	% of GDP	34.7	32.7	31.7	31.1
	GDP growth	%	4.1	4.9	3.7	2.8
	Inflation	%	2.4	2.9	3.2	3.2
Uunnes	Unemployment	%	4.2	3.7	3.5	3.5
Hungary	Current account balance	% of GDP	3	0.5	-1.2	-1.4
	Fiscal Balance	% of GDP	-2.2	-2.2	-1.8	-1.6
	Government Debt	% of GDP	73.4	70.8	69.2	67.7
	GDP growth	%	4.8	5.1	4.2	3.6
	Inflation	%	1.6	1.2	1.8	2.5
Dele- d	Unemployment	%	4.9	3.9	3.8	3.5
Poland	Current account balance	% of GDP	0.1	-0.5	-1	-1.4
	Fiscal Balance	% of GDP	-1.5	-0.4	-1.6	-1.4
	Government Debt	% of GDP	50.6	48.9	48.2	47.4
	GDP growth	%	7	4.1	3.3	3.1
	Inflation	%	1.1	4.1	3.6	3
Romania	Unemployment	%	4.9	4.2	4.1	4
KUIIIailia	Current account balance	% of GDP	-3.4	-4.7	-5.2	-5.3
	Fiscal Balance	% of GDP	-2.7	-3	-3.5	-4.7
	Government Debt	% of GDP	35.2	35	36	38.4
	GDP growth	%	3.2	4.1	3.8	3.4
	Inflation	%	1.4	2.5	2.4	2.3
Slovakia	Unemployment	%	8.1	6.5	5.9	5.6
SIUVdKId	Current account balance	% of GDP	-0.2	-1.1	-0.5	-0.1
	Fiscal Balance	% of GDP	-0.8	-0.7	-0.5	-0.6
	Government Debt	% of GDP	50.9	48.9	47.3	46
	GDP growth	%	2.5	2	1.4	1.6
	Inflation	%	1.7	1.9	1.6	1.7
EII total	Unemployment	%	7.6	6.8	6.5	6.2
EU total	Current account balance	% of GDP	1.3	1.2		
	Fiscal Balance	% of GDP	-1	-0.6	-1	-1
	Government Debt	% of GDP	83.3	81.5	80.2	78.8

Economists' view

CEE is stable and prosperous

Raffaella Tenconi ADA Economics London

CEE is the best place to be right now in Europe. There are many structural factors which make the region strong. First, banking sector has gone through a cleaning up process and is stable today, which is a boost to growth. Second, CEE benefits from businesses relocating their activities from

the West to the East. Hungary is doing it most successfully, but other CEE countries

follow the suit. It is very important to see that the region experiences a second wave of growth in investments after the EU enlargement in 2004. The first wave was concentrated in finance and manufacturing, driven mainly by Germany and Austria. Today the sector and geographical scope of investments is wider and, what is news, the quality of jobs associated with investments is higher. Most people completely underappreciate the strength of the improvement in the labor market in Central Europe and how wages and productivity in certain sectors almost completely converged to Western European levels. Third, CEE countries made adjustments in macroeconomic policies since 2008 - they have much more flexibility in fiscal policy today than 10 years ago. Moreover, most of them have exchange rate flexibility – it might act as an important shock absorber.

The risks are mounting

Sharon Fisher IHS Markit

The main trend in the CEE today that investors should pay attention to is tightness in the labor markets. Unemployment in the region is very low, putting pressure on wages and inflation. Washington This factor helps to sustain strong domestic demand and is one of the reasons why CEE has been resilient to the slowdown in the Eurozone in the recent year (although this resilience

> will not likely last long). But it has costs too. The region is at risk of weakening its international competitiveness. As industry uses more robots and less manual labor,

the competitive advantage of CEE countries, based on comparably low wages, will be eroded as labor becomes more expensive. More attention needs to be paid to education and training to meet the needs of investors. Of the five CEE countries, the Czech Republic is currently best prepared for that shift, ranking at or near the top on three key metrics: research and development expenditure/GDP, robot density in manufacturing, and investment in intellectual property products. On the other hand, Romania and Poland rank relatively low on all three metrics. IHS Markit expects that the region's convergence with the EU-average per capita GDP levels will continue over the longer term, albeit at different rates. The Czech Republic

will be the first to fully converge in 2031. Slovakia will be the second (in 2034), followed by Romania (2039), Hungary (2040) and Poland (in 2042). Poland's relatively poor showing is based not only on lower investment in new technologies, but also on the impact of such policies as the retirement age reduction, which reduces the size of the potential labor force.

Commercial real estate:

Comparison of legal and tax issues

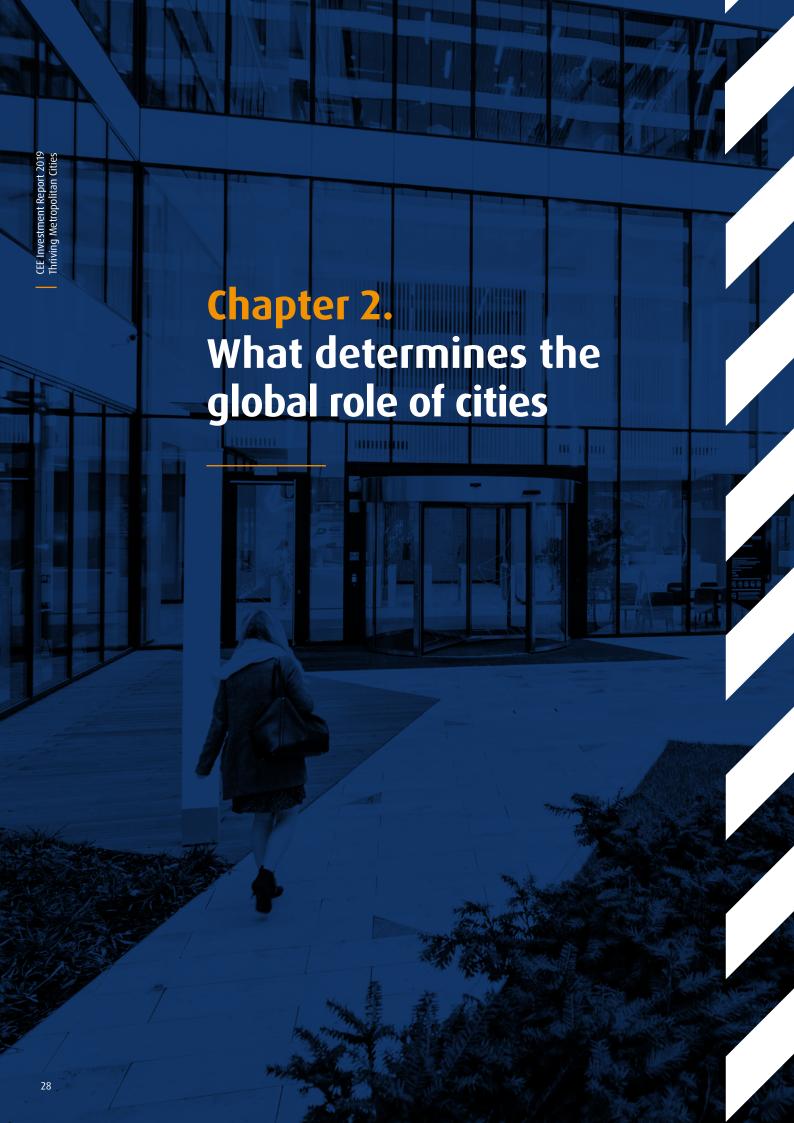
- CEE vs.Western Europe

	Poland	Czech Republic
Type of Real Estate interest	-Ownership (freehold) -RPU -Condominium ownership	- Ownership - Condominium ownership - Co-ownership - Building rights
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)
Types of transaction	- Asset - Shares	- Asset - shares - Enterprise
Title certainty (Public Register)	Public faith warranty principle	Public warranty principle (for asset deals) offers stronger protection than previous good faith principle
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: ca. €1.50 per signature
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
VAT	- 23% applicable to rent - Asset deals	- 21% - Landlords elect to charge VAT - Asset deals
сіт	- 9% applicable to small taxpayers (15% before 2019) - 19% - Capital gains from property and shares - Subject to Double Taxation Treaties	- 19% - 5% for investment funds Capital gains from property and 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
Tax losses	- Up to 5 years carried forward - Max. 50% to be utilized in one fiscal year	- Carried forward up to 5 years
Transfer tax	- Depends on type of transaction (PLN 19 (€5) - 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

Hungary	Romania
- Ownership - Co-ownership - Condominium ownership - Easements - Building rights - Land use right	- Ownership - Co-ownership - Condominium ownership - Building rights - Easements
- European Economic Area - Non- EU, non-EEA foreigners - as regulated - by international treaties, on a reciprocal basis Exemption: agricultural land and forest	- European Economic Area - Non- EU, non-EEA foreigners – as regulated by international treaties, on a reciprocal basis
- Asset - Shares / Quotas - Transfer of business (typically hotel)	- Asset - Shares - Transfer of business
Legal presumption of the correctness of registered rights and protection of good faith buyer who acquired the property for good consideration (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
Neither the property sale and purchase agreements, nor the share (quota) sale and purchase agreements or the business transfer agreement need to be notarized. Stirict formalities apply to legal documents to be registered with the land registry, including property sale and purchase agreements and property mortgage agreements and involvement / countersigning of a Hungarian attorney or notary is required Mortgage and other security agreements are often signed in a notarized form to ensure simpler enforceability Notarial fees depend on the value of the transaction and range between approx. 0.1-4% of the transaction value (calculated with a regressive scale). Additional fees may apply in case of foreign language documents and for particularly complex cases. Notarial fees for certifying signatures: ca. €10 per signature	- 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
- Share deals are also subject to real estate transfer tax so no longer preferred by buyers over asset deals	- Complicated and complex regulations on the sale of real estate; transactions and VAT exemptions - Reverse charge mechanism - Share deals in general outside the scope of VAT
- 27% - Landlords elect to charge VAT - Asset deals, domestic reverse charge may apply	- 19% - 5% in limited cases (mainly sale of special-purpose buildings designated e.g. for elderly shelters or children's care facilities)
- 9% flat tax rate - Capital gains from 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 (requires an annual turnover below €1 million) - Capital gains from property and shares - Subject to Double Taxation Treaties
N/a to corporations; only applicable to private individuals, subject to Double Taxation Treaties	- 16% - Nil / 5% on dividends (in general 5%, but not applicable in certain specific cases) - Subject to Double Taxation Treaties
- Carried forward for 5 years - Can be utilized up to 50% of the tax base in a given year	Carried forward up to 7 years
- 2% - 4% on asset deals capped at HUF 200 m (€620,000) per lot number, paid by the buyer - Share deals too, if more than 75% of the asset(s) (of the SPV or in some cases its subsidiary) is HU real estate	- Asset deals- registry fees and notary fee up to approx. 1% of value - Share deals - Trade Registry duties

	Slovakia	Spain
Type of Real Estate interest	- Ownership (freehold) - Condominium ownership - Co-ownership - Easements	- Ownership (main type of title) - Administrative Concession
Acquisition of Real Estate by foreigners	- European Economic Area Exemption: agricultural land and forest	No limitation or distinction applied to the acquisition of real estate assets by foreigners.
Types of transaction	- Asset - Shares - Enterprise	- Asset - Share
Title certainty (Public Register)	- Good faith principle - (holding real estate in good faith for 10 years guarantees good title to the property)	Legal presumption of the correctness of registered rights
Notary and notarial fees	 Legal agreements establishing the sale of real estate and the transfer of usufruct rights to real estate (such as easements, pre-emption etc.) that are to be registered in the Cadastral Register do not need to be in notarial form to be enforceable. The signatures of transferors in such agreements have to be certified by a notary public or local municipality (unless the agreement is in notarial form or authorized by advocates). Notary fee to certify one signature is €1.99 (or €2.39 incl. VAT) 	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
Transaction exit	- Share deals are preferred, since a tenant has a right to terminate the lease if the owner of real estate is changed (after completion of an asset deal)	- Both asset deals and share deals could be subject to taxation
VAT	- 20% - Reduced 10% rate on some goods and services - Landlords elect to charge VAT - Asset deals	- 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
СІТ	- 21% - Capital gains from property and 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 from property and shares Subject to Double Taxation Treaties
Withholding tax	- Nil / 7% / 35% on dividends (depending on recipient of dividend and its tax jurisdiction) - 19% on interest - Subject to Double Taxation Treaties	- 19% on dividends, interest and capital gains - Subject to Double Taxation Treaties and Parent-Subsidiary Directive
Tax losses	- Carried forward up to 4 years - Max 25% can be used in one fiscal year	- 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.
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Germany	Netherlands
- Ownership - Co-ownership - Condominium ownership - Heritable building rights (Erbbaurechte) (similar to ownership but limited in time)	- Ownership (freehold) - Apartment right Rights in rem: - Right of leasehold (ground lease)
	Right of superficies Right of superficies Right of superficies Right of usufruct - Joint / common ownership - Right created by virtue of easement
- No restrictions	No formal impediments for foreigners to acquire Dutch real estate
- Asset - Shares - Enterprise	- Asset - Share
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	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 Kommanditgesellschaft/KG, does not require notarization (without transfer of unlimited partner GmbH) 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 ca. €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 	 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 (corporate) income taxation (and trade tax if the seller has a German permanent establishment) - In case of a sale of shares in a German corporation the capital gain would be (i) fully tax exempt (if the seller is a certain non-German corporation) or (ii) 5% taxable (if the seller is a certain German corporation) and subject to regular corporate and trade income taxation	- 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.
 In case of a sale of shares in a non-German corporation the capital gain would be 5% taxable if the seller is a certain German corporation and subject to regular corporate and trade income taxation (subject to applicable double tax treaty) In case of a sale of shares in a non-German corporation qualifying as a German property-rich company (i.e. owning 50% or more assets in German real estate investments) the capital gain would be fully tax exempt if the seller is a certain non-German corporation (subject to applicable double tax treaty) In case of a sale of shares in a non-German corporation which does not qualify as a German property-rich company (see bullet point above) the capital gain would not be subject to German income taxation (in case of non-German investors/sellers) 	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 to lessees rendering non- VAT exempt supplies	- 21% Acquisition:
- Sellers may elect to charge VAT in case of asset deals unless the sale is qualified as the sale of a going concern	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 for which at least 90% of the VAT charged on the supply of the real estate can be deducted.
	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 is able to deduct at least 90% of the VAT charged over the rent (a threshold of 70% applies for certain designated lessees)
- 15.825% (incl. Solidarity Surcharge) - 7 - 21% Trade Tax, if applicable - Capital gains from property (fully taxable) and shares (probably only partially taxable, see above	- 25% (19% for profits up to €200k) - Capital gains from property and shares
Transaction exit) - Subject to Double Taxation Treaties	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:
	2020 16.5%/25% 2021 15% / 21.7%
- 26,375% (incl. Solidarity Surcharge) - Subject to Double Taxation Treaties - Treaty/directive overriding rules to be considered	- 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 time limitation - Max. €1 m can be fully utilized p.a. (minimum taxation), in addition up to 60% of the total amount of income exceeding 1€ m	- Loss carry forward of up to 6 years (grandfathering rules apply) - Carried back up to 1 year
- 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%; extension of holding/consideration periods to 10 years (or 15 years) (previously 5 years); concurrent application of current and future legal provisions) is expected to come into force as from 0.10.12.020 (certain grandfathering rules to be considered)	Real estate transfer tax is due on the acquisition of legal or beneficial/economic (economisch) 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



The woman who helps to predict the future of CEE cities

When the Internet emerged as a widespread technology in the mid-1990s, economists were very excited by the opportunities it offered. Some of them hoped that it would bring dynamic increases in productivity. Others envisioned the now famous "death of distance": that economic activity would spread across much wider spaces than before and large cities would cease to be the centres of economies. Most of those predictions were wrong.

But there is one researcher who predicted very early how communication technologies would affect cities and economies. In 1991 Sakia Sassen from Columbia University wrote her famous book "The Global City". In 2005 she updated her conclusions in a paper of the same title. And today she shares her thoughts with us (see the next page). What Sassen says very accurately describes the growing importance of CEE metropolises and helps to predict their future.

Her conclusions are best demonstrated in a few simple points:

- Globalisation brings a huge expansion in complexity of operations of the largest companies.
- Due to increasing complexity, companies outsource a sizable share of operations to specialised firms.
- Specialised firms operate in large cities, because they must use the large pools of talents.
- Specialised firms build global networks, to match their clients' fit to global operations.
- Cities around the world grow in importance and have built a city-to-city transactions network.

 While global cities form an integrated economy, their growing disconnect from local environments may increase inequality and social tensions.

Every step described above, apart from the first one (which is concentrated in most developed countries) is clearly visible in CEE. Since mid-2000 there has been an enormous expansion of advanced business services operation in the region. Those business centres choose metropolises with large pools of talents as their location. The cities of CEE have gradually become part of the economies of the largest metropolises, such as London, Boston, New York and Singapore. And last, but not least, governments in the region have started to spend more money on redistribution to diminish pressure on inequalities. The scenario is almost 100% correct.

The future should bring a continuation of this process. Cities will become more integrated worldwide. And the success of CEE cites will depend on two factors: firstly, their ability to provide ever more complex services to large corporations; and secondly, their agility when managing the social changes arising from globalisation of services.

"The Global City" and predictions for CEE

Professor at Columbia University New York

Sakia Sassen In 1991 you wrote a book titled "The Global City". Many shifts and changes in the global economy have gone exactly along the lines you predicted. For example, we have seen the strengthening of cross border city-to-city transactions and networks. In what stage of this process we/CEE are in? Has it achieved its peak, or it will deepen further?

> It will keep expanding. The reasons are diverse but they all come down to a few key factors: the urbanizing of our economies and the digitizing of more and more, even if partial, aspects of economic processes. I want to invite us to remember that when the digital revolution took off, now decades ago, there was a very strong conviction that this meant that cities were going to lose their importance. Why? Because firms of all kinds could now locate wherever

> > given digital communication. But in

fact, it led mostly to the opposite

We are observing a massive proliferation of global centers installed in a growing number of cities.

in the case of advanced economic sectors, notably high finance (not traditional banking - high finance is very different, no connection to traditional banking). High finance depends deeply on

Large financial companies are moving more and more of their operations to Warsaw, Krakow, Wroclaw, Prague, Budapest, Bucharest from London, Paris, New York etc. We treat this process as



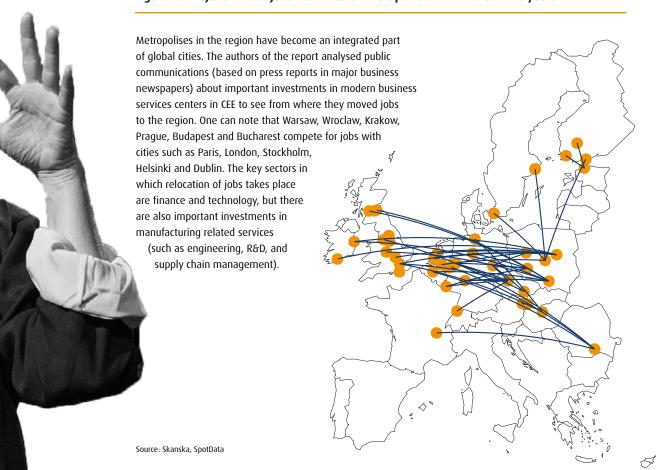
an opportunity - better paid jobs are moving in. What is your view on this process? Can we expect to gain more of that in CEE? What factors should we pay attention to?

Two points. My answer to the prior question exactly confirms what you describe, and that is still going on. And as the global economy begins to include all kinds of major and minor business centers in cities across the world, this means an ongoing and even growing demand for those specialized services. So yes, what you describe makes a lot of sense... It is so.

What do you think will be the role of metropolises like Warsaw, Prague, Budapest or Bucharest comparing to London, Paris, New York or Shanghai? Will we live in the world of dominance of global metropolises, or will CEE capital cities gain more importance?

I definitely think, and more precisely, have seen it across the decades: what were once considered minor or remote, or barely known, or speaking strange languages have now become quite strongly integrated into a whole range of specialized circuits. These circuits may not be as diverse and powerful as Beijing, New York, London, Tokyo etc. but, they matter. This is the current period: a massive proliferation of global centers installed in a growing number of cities, some big and famous and powerful, and others not so big, less known, less powerful, but still able to provide particular products or options. I have written about these specific circuits we see emerge after the 1980s, that come out of smaller or less important cities, but are definitely part of this global economy.

Figure 13. Major shifts of jobs from Western Europe to CEE in the last five years



31



How complexity of jobs has accelerated over the last five years

A decade ago, most investments in business services centres concentrated on relatively simple tasks, such as accounting, simple IT support or call centres. Today many more investments in CEE create advanced functions, such as research and development, advanced analytics, investment managament, supply chain managament or advanced IT services.

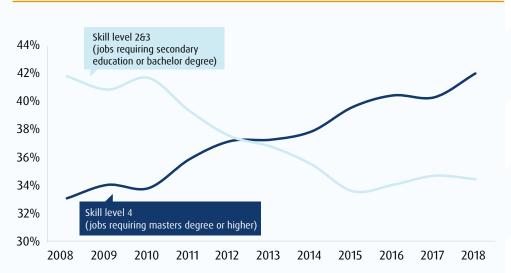
We quantify this process through narrative analysis of information about modern business services centres located in Poland (the choice of Poland is explained by the fact that we have copyright to analyse press articles here). We analysed 1,100 articles from Puls Biznesu (the largest business daily in Poland), spanning years from 2000 to 2018, about investments in modern business services centres* and disentangled information about relatively simple and relatively complex functions. This is obviously an approximation, because we do not have any detailed information about what the business centres do.

The conclusions from our research reflects the huge transformation that CEE has gone through in recent years. The process clearly started three or four years ago, and continues today. Whereas in 2010 only around 25%

of jobs located in business services centres were complex tasks, today more than 50% are in that category.

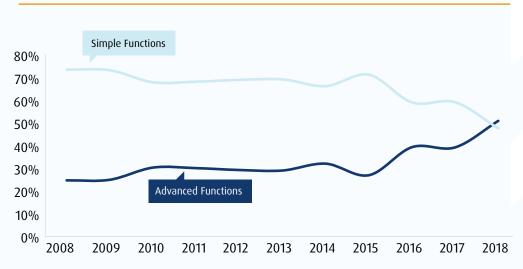
This narrative analysis provides only a soft measure of the fundamental shift in skills. But other data also points to similar change. For example, according to Eurostat statistics, in 2010 companies providing general business services (information, IT, professional services and administrative support, both international and local) in CEE employed 33% of their workers in positions requiring the highest level of education (a master's degree or higher) and 42% in positions requiring a bachelor's or only secondary education. In 2018 those percentages had changed to 42% and 34% respectively. Therefore complex functions have increased and mid-level functions decreased in importance.

Figure 14. Employment share in general business services (international and local) according to skills required for a job



Source: Skanska, SpotData, based on data from Eurostat

Figure 15. Share of investments in international business services centres in Poland, according to complexity of tasks performed in a centre. The result of text-mining analysis of articles printed in Puls Biznesu, the largest business daily in Poland



Source: Skanska, SpotData

Can Warsaw and Prague be like Milan and Berlin?

Michael Batty, British urban planner and geographer, professor at University College London and author of the book "Inventing the Future Cities" published in 2018.

What do you think will be the role of regional metropolises such as Warsaw, Prague, Budapest and Bucharest compared to London and Paris?

As cities grow, their hierarchy will also get richer. The number of cities which perform global functions increases, more places join that status and more will continue join as populations continue to concentrate in the biggest cities. The future for cities like Warsaw looks fine. In Europe there will be two or three world cities, like London, Paris or – to a

lesser extent – Frankfurt. Then, next tier down, there are cities like Milan or Berlin, and CEE metropolises can find their place on this level. But it is important to remember that the status of all European cities will very much depend on the wealth of the whole continental block. And the future is intrinsically unpredictable. Predictions are very hard to make with any confidence.

Rich countries tend to have all activities developed along the specialization hierarchy – each new specialization is built on top of what already exists.

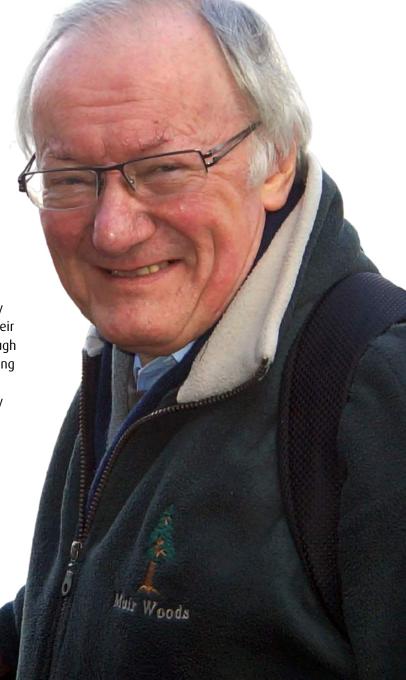
You wrote in your book "Inventing the Future Cities" that the separation of functions on the world scale will be an important factor in determining the future of cities. Do you mean that different metropolises will specialize in different economic/social processes?

Rather than cities being specialized where they only do one kind of thing, they build more specialized functions as they grow. In the largest metropolises, very specialized services in finance coexist with basic services. Rich countries tend to have all activities developed along the specialization hierarchy – each new specialization is built on top of what already exists. So specialization does not mean retaining only narrow functions. It means growing diversity. And the more diversified the city, the more opportunities exist in the labor market. Economies of scale increase, and the cities become more attractive for workers and companies while they grow.

There are huge investments in CEE cities in business process outsourcing and shared services centres from the companies like HSBC, Citi, JP Morgan, EY, PWC

etc. Will this process strengthen?

We will see increasing amount of outsourcing in the world. But my view about outsourcing is that there will be continued mobility in various direction to offshore and back to onshore. There are businesses going to low cost countries, but also companies coming back to developed countries. For example, a lot of investments, which could go to Asia, went to Ireland in recent years, because of stability and good education in that country. So the investments will be functions of several factors, including costs, but also stability and human resources. And because the world population will gradually level off, growth of cities will depend on their ability to attract a growing labor force through migrations. You will see, I think, an increasing competition between cities for what are rather footloos resources, particularly highly skilled labour.





What is an alpha city?

An alpha city is a city with a global impact in the fields of economics, politics and culture. Cities are rated by the Globalisation and World Rankings Research Institute, which is based in the geography department of Loughborough University in Leicestershire (United Kingdom) and is considered as one of the leading think-tanks in the field of urban research.

There are various levels of alpha cities. Alpha++ are the largest and most important metropolises: only London and New York are in this category, they are the centres of global activity, similar to presidents of the board of a company. The other categories are: Alpha+, Alpha-, Beta+, Beta, etc. down to Gamma-.

Figure 16. A list of selected alpha cities

CATEGORY	SELECTED CITIES (CEE in orange)
Alpha++	London, New York
Alpha+	Hong Kong, Beijing, Singapore, Shanghai Paris, Tokyo
Alpha	Milan, Chicago, Moscow, Toronto, Zurich, Warsaw, Istanbul
Alpha-	Amsterdam, Stockholm, San Francisco, Dublin, Prague, Budapest
Beta+	Copenhagen, Düsseldorf, Athens, Munich, Atlanta, Bucharest
Beta	Philadelphia, Vancouver, Shenzhen, Sofia, Perth, Hanoi, Oslo
Beta-	Stuttgart, Tunis, Geneva, Seattle, Bratislava, Manchester
Gamma+	Detroit, Riga, Cleveland, Glasgow, Osaka, Rotterdam
Gamma	Phoenix, Porto, Ankara, Minsk, Turin, Leeds, St. Petersburg
Gamma-	Cologne, Poznan, Wroclaw, Ottawa, Nantes, San Antonio

Source: Globalization and World Cities, 2018

What does it take to be an alpha city? How can CEE cities advance? We posed these questions to Charlotta Mellander from Jönköping International Business School (Sweden), who is a renowned researcher in urban economics and published her work with such famous economists as Richard Florida (who coined the term "creative class").

Alpha is a megacity with the strongest global impact. There are only few of them, in Europe

Charlotta Mellander *Researcher* Jönköping International Business School (Sweden)

it is London. Down the hierarchy there are cities which combine global and local impact, with the global becoming less important and the latter growing in importance. It is difficult to compete with cities which are on top of the hierarchy, because the "the-winner-takes-it-all" economy – they account for a disproportionate share of talent, economic activity, innovation, and wealth. Although, at the same time theses mega cities are very expensive and this is why companies often relocate some of their activities to other places. My colleagues Richard Florida and Patrick Adler recently analysed the determinants of decisions to locate headquarters in cities. And it comes out that there are three crucial factors: size, connectivity and human capital. Cities that are large, well-connected through the airport system and have large pool of well-educated people can prosper.

The character of cities

How to paint a picture of the city to someone who doesn't know it very well? Who has never been to the city or only slept in downtown hotels and only travelled from a hotel, to an office and a business restaurant?

We selected a set of indicators that help to understand the character of a city. Some of them are traditional economic indicators (such as GDP per worker), others are less standard (such as programmers' scoring on StackOverflow portal), which help to capture features that are not easily reflected by official statistics.

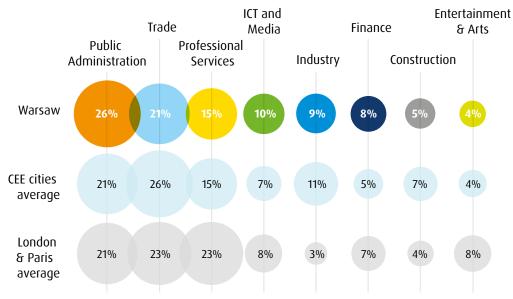
Every city is different, each has its distinctive characteristics and soul. On the next seven pages we present the main cities in CEE: Warsaw, Krakow, Wroclaw, Prague, Budapest, Bucharest and Bratislava.



3.1 million inhabitants in the agglomeration

Warsaw is a regional financial centre and has a very large government administration. It is the most important city in the region from the global perspective, a fact reflected by the relatively high number of airline connections (and, as mentioned before, it is the highest rated alpha city in the region), almost as many as Berlin, which is a capital of the largest European economy. Due to the strong financial position of the city and its workers, most of the largest global investment banks have service centres in Warsaw.

Figure 17. Structure of employment in 2016



Source: Eurostat

London 813 Paris 436 Berlin 245 Warsaw 189 Prague **Budapest** 141 **Bucharest** 114 Krakow Wroclaw 61 Bratislava 47 0 100 200 300 400 500 600 700 800 900

Figure 18. Number of destinations from the main airports

Source: FlightsFrom.com

Major investments in the recent years

C.H. Robinson

A Fortune 500 provider of third-party logistics and multimodal transport services has announced in 2019 that it plans to expand its Warsaw tech centre, hiring 100 new IT professionals by the end of 2020. The company plans to enhance its leading technological solutions through this expansion, thereby enabling it to improve its service to customers and carriers in Europe and global markets.

JP Morgan

This American investment bank chose Warsaw as the headquarters of its administration centre in 2018. Currently, it employs 450 people, who deal with Know Your Customer (KYC), HR and reporting services, and is considering launching data analysis, machine learning, cloud, and data science departments. In the coming years JP Morgan plans to increase employment in its Warsaw office to 3,000 staff.

Johnson & Johnson

Warsaw was chosen as the location of the firm's first R&D centre ever. It was opened in 2018, and now employs dozens of experts in the fields of business, science and data analysis. Their work focuses on the development, registration and marketing of new Johnson & Johnson personal health and hygiene products worldwide.

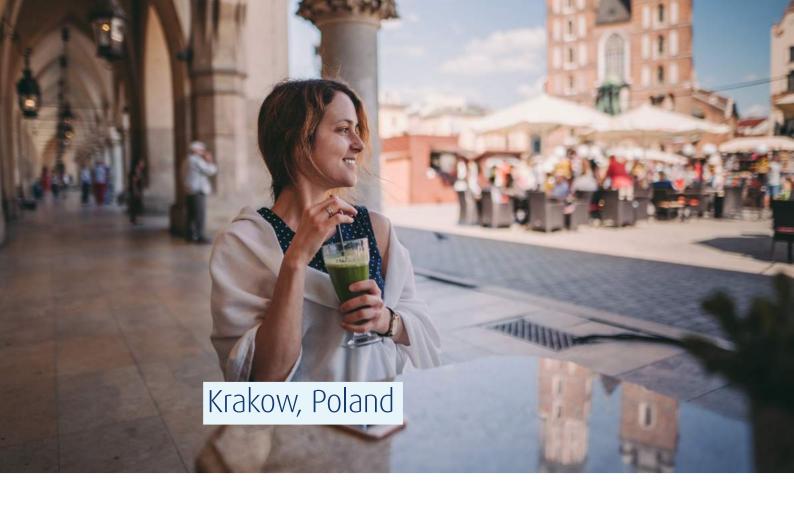
Standard Chartered

This British bank opened its global business centre in Warsaw in 2018. It employs people who deal with AML (anti-money laundering), technology, risk, and HR, among others. The bank wants to employ 750 people in Warsaw. The new office is intended to help bank to expand in the European market.

Roche

This Swiss pharmaceutical giant is expanding its Warsaw service centre. In 2018 it employed 150 more IT specialists. Roche already employs 500 people in its Warsaw and Poznan offices. They deal with making applications that help clinical and new drugs research as well as software development.

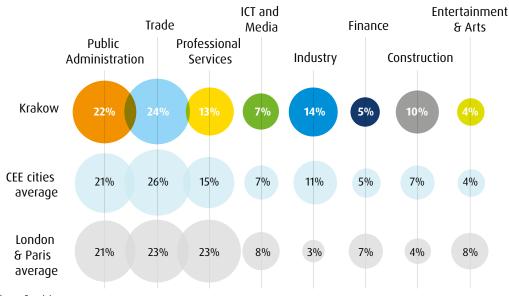
Source: Puls Biznesu



1.4 million inhabitants in the agglomeration

Krakow is the major university centre in the region, as measured by the percentage of students in the city's population, which is very high as for a large city. This is the reason why Krakow became the first choice for foreign investors in the business services sector. It is worth noting that the city also has a relatively large industrial sector, with the second largest steel mill in Poland. That is why many business services in Krakow work for manufacturing sector. In addition, the city is considered as one of the liveliest places in Poland, with many restaurants and cultural facilities.

Figure 19. Structure of employment in 2016



Source: Eurostat

Krakow Wroclaw 211 Warsaw 169 Bratislava 126 Prague 95 **Bucharest** 91 **Paris Budapest** 59 Berlin 51 0 50 100 150 200 250 300 Source: Eurostat

Figure 20. Share of students per 1000 inhabitants in 2016

Major investments in the recent years

HSBC

This British bank opened a global cybersecurity centre in Krakow in 2018. The new unit focuses on monitoring activities and detecting threats on a global scale. It employs both junior analysts and senior managers. The new employees joined the bank's centre of exellence of 600 people that was founded in 2007.

Qualtrics

This global leader in the experience management business opened its European engineering headquarters in Krakow in 2018. The company employs mainly IT engineers, who work on new software, product management and creating new innovative solutions. It intends to create 120 jobs.

UBS

The largest Swiss bank opened a global business centre here in 2017. But now it is expanding: the company is increasing headcount in the city by more than 350. As well reporting and financial instrument analysis, the company now also deals with software development here.

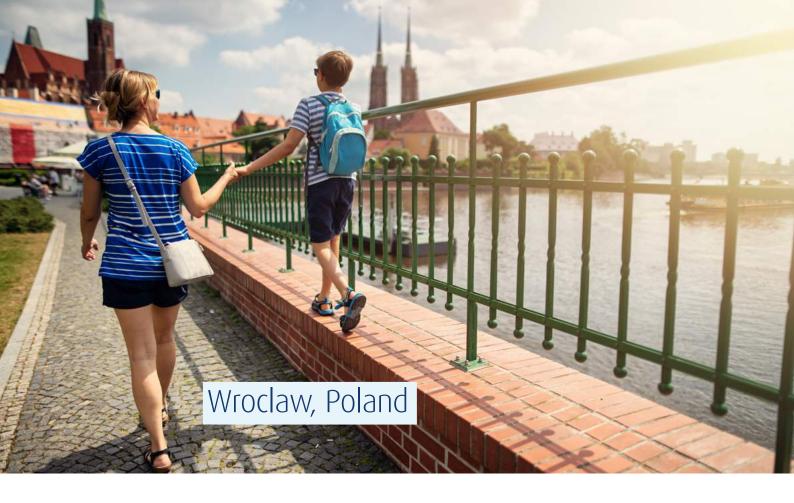
Source: Puls Biznesu

Varroc Lighting Systems

This global supplier of lighting solutions for cars opened its Krakow R&D centre in 2019. It already employs more than 60 engineers, who develop technologies used in various lighting systems. Varroc is also planning to set up in Krakow a global centre for purchasing, IT, HR and finance.

Universal Investment

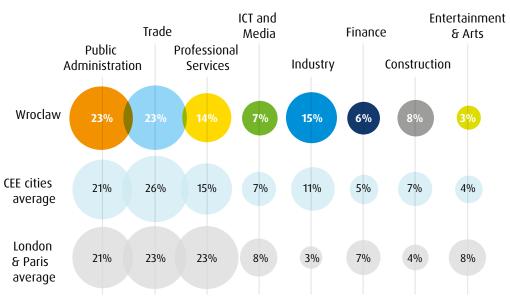
This company is the largest independent supplier of investment products and services related to the administration of institutional investors' funds and asset managers in German-speaking countries. It opened its Krakow office in 2018. The new centre focuses on developing advanced processes, such as robotics and data science. Universal intends to employ a total of 150 staff here.



0.9 million inhabitants in the agglomeration

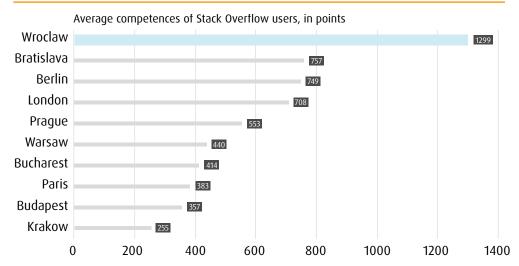
Wroclaw is renowned for its two major features. Firstly, it has very high-quality staff fully capable of working in an international environment, well educated, skilled and speaking many languages. This is reflected by the fact that the city has one of the highest rated programmers in Europe. Secondly, it is a very strong industrial centre for German manufacturing companies, which locate their service operations within the city and logistics operations around Wroclaw. The list of major investments demonstrates how important industry is in Wroclaw.

Figure 21. Structure of employment in 2016



Source: Eurostat

Figure 22. IT competences



Source: Skanska, SpotData, Stack Overflow

Major investments in the recent years

Schaeffler

This German automotive parts supplier opened a European service centre in Wroclaw in 2018. The centre provides financial services, human resource management, purchasing, logistics and IT. Within five years the company will employ 800 staff, mainly with economics, IT, and digital backgrounds.

Smith & Nephew

The company's global centre manages all Smith & Nephew services around the world, supports the entire group in finance, accounting, IT and HR. 200 people are already working at the centre in Wroclaw, but the company is constantly looking for employees specialised in financial systems, accounting, process improvement, IT and HR.

Source: Puls Biznesu

Olympus

This Japanese company specialising in optics and reprography opened its first global business centre in Wroclaw in 2018. The centre deals with financial operations, sales support and supply chain, and in the future will take on additional roles related to operational HR. The company already has 200 staff and intends to increase employment to 320.

PPG

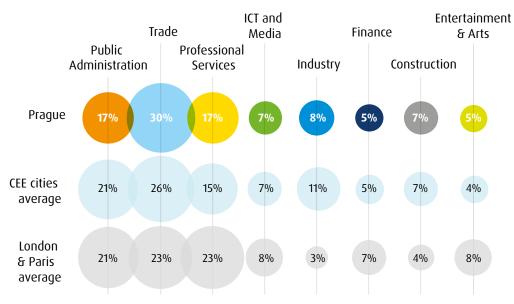
A world leader in the chemical industry opened its global business services in Wroclaw. The new office support PPG units around the world by creating and developing business applications and mobile digital platforms. The company plans to employ around 100 people in Wroclaw.



2.2 million inhabitants in the agglomeration

This is the most Western city in CEE in terms of structure of the local economy, with a relatively high share of professional services and arts/entertainment. For many years it has been regarded as the location for the most advanced international investments in the region, with a high number of R&D centres, although recently other CEE cities have caught up in this aspect. Prague also offers an exciting lifestyle: it has a very high number of restaurants and is a developed cultural centre.

Figure 23. Structure of employment in 2016



Source: Eurostat

Paris 4770 Prague 2856 Krakow 1585 London 1361 Berlin 1258 Budapest 1175 Warsaw Wroclaw Bratislava 711 **Bucharest** 490 0 1000 2000 3000 4000 5000 6000

Figure 24. Number of restaurants per 1 mln inhabitants

Source: Skanska, SpotData, tripadvisor.com , data from August 2019

Major investments in the recent years

Veeam

One of the world's largest private software companies expanded its Prague office in 2018. Veeam opened a new R&D centre, where engineers work on innovative data management, automation, and Hyper-Availability technology. The company is also increasing employment in marketing, software development, sales and HR.

Dial Telecom

This telecommunications provider has announced that it will expand its technology activities in Prague's CE Colo data centre. The new space is connected to Dial Telecom's own optical infrastructure, one of the most important in the Czech Republic. The newly established data centre will now be used primarily for critical technologies and technologies of major Dial Telecom customers.

Source: Hospodarskie Noviny, ABSL

Johnson & Johnson

This company recently expanded its Prague office, one of its five regional global services hubs located around the world. It plans to increase employment here by 300 within three years and expand the scope of services provided. In addition to the services that have been provided so far, such as financial operations, the Prague centre now also provides solutions such as purchasing, customer service and personnel management.

Amazon

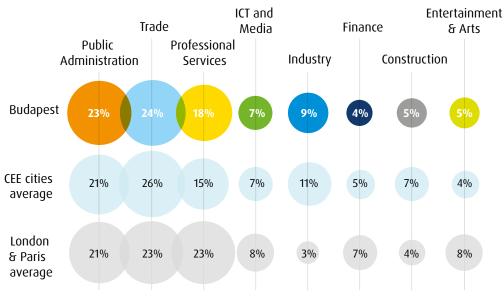
This American tech company is expanding its Prague office. It announced early last year plans to create more than 500 new permanent posts in HR, logistics, customer service and IT. Amazon already created more than 4,500 jobs in and around Prague.



3 million inhabitants in the agglomeration

Budapest is regarded as a city of innovations and entrepreneurs. It has large start-up community, which reflected by the fact that it has high share of ICT (information and communication technologies) companies (although the size of the ICT sector is at the average level, which suggests that the average ICT company here is small). For years it has been the richest city in the region in terms of GDP per capita, although the economic stagnation in Hungary during the financial crisis has harmed the local economy. Since 2016 the city has been growing dynamically again. In addition to ICT, it is particularly strong in car engineering.

Figure 25. Structure of employment in 2016



Source: Eurostat

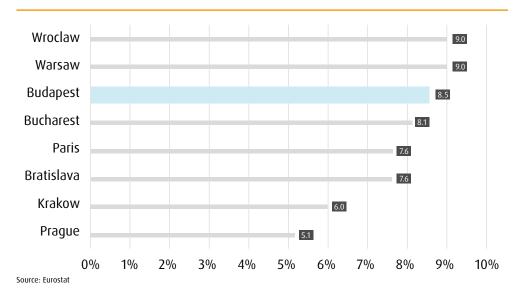


Figure 26. Share of ICT companies in 2016

Major investments in the recent years

Ford

This American automotive company chose Budapest as the site for its European business services centre, which is Ford's largest European administrative centre. The new centre performs pricing and production planning functions, and provides HR services to Ford units in Europe, the Middle East and Africa.

Tesco

This British retailer set up its Budapest service centre in 2018. As well as payroll and HR administration, product administration and customer service, the Budapest office performs administrative and analytical tasks. Tesco plans to create a total of 800 jobs here.

Source: portfolio.hu

BlackRock

The world's biggest fund manager opened its new data and technology hub in Budapest in 2018. The company already employs 400 people, but it plans to recruit a further 100 technology and customer service staff. The new office will develop technology for financial and business processes, handling client data and marketing. It will also handle customer services, including providing a help desk for German-speaking clients across Europe.

Jaguar

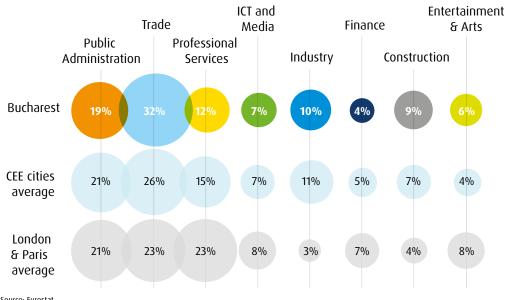
This British car maker opened a new technical development centre in Budapest. The centre will focus on developing and introducing new models, as the company will primarily make electric cars from 2020 onwards. The new office will employ 100 engineers.



2.3 million inhabitants in the agglomeration

The most dynamic of the largest metropolises in CEE in terms of income growth. Two decades ago it was overlooked as a destination for foreign investments, today it is one of the best locations for IT investments. It is gradually transforming from an IT outsourcing centre to an IT innovation centre.

Figure 27. Structure of employment in 2016



Source: Eurostat

Bucharest 96% Wroclaw Krakow 60% Warsaw 55% Bratisalva 46% Berlin 24% London 23% Prague **Paris** 18% **Budapest** 6% 0% 20% 40% 60% 80% 100% 120%

Figure 28. GDP growth over the last 10 years

Source: Eurostat, OECD

Major investments in the recent years

LeasePlan

The biggest operational leasing company in the world selected Bucharest as the location of its new support service centre for European markets. The company is looking to hire approximately 400 staff, such as contracting management specialists, to run the operations here.

Edenred

The world leader in corporate payment solutions set up a digital innovation centre here in 2019. Currently, it employs 20 people, but intends to hire another 200 IT specialists over the next two years. The Romanian branch of the firm will concentrate on innovation and IT projects for various subsidiaries around the world. Its role will not be limited to development and execution but will include a core role in designing, implementing and managing platforms.

GCI

Canadian GCI is the world's fifth-biggest independent IT services company. The firm opened its first software consultancy and

development centre in Romania. The centre already employs 100 IT specialists and will hire 300 more over the next three years.

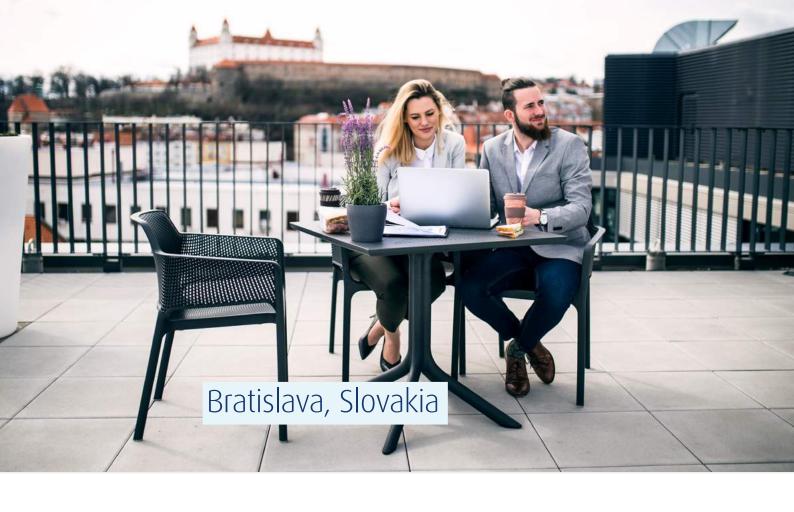
London Stock Exchange

London Stock Exchange, one of the biggest capital market operators in the world, opened a support centre in Bucharest in 2018. The company plans to hire at least 200 staff in Romania's capital. It is looking for mainly IT specialists, such as system administrators, web software developers and senior data base managers.

Kellogg's

This American company is one of the world's biggest producers of cereals. It opened its Bucharest service centre in 2018. The new unit will take over supply chain activities and will be responsible for planning the cereal and snack categories, managing inventories and other specific activities in Europe. It currently has about 250 employees and will hire some 50 more for the supply chain division.

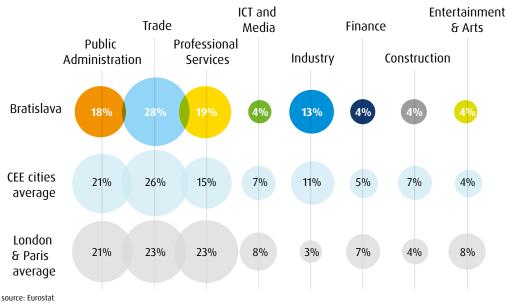
Source: Romania Inside



0.7 million inhabitants in the agglomeration

This city has the highest GDP per worker in the region and is a very strong industrial centre. It does not attract as much attention from investors as larger metropolises in CEE, but it is the capital of one of the most dynamic and stable economies in the EU, and the only member of the Eurozone in the region. It has also highly regarded workforce, a fact reflected by the high scoring of programmers on StackOverflow. However, industrial companies use the skills of those people more than IT firms.

Figure 29. Structure of employment in 2016



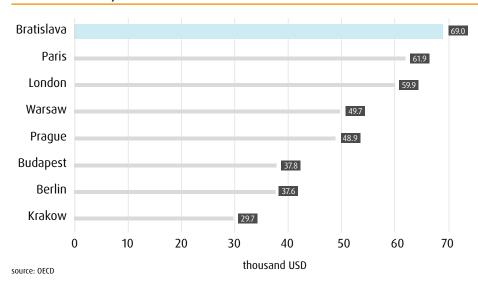


Figure 30. GDP per capita (in purchasing power parity – corrected for differences in prices between countries)

Major investment in the recent years

Atlas Copco

The world's leading manufacturer of industrial tools and solutions opened a unique innovation centre in Bratislava in 2019.

Swiss Re

This Swiss insurer recently expanded its shared services centre in Bratislava.

Lenovo

In the first quarter of 2019 Lenovo opened its new office of the shared services centre in Bratislava as part of the smart transformation strategy. The firms office in Bratislava is its largest one in Europe. Lenovo currently employs 750 specialists in the city, dealing with finance, value chain management and business process management.

Johnson Controls

Johnson Controls, a technology and multi industrial services company, expanded its presence in Bratislava moving to the new office in 2017. This is the firms largest business services centre. It employs 1,700 people dealing with finance, IT, purchasing, sales and HR.

Dell

Dell has been present in Bratislava since 2003. Initially it worked as a centre of sales and customer support, but later it transformed into the firms main global financial hub. Dell now employs ca. 2,000 in Bratislava, mainly in sales, marketing, data science and finance.

ING

The Dutch bank invested in the global services & operations centre in the Slovak capital in 2015. It is ING's second such centre, after Manila (Philippines). The bank informed that it planned to employ ca. 300 people in this centre.

Source: Companies' reports



Chasing Paris and Amsterdam

Modern office space in CEE metropolises has more than doubled over the last decade. Real estate in general, the office market in particular, has been one of the most dynamic areas of investments in the region. That growth might continue in the future.

Amsterdam (2017)

Prague

Office space in CEE has grown faster than transport infrastructure, heavily supported by European Union funds. And it draws attention of an ever-larger group of international investors. As we show on the next few pages, in recent years the region has experienced spectacular growth in investments from Asia.

The office stock in major CEE's cities* totals 21.8 million sqm and forecasted completions by 2021 will increase it by another 20%, to 26.5 million sqm, according to Colliers International. But

2.5

2.0 1.5

1.0

0.5 0.0 2007

Krakow

Budapest

the stock is still only approximately 1 m2 per inhabitant, comparing to 5 sqm per inhabitant in the major cities in Germany, 2.6 sqm in the Netherlands, 2.4 sqm in Italy and 2 sqm in Spain. If CEE maintains its high economic growth rate, and many forecasts indicate it will, the penetration of modern office stock should increase. As demonstrated by figure 31, the largest metropolises in CEE are on a path to achieve similar levels of modern office space per inhabitant as Amsterdam and Paris in the future.

5.0 4.5 Frankfurt (2017) 4.0 office space per inhabitant, in sqm An arrow indicates change in GDP and 3.5 office space over the last decade in CEE Paris (2017) 3.0

Figure 31. Office space vs GDP per inhabitant in selected metropolises in Europe

GDP per capita in USD (in 2011 prices)

^{*}Those cities are: Warsaw, Krakow, Wroclaw, Lódź, the Tri-City, Katowice, Poznan, Prague, Bratislava, Bucharest and Budapest Source: Skanska, SpotData, OECD, Colliers International.

Doubling again? Office stock in the future

Can the modern office space in major CEE metropolises double over the next decade, as it did during the last 10 years? To answer that question, we analysed data from 40 European cities to discover factors that drive office space growth. And we fitted the statistical patterns to CEE data.

Economic dynamism is a very important factor, but not the only one. There are cities in Europe which are economically very dynamic and yet the stock of modern offices there is quite stable, Rotterdam is one such example. On the other hand, there are cities which are rather economic laggards and yet the stock of modern offices there steadily rises, such as Milan. This difference might be the result of redevelopment and regeneration activity taking place within cities. For example, in 2018 Rotterdam saw strong demand for office space, but approximately 1% of its office stock was removed from the market due to demolitions or changes in use.

One very important statistical pattern which we found in the data is that office stock growth is significantly correlated with GDP when the stock per inhabitant is low, and almost not at all correlated when the stock per inhabitant is high. Why? One answer might by that there is a level of saturation above which modern office buildings are constructed at the place of the older ones –

like with smartphones: version 10 replaces version 5, but the total number of phones might not change. Urban specialists often say that modern cities more often grow inward – through reinventions of their centres – than outward through urban sprawl. The other possibility is that sector composition of an economy matters to the office market more than total economic growth. Financial and technology centres, such as Berlin, have faster office space growth even when the level of stock is very high.

CEE has still low levels of office space per capita, so the economic dynamism should greatly contribute to office stock growth. Although the first huge wave of development has already occurred, and it will be difficult to continue growth at the historical rates, the future looks promising. Statistical patterns suggest that office stock growth should be higher than economic growth in the next decade.

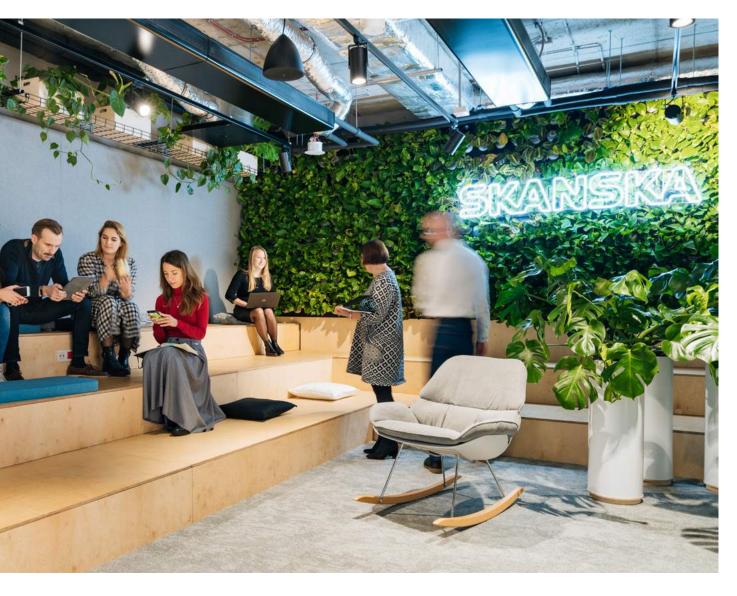
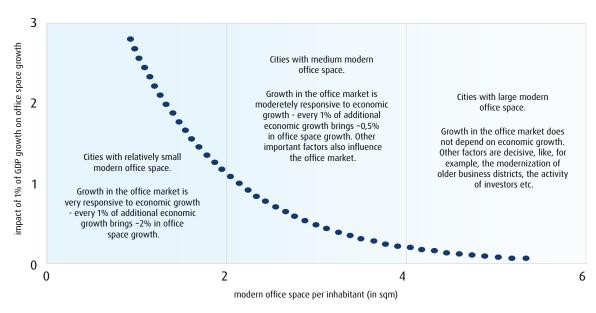


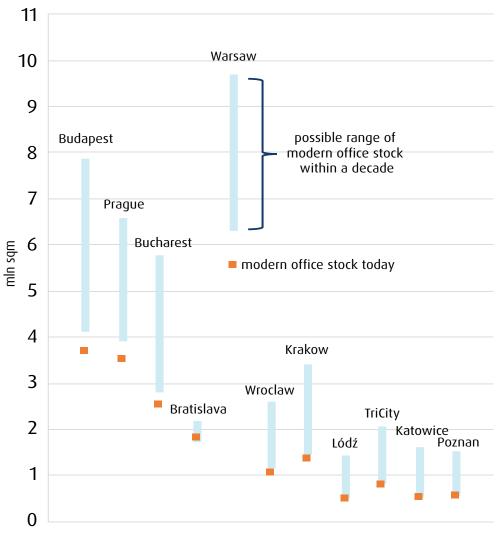
Figure 32. How modern office stock growth correlates with economic growth



Source: Skanska, SpotData

Office space in CEE can grow in the future if the region sees the economic development rates forecasted by OECD and the International Monetary Fund, and if statistical correlations between GDP and office space remain stable. The statistical model predicts almost 10% annual growth for the whole region. And that is exactly the growth rate which will be registered over next couple of years if projects currently in the pipeline are be completed on time. But later on, when a medium level of saturation in many cities is reached, the growth rate might become more moderate.

Figure 33. The office stock (range) that might be reached by 2030 if the high economic growth rate is maintained



Source: Skanska, SpotData



Figure 34. Office market data

	Warsaw		Krakow		Wroclaw		Łódź		TriCity	
	2018	H1 2019	2018	H1 2019	2018	H1 2019	2018	H1 2019	2018	H1 2019
Stock [sqm]	5,461,680	5,543,680	1,257,520	1,348,000	1,054,240	1,070,800	468,890	496,700	775,010	792,400
Leasing activity [sqm]	858,320	405,950	208,800	134,900	161,560	45,000	56,700	35,200	84,400	35,200
Net absorption [sqm]	320,400	82,500	157,800	62,800	138,100	12,500	32,100	8,200	87,500	16,300
Vacancy Rate [%]	8.7	8.5	8.6	10.1	9.1	9.3	8.7	12.1	6.1	6.1
Prime rent [EUR/sqm/month]	24	24	15.5	15.5	15.5	15.5	14.5	14.5	15.5	15.5
Forecasted completions by 2021 [sqm]	1,067,000	1,126,700	490,000	634,900	352,000	429,600	271,400	310,000	341,900	304,000
Prime yields [%]	4.6	4.5	5.85	5.85	5.85	5.85	7.15	7.15	6.75	6.75
Capital values [EUR/sqm]	6,500	6,500	3,100	3,100	2,800	2,800	2,200	2,200	2,300	2,400
Office investment volume [EUR mln]	1,846	1,010	571.6	156.9	221	101.6	69.5	42.9	9.1	114.6

Source: Colliers International International

Katowice		Poznan		Prague		Budapest		Bucharest		Bratislava	
2018	H1 2019	2018	H1 2019	2018	Q1 2019	2018	Q1 2019	2018	Q1 2019	2018	Q1 2019
519,270	527,100	47,120	554,000	3,510,730	3,510,320	3,649,040	3,680,730	2,418,500	2,511,490	1,796,000	1,812,250
38,000	29,800	70,362.9	17,100	527,200	95,160	530,280	242,000	327,000	105,200	172,500	31,400
64,900	14,300	28,300	42,700	n/a	n/a						
8.8	7.4	7.3	12.1	5.1	4.4	7.3	7.3	9.5	10.75	6	6.4
14.5	14.5	16.5	15.9	22	22.5	20	21	18	18	15.5	15.5
178,000	300,000	167,800	101,500	349,000	337,190	479,000	533,000	430,500	410,000	194,400	178,100
7.25	7.25	6.3	6.3	4.75	4.5	5.75	5.5	7.25	7.25	6	5.5
2,400	2,400	3,000	3,000	5,560	6,000	4,170	4,560	2,980	2,980	3,100	2,380
59.5	25.7	0	151.6	811	480	836	127	492	5	253	0

Offices will drive

real estate investments

Senior Partner Head of Investment Services Colliers International

Piotr Mirowski CEE continues its growth trajectory as one of Europe's key real estate investment destinations, with Poland still having both a market share in excess of 50%, the greatest product diversity and liquidity generated by investors of various origins. The ever-improving performance of the region is

> underpinned by a combination of the stable legal and political systems, robust economic growth and healthy leasing fundamentals, as well as a stillattractive price point compared

with Western Europe (both in terms of yield and capital value per square metre).

The region has enjoyed an unprecedented inflow of overseas capital, ranging from South Africa to Asia (originating from Singapore, the Philippines, China, South Korea and Malaysia). Whereas the majority of South African equity has been deployed in Poland (office & retail), Asian investors have already made purchases in the Czech Republic, Slovakia and Hungary, with other markets potentially within the scope of their interest. Typically targeting long-term income, they have emerged as major competitors to Germany-domiciled funds, which have been market-makers in the region for years. The activity of the usual suspects, i.e. other Europe and US-based investment managers, has continued to be strong, although the availability of products is drying up, and many of them will be focusing on core+ and value-add investment opportunities as they get priced out of core deals.

New strategic investors, both those from Europe and further afield, looking for scale in the form of large office platforms or portfolios, are currently

on the side-lines, analysing the CEE market, and we expect some of them to announce themselves in the region in the next 18 months.

The office asset class is expected to continue to drive the market across CEE, with further sharpening of pricing as liquidity grows and

Domestic capital, which already accounts for more than 50% of the overall volume in the Czech Republic and Hungary, will continue to expand, with more family firms entering the fray.

> the number of assets available to purchase falls. Colliers International expects that new benchmark pricing will be established in CEE's key markets, including regional cities, both for products with long-term income in place, as well as multi-let tenants enjoying strategic CBD locations.

Domestic capital, which already accounts for more than 50% of the overall volume in the Czech Republic and Hungary, will continue to expand, with more family firms entering the fray, both within the respective countries and also expanding wider across the CEE region. Poland, the only market which does not have an institutionalised framework for direct real estate investments, will at a certain point finally introduce an a REIT structure, which will add a new layer of liquidity to the market.

It is expected that the inflow of new office capital will continue throughout 2019 and beyond. There are number of transactions in due diligence, under negotiations and marketing with a view of closing soon.

Figure 35. Investment volumes in the real estate markets

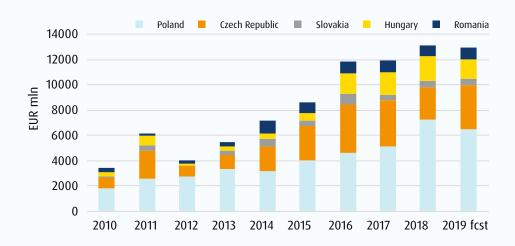
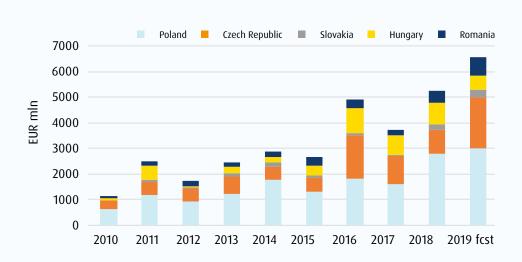
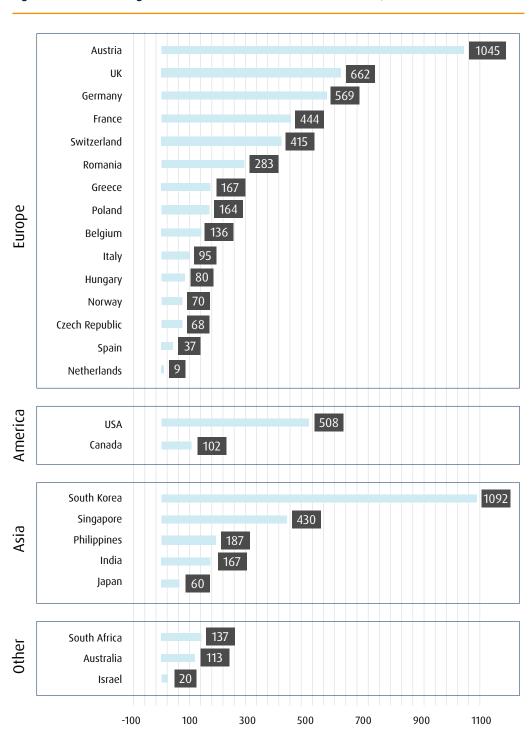


Figure 36. Investment volumes in the office markets



Source: Colliers International

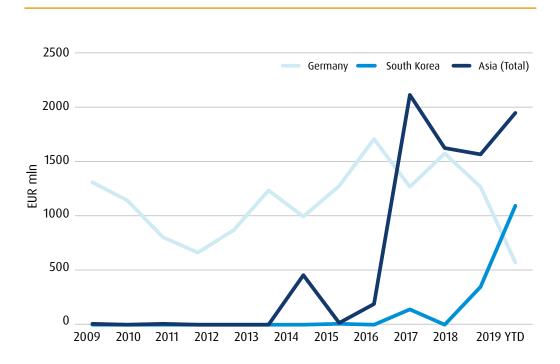
Figure 37. Investors' origin in the real estate market in CEE in H1 2019, EUR mln



Source: Real Capital Analytics



Figure 38. Volume of investments from Germany and Asia in CEE real estate markets



Source: Real Capital Analytics

Asian investment into CEE:

A wave but not yet a tsunami

Partner, Real Estate Dentons

Tax Advisor

David Dixon Asian investment in CEE is not exactly a new phenomenon for the region. A case in point is the investment by Singapore's sovereign wealth fund, GIC, in the acquisition of P3, Tomasz Krasowski also known as PointPark Properties, in 2016. Subsequently, the wave of Asian investment Dentons has started to build. In particular South Korean investors, supported largely by Korean pension funds, have become notably active, even aggressive, in pursuing opportunities in CEE. A number of factors are facilitating this trend.

> The two most important are a favourable foreign exchange situation (e.g. compared with higher hedging costs in the US caused by increasing interest rates and the uncertain outlook for the US dollar) and, even more overarching, the availability of higher yields. Only by moving up the (perceived) risk curve in CEE, as opposed to investing in more yieldtapped-out markets, such as Germany, are more robust returns available. The realisation by informed market players that CEE countries, especially the largest market, Poland, actually carry a risk profile more akin to Western Europe has highlighted opportunities for

investors, and Asian institutional investors are certainly taking that lesson to heart.

At the same time, the Chinese belt-androad initiative has had clear beneficial effects for CEE, with major Chinese institutional investors kicking the tires on prime opportunities. The same economic factors that have stimulated South Korean and other Asian investors are in play with the Chinese, but there is a distinct political overtone as well. That is both good and bad, as can be seen from some of the most recent developments with Chinese investment overtures in CEE, with Chinese investors moving into a "wait-and-see" mode, as the US/China trade war starts to resonate at the highest levels of the Chinese government. The move from a "full-go" attitude (good for CEE) to the current pause (bad for CEE, and Europe generally) is purely driven by politics above and beyond the European ambit. Fortunately, the Chinese belt-and-road initiative is not likely to be a flash in the pan but instead a policy that will have long-term endurance. This bodes well



for future Chinese investment in CEE.

Contrary to the flow of South Korean, Chinese and Singaporean capital into CEE and Europe, Japanese institutions have so far been slow making outbound investments. This may change over time, but it is expected that they will play things safe and focus on indirect investments, with initial targets being US core open-ended funds.

Asian investment is primarily entering CEE through Luxembourg and Netherlands structures. This is a combination of trust in well-trod pathways and tax efficiency. How will it evolve in the future?

EU holding structures, in addition to offering business advantages, make possible the repatriation of profits through dividends or interest in an efficient manner. Under the EU Tax Directives dividends, interest payments and royalty payments made to EU companies may benefit from tax exemptions under certain circumstances. Please note, however, that with holding structures one must

consider the vigilant scrutiny of tax authorities with regard to tax transparency, treaty and directive shopping, and beneficial ownership.

EU holding companies must have strong business justification and substance as such, otherwise tax authorities may claim that an EU holding company is not a beneficial owner with regard to payments and deem its structure to be an abuse of rights. Therefore, some structures involving EU holding companies are unsuitable, for example for investment in only one property company.

Recently, we have noted increased interest in more direct structures where Asian investors acquire shares in property companies directly from Asia. Such structures may also be quite efficient, depending on the investor and diligent planning. In the tax world, there is no such thing as one size fits all and, therefore, each particular investment structure has to be carefully designed and analysed to meet the goals of the investors.

What role CEE plays in Asian investments

Europe's real estate market is increasingly globalised. Since 2017, investors headquartered in 83 different countries have purchased European commercial real estate. In contrast between 2006 and 2007, the same figure was 63.

Tom Leahy Senior Director Real Capital Analytics

One of the main changes has been the large increase in the flow of capital moving from Asia into Europe. From 2013 onwards, Asian investors have bought €136 bln of European property and sold just €35 bln. And since 2017, 30% more Asian capital has been spent in Europe than North America.

Typically, the UK has been the most important market for Asian capital and accounts for more than half of the total invested since 2013. However, its relative importance has lessened: so far in 2019, it accounts for 34% of all Asian investment while other markets have come to the fore.

This means a greater focus on France and to a lesser extent Central Europe – primarily Poland and the Czech Republic. One of the reasons for the increased focus on France is that South Korean institutions, who have been the biggest Asian buyer of European real estate in the last year, have switched attention from London to Paris.

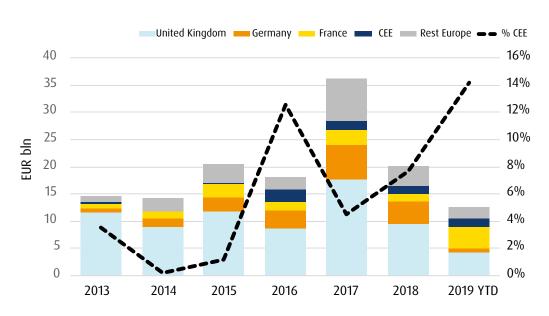
South Korean institutions have spent over €3 bln on Paris offices so far in 2019, as compared to just €740 mln in the previous two years combined. This shift is partly because of the risks Brexit is seen to pose for London's property market and some of the difficulties South Korean securities funds have had in syndicating London assets among other institutions. In contrast to capital from Hong Kong, which is almost solely focused on Central London

offices, South Korean investors have shown a willingness to explore a wider range of European geographies and property types. In 2019, for example, €670 mln has been spent in Vienna, €544 mln on Prague offices, and close to €400 mln on a mix of Polish office and industrial assets. RCA has also recorded the first direct purchases by South Korean players in Slovakia and Hungary.

Since 2013, the CEE region has accounted for less than 3% of all capital spent by Asian investors outside their home continent. This year that figure has jumped to 9.5% and in Europe it is 14.5%. This is motivated, in part, by the higher yields and lower levels of competition from domestic players in comparison with Europe's other core markets.

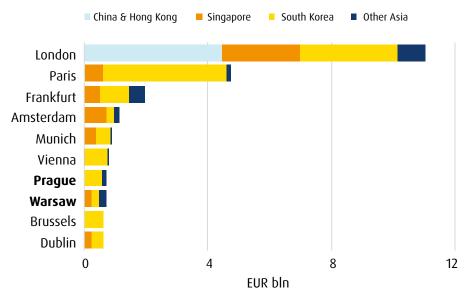
At the same time as South Korean investment has picked up, the flow of capital from China and Hong Kong has slowed substantially. Investment volumes peaked at the end of 2017, boosted by the acquisition of the Logicor industrial property platform by CIC for more than €12 bln. However, the imposition of capital controls has virtually turned off the tap, so only €1.1 bln has been spent in Europe this year. Moreover, Chinese and Hong Kong investors have become net sellers for the first time as the likes of Anbang, the troubled insurance firm, have come under pressure to offload assets. It is likely this will remain the case without a change in domestic Chinese politics.

Figure 39. Asian investment into Europe by destination



Source: Real Capital Analytics

Figure 40. Top 10 European metropolitan areas ranked by investment volumes by Asian buyers from 2018 onwards



Source: Real Capital Analytics

Investors' view

Chairman ISOC Holdings, Inc.

Michael C. Cosiquien The opportunities for growth and development in Central and Eastern Europe are unbounded. Amongst the CEE countries, of particular interest to ISOC Holdings, is Poland due to its strategic location, economic and political stability, and its many similarities with our

> country, the Philippines. Aside from both being fast-developing economies in their respective regions, we see a robust and booming real estate market, as well as

a workforce that is highly skilled, professional and most importantly, resilient. These attributes show a burgeoning potential, and have contributed to the influx of Business Process Outsourcing (BPO), Shared Services Centers (SSC), and Research and Development (R&D) centers, which in 2018 have helped propel Poland's economy and property sector to new heights. Remarkably, the demand for BPO office spaces have grown tremendously, reminiscent of the same strong demand in the Philippines. Our decision to diversify our portfolio in Poland further hinges on its expected healthy rate of capital appreciation with its attractive yields compared against Western Europe.

With the World Bank expecting the Polish economy to grow at a rate significantly better than its EU counterparts, driven in part by accelerated investments, we can't help but being enthusiastic to be involved in this rapidly expanding market. Soon enough, we should see Poland transform into the key hub for worldwide business services.

Zoltan Szelyes Head Global Real Estate Research Credit Suisse Asset Management Office real estate markets in many cities in Central and Eastern Europe have improved over the last 10 years in the level of transparency as well as liquidity. We believe that prime office properties at the best locations in CEE should be included into pan European or global core real estate portfolios. We particularly prefer cities in Poland, like Warsaw, Krakow or Wroclaw. All these cities are benefiting from a strong demand driven by one of the strongest economies in Europe. Credit Suisse expects real GDP in Poland to grow by 3.9% and

3.7% in 2019 and 2020. Due to the strong domestic demand and structural trends as business and technology outsourcing Poland's economy is also likely to be less affected by the slowdown of global GDP growth than some Western European countries. Compared to Western European real estate markets investments in the aforementioned cities also provide an additional yield pick-up. In the current increasing negative yielding environment for fixed income assets, we see the yield levels in these cities as a very interesting value proposition.

Hyon Suk Jan, Executive Managing Director JR AMC Korean investors have been active in the European real estate scene now for almost 10 years. The trend is constantly growing but a distinctive change that is noticeable is the widening spectrum of target cities and transaction types. One of the most significant changes in trend is the expansion into CEE countries.

As JR AMC, we strongly believe in the CEE market. With yields in Western Europe breaking historic records, the CEE has become a very appealing substitute whereby high yields can still be achieved, simultaneously minimizing any trade-off in building quality or

macro risk profile. At the same time, core CEE cities such as Warsaw, Budapest and Prague are strongly growing to become serious competition to traditional Western European cities. Our investment strategy in the short-run in the

CEE region is to expand our acquisition of core office properties in well-established sub-markets. We are well aware that competition in this sector is fierce and understand forward action has become increasingly important to secure quality properties, just as our most recent forward-commitment transaction of Nordic Light Trio in Budapest with Skanska. As in any other new market one is entering, we evaluate highly the importance of working with a reputable and credible business partner – this was, of course, a very easy decision for us with Skanska.

Andrew C. Angeli Head of EMEA Strategy and Research CBRE Global Investors

CEE cities are attractively positioned in a world of heightened global uncertainty. Underpinned by still-healthy rates of economic growth, low unemployment rates and rising real wages, demand for space across property sectors and geographies has been resilient. Liquidity has improved manifestly in recent years as institutional cross-border investors targeted the region. Highlighting the diversity of investment strategies that are executable, the capital cities

have overtaken several larger Western European markets in terms of deal activity.

Furthermore, in the face of a possible global slowdown, cities in the region are

positioned defensively. A maturing consumer sector provides a buffer to a potential export-oriented slowdown. It should come as little surprise that CEE cities continue to feature favourably in our risk-adjusted return forecasts and recommended investment strategies. Given these attributes, we have been successful steering a diverse range of our investors to the region. Looking to the future, we are drawn to the region's capacity to innovate. Cities like Prague and Budapest are well-positioned to support the growth of the new economy, given the entrepreneurial environment, top research universities, and highly skilled workforce. Infrastructure investment solidifies the region's role as a crucial link in Europe's supply chain network, which supports investment into the logistics sector. Looking to the future, we are drawn to the

region's capacity to innovative. Cities like Prague and Budapest are well-positioned to support the growth of the new economy, given their entrepreneurial environment, top research universities, and highly skilled workforce. These forces coalesce is vibrant manner in Prague's Karlin district, which has transformed in recent years to become an attractive live-work-play environment. We see locations such as these being able deliver long term stable returns.



Summary

- Recent years have been particularly good for the CEE region. GDP growth has remained strong, even in the wake of the slowdown in the Eurozone. In 2018 the growth difference between CEE and the Eurozone was the biggest since the financial crisis. Why was that possible? One explanation is the very strong consumption growth, which is due to strong wage growth. Another explanation is the relocation of production from Western Europe to CEE, both in terms of industry as well as services.
- CEE cities dominate the list of the fastest growing metropolitan areas in the European Union. Of the top-20 cities, 16 are from the CEE. Just after Dublin, Prague is on the second place, which has seen very rapid growth in educated population over recent years. And Wroclaw has the third place on the podium, mainly thanks to its spectacular

- productivity growth. CEE economies achieved their economic success largely due to their openness to world trade and very high quality of human capital.
- CEE cities have gradually become part of economies of the largest metropolises, such as London, Boston, New York and Singapore. The future should bring a continuation of this process. Cities will become more integrated worldwide. And the success of CEE cities will depend on two factors: their ability to provide ever more complex services to large corporations and their agility in managing social changes arising from globalisation of services.
- CEE has gone through a significant transformation over recent years. The process clearly started three or four years ago, and continues until today. Whereas in 2010 only around 25% of jobs located in business service centres were complex tasks, today more than





50% are from that category. The quality of jobs located in CEE is increasing dynamically.

- The office stock in the major CEE cities totals 21.8 million sqm and forecasted completions by 2021 will increase it by an additional 20%, to 26.5 million sqm. But the stock is still only approximately 1 sqm per inhabitant, comparing to 5 sqm per inhabitant in the major cities in Germany, 2.6 sqm in the Netherlands, 2.4 sqm in Italy and 2 sqm in Spain. If CEE maintains its high economic growth rate, and many forecasts indicate it will, the amount of modern office stock should increase.
- It is expected that the inflow of new office capital will continue throughout 2019 and beyond. There are number of transactions in due diligence, under negotiations and marketing with a view of closing by the end of the year. Domestic capital, which already accounts for more than 50% of
- the overall volume in the Czech Republic and Hungary, will continue to expand with more family firms entering the fray, both within the respective countries and also expanding wider across the CEE region. Poland, the only market which does not have an institutionalised framework for direct real estate investments, will at a certain point finally introduce a REIT structure, which will add a new layer of liquidity to the market.
- CEE has recently become the hotspot for Asian investors. Since 2013, the CEE region has accounted for less than 3% of all capital spent by Asian investors outside their home continent. But this year that figure has jumped to 9.5%. This is motivated by the higher yields and lower levels of competition from domestic players in comparison with Europe's other core markets.

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