

European Regional Economic Growth Index E-REGI 2014

Despite headwinds, the economic recovery gathers pace in Europe's major cities.

Long-term strengths in Demographics, Technology and Urbanisation underpin the scores of the top three: London, Paris and Istanbul.

Madrid and Barcelona return to the category of strong-scoring cities, mirroring gains made by the Spanish economy over the last year.

The cities of Warsaw, Prague, Krakow and Poznan are among the best improvers in 2014 ranking.



Overview

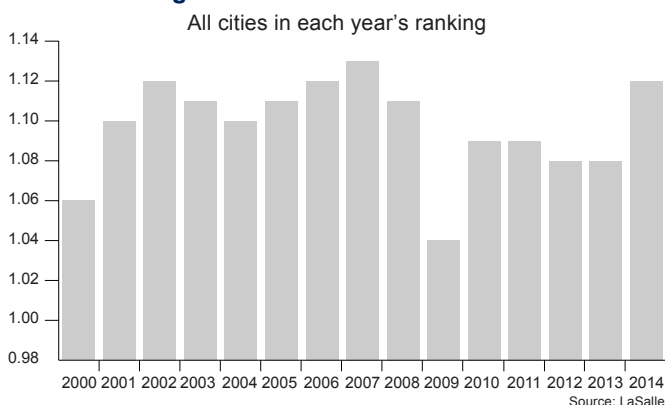
LaSalle's annual European Regional Economic Growth Index (E-REGI) identifies those regions across Europe with the best economic prospects. As such, E-REGI approximates the relative strength of real estate occupier demand in Europe's cities in the medium term. This report presents the latest E-REGI results and is the fifteenth iteration of the analysis.

Analysis is carried out for nearly 300 regions across Europe, covering 32 countries with a total population of more than 730 million. This report focuses on a subset of 100 major cities (metros with $\geq 500,000$ inhabitants and all national capitals). When combined with detailed real estate knowledge, supply side information and relative pricing, the E-REGI is a valuable tool to determine real estate market outperformance.

Main Trends

- The 15th edition of LaSalle's European Regional Economic Growth Index (E-REGI) highlights two key themes.
- First, the index signals that, despite continued headwinds, the economic recovery is gaining traction in Europe. The average score of the 100 European cities reached its highest level since 2007. This puts an end to four years of stagnation of the average score since the 2009 downturn. Each year, E-REGI shows how individual regions are doing relative to the European average. Therefore, the strong average score of the 100 cities is evidence that an improving macro-economic environment is benefiting Europe's major urban centres more than other regions.

E-REGI Average Score



- Madrid and Barcelona return to the category of strong-scoring cities, mirroring the encouraging gains the Spanish economy has made over the last year. A programme of reforms has set Spain on a path of accelerating growth. In particular, the fall in unit labour costs, stimulated by labour market reforms, sparked a spectacular increase in exports. However, unemployment is expected to remain above 20% for a prolonged period, prompting many Spanish nationals to look for jobs abroad. Domestic demand is finally starting to rebound, as shown by the spurt in imports in the first half of 2014. International investors have been pre-empting this recovery, returning to the Spanish real estate market *en masse*. The strong performance of Madrid and Barcelona in the E-REGI 2014 analysis suggests that this move is justified.

Office rental growth in Madrid is forecast to be the strongest of the major markets in Europe over the next five years.

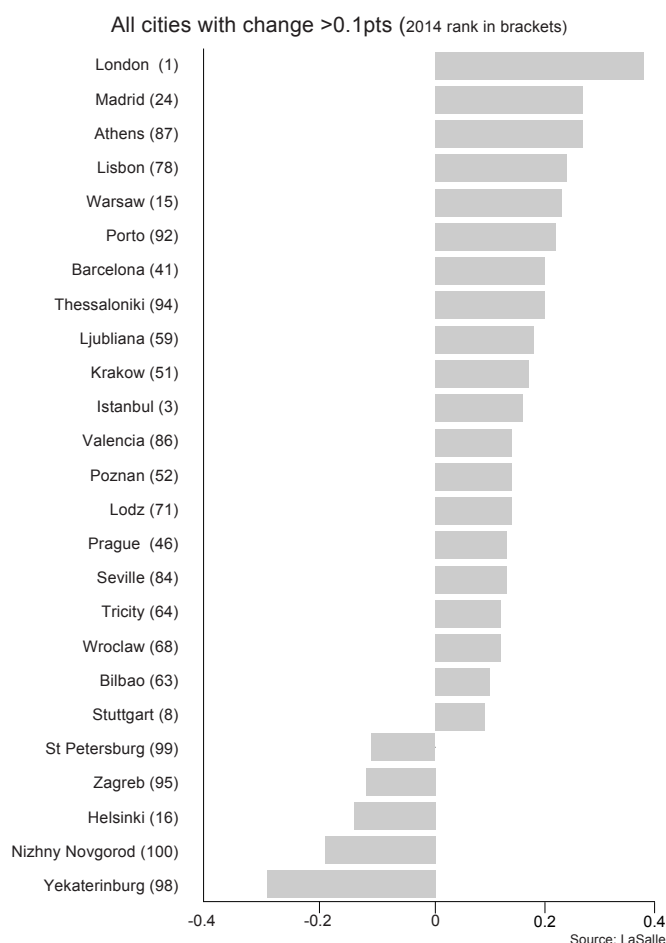
- Another country where all cities made significant progress in E-REGI 2014 ranking is Poland. Warsaw, Krakow, Poznan and Tricity (the urban area of Gdansk, Gdynia and Sopot) as well as Katowice, Wroclaw, and Lodz saw their ranking progress considerably. This is largely due to the improvement of Poland's economic forecasts. The economy is rebalancing towards domestic demand with improving labour market conditions lifting households' purchasing power. With a larger internal market, Poland is less vulnerable than other Central and Eastern European (CEE) economies to a slowdown in the Eurozone. This context encourages investors to focus on Poland for a growth-oriented investment strategy, although a risk premium over investment in Western Europe should be required.
- Second, over and above the economic recovery, E-REGI 2014 confirms the importance of the Demographics, Technology and Urbanisation ("DTU") trends which took centre stage in LaSalle's 2014 Investment Strategy Annual report. The results from the E-REGI analysis show that due to their strengths in these areas, cities are much more likely to be more dynamic than their rural counterparts.
- That these long-term trends provide sources for outperformance is particularly visible in the three cities topping the 2014 E-REGI ranking. London's E-REGI score is far ahead of all other cities, solidifying its position as a key business location. London benefits from the unique combination of the three DTU components with strong demographics, a high research & development (R&D) score and continuous expansion of its urban area to accommodate its growing population. London not only tops the ranking for the third year in a row, the city also shows the strongest increase in score in the E-REGI 2014. Cross-border investors continue to invest in London more than in any other city in the world, and the occupier market remains buoyant. However, increasing prices in London and the South East has pushed out investment into higher-yielding UK markets such as Manchester and Birmingham, where the economic recovery is also underway.
- Paris moved up one position to rank second, despite the current sluggishness of the French economy. Paris' high value-add sectors, in part focusing on technological advances as a long-term trend, are the main reason explaining this strong performance. Paris accounts for the largest expenditure in R&D of all European cities. The Paris region boasts dozens of clusters specialised in high-tech, healthcare, cosmetics, aeronautics and automobile industries, while the Paris-based national centre for scientific research (CNRS) is the largest fundamental research organisation in Europe. As a real estate investment market, Paris benefits from this international reputation. Its large real estate market records more office purchases than the top five German cities combined, while Paris trophy assets are highly sought-after by Middle Eastern and increasingly Asian investors.
- In position three, Istanbul has some of the most positive demographic fundamentals in the region, benefiting from a large and youthful population unlike many other European cities. With more than 14 million inhabitants, Istanbul is also

the most populous city covered in the E-REGI. The city bridging two continents ranks first in Europe for employment growth and third for GDP growth. Despite its growing middle class, Istanbul's GDP per capita is still far below the European average, while the city continues to underperform in terms of R&D expenditure. Nevertheless, Istanbul's overall score is only slightly lower than Paris', a much more significant market for global real estate. Despite the continuous improvement in its score, Istanbul remains an emerging market, where high economic volatility paired with a lack of transparency and suitable stock continues to deter institutional investors.

- Germany's major cities tend to perform well in the E-REGI with Munich and Frankfurt consistently showing strong scores. Over the last five years, Berlin's score has improved most significantly of all German cities, reaching its highest score since 2000. Berlin's urban renaissance has enhanced the city's ability to attract skilled workers, maintaining its reputation as a fertile ground for the fast-growing technology & media sectors. Domestic and foreign investors have been actively targeting real estate assets in Berlin, with a particular focus on the residential sector. As a result, property yields have compressed to reduce the yield premium between Berlin and the other German markets.
- On the flipside, E-REGI 2014 also shows that cities lacking the DTU factors are more likely to fall behind. This can increase the polarisation between regions within countries. Countries with a centralised economic structure, in particular the UK and France, show the most fragmentation.
- Although the number of UK cities with strong scores on the E-REGI has doubled between 2013 and 2014, the UK regions continue to drift apart. Growth is spreading out from London and the rest of the South East to the dynamic regions of Manchester, Nottingham and Birmingham, as well as Edinburgh in Scotland, which have all experienced an increase in their score. However, many of the UK's secondary cities have tended to rely on the public sector and are now impacted by austerity measures; Cardiff, Leeds, Newcastle and Glasgow saw significant drops in their E-REGI score. Going forward, regional disparities are expected to widen further as London will continue to grow faster than any other UK city.
- The French economy continues to stagnate. Household consumption growth only partly offsets decreasing investment and exports, high unemployment persists. These negative developments are reflected in polarisation between Paris and most French regional cities which, apart from Lyon, are edging down in the ranking. While GDP scores improved in the capital, Lyon and Toulouse, weaker employment prospects impacted all French cities' scores. Strikingly, only four French cities have strong scores in E-REGI 2014, compared to thirteen German and six UK cities.
- Russia is the country that has lost most ground in the E-REGI 2014. Unsurprisingly, following Russia's involvement in the crisis in eastern Ukraine, the business environment scores for the Russian cities have been downgraded most out of all the cities in the index. Russia's GDP growth forecasts have also been downgraded substantially. Nonetheless, GDP growth remains the main driver of performance for the Russian cities on the E-REGI, since country-wide population declines

continue to negatively affect their employment scores. Additionally, Russian cities also display weak wealth and R&D scores. The exception is Moscow which has an above-average R&D score, as a result of government-backed initiatives such as Skolkovo Tech City. The real estate investment market has already started to reflect the weakening climate, with investment volumes falling dramatically as many foreign investors exit the country.

Change in Score 2014 v 2013

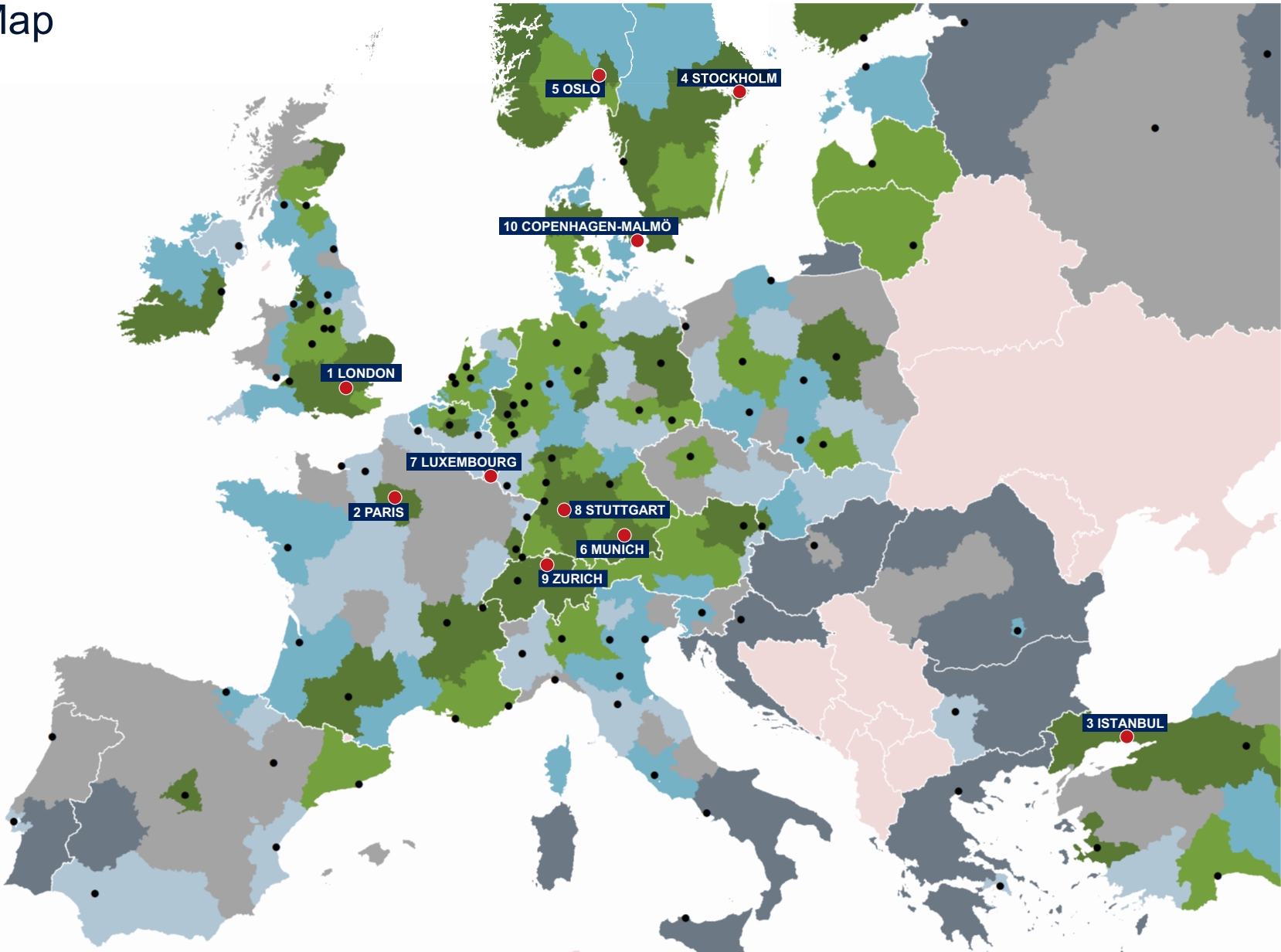
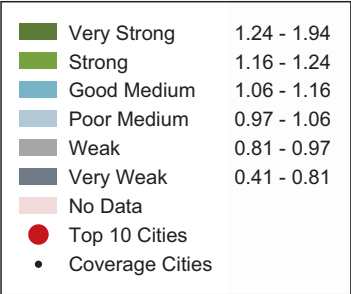


Top 10 E-REGI Rankings 2014

1. London	↔
2. Paris	↑
3. Istanbul	↑
4. Stockholm	↑
5. Oslo	↓
6. Munich	↓
7. Luxembourg	↓
8. Stuttgart	↑
9. Zürich	↑
10. Copenhagen-Malmö	↓

Source: LaSalle

E-REGI 2014 Map



E-REGI 2014 Results

The overall outlook for the European economy that underpins all E-REGI scores has improved moderately compared to last year; E-REGI 2014 shows a number of European cities clearly benefiting from an improvement in economic climate. However, the economic recovery remains erratic in nature as many fundamental issues affecting the European economy remain unaddressed, despite the immediate threat of a collapse of the Eurozone having diminished. Since last year geopolitical risks have also increased in importance presenting an additional threat. At closer inspection, under- and outperformance of cities can often be explained by developments that tie in with long-term trends relating to “DTU”.

London (UK)

- **London** (2014 rank: 1 / Change from 2013: 0) retained its position at the top of the E-REGI ranking for the third consecutive year. London achieved its highest ever score and has the most improved score compared to last year of all the cities in the ranking. London's growth score has improved further since last year and the city now ranks first for this component, largely driven by an improvement in GDP and service employment prospects, with the majority of growth expected to come from the professional services and the information & communication sectors.
- The momentum within the UK economy has been carried into 2014, with the economy now above its pre-crisis peak. The UK is pulling ahead of other European economies; primarily owing to London's economic and demographic strength which is resulting in an uneven recovery. London's contribution to national output stands at more than one third and is set to increase both in absolute and percentage terms over the next five years. However, doubts have been raised over the sustainability of the UK's dependence on London, its housing market and the financial sector. With London's population continuing to grow, a significant amount of investment is needed to ensure that the capital has the necessary infrastructure in place to accommodate such growth and continue to operate successfully in the longer term. Crossrail, one of Europe's largest infrastructure projects, is the most prominent example of this. The project is expected to complete in 2018 and will improve accessibility and urban regeneration of outer London areas.

Rest of the UK

- Although the UK displays some encouraging signs of recovery, austerity measures put in place have exacerbated the polarisation between London and the rest of the country, as other UK cities have tended to rely more on the public sector. Although growth scores generally improved for the UK cities in many cases it did not result in an improvement in ranking as the wealth scores for all UK cities fell slightly.
- An important exception to this trend is **Manchester** (20/+3), which recorded improved GDP and employment scores and is the only other UK city ranked in the E-REGI 2014 top 20. Manchester's economic growth has been driven by large-scale and rapid expansion of the service sector, particularly in

professional services. Manchester also scores strongly on R&D, with research and innovation activities clustered around the four main universities.

- **Bristol** (28/-9) has been overtaken by Manchester as second strongest city in the UK as a result of a relatively large fall in its wealth score. However, the city benefits from an improved, strong R&D score which is driven by the presence of well-established creative, environmental, technology and knowledge-based industries. Additionally, the Bristol Temple Quarter enterprise zone, one of the largest urban regeneration projects in the UK, is transforming the city centre and encouraging further businesses to open in the area.
- Benefiting from strong connections to Manchester, **Liverpool** (67/+7) also gained seven positions following a stronger improvement in GDP and employment growth prospects than the other UK regional cities. The rankings of **Birmingham** (39/0), **Edinburgh** (42/0) and **Nottingham** (48/0) remained unchanged despite small improvements in scores. All three cities benefited from marginally better GDP and employment growth prospects, but these were cancelled out by a reduction in wealth scores.
- The remaining UK cities all display weak or medium scores in the E-REGI 2014, but also saw their positions fall in the ranking. **Leeds** (55/-11), **Glasgow** (72/-16), **Newcastle** (73/-16), and **Sheffield** (82/-13) fell in the ranking as wealth and, in some cases, employment prospects were downgraded. **Belfast's** (79/-9) total score was unchanged from last year; however its ranking still fell as other cities performed relatively better. **Cardiff** (69/-22) fell the most positions of the UK cities, as its total score was dragged down by a more substantial reduction in wealth and employment scores.

Paris (France)

- Despite the continued weakness of the French economy, **Paris** (2/+1) gained one position, though its score remains far below that of London. The improvement in its ranking is mostly due to an increase in its GDP score, but its wealth and R&D scores improved as well. The Île-de-France region generates around one third of national GDP and is home to 19% of the country's population. The local economy is dynamic and well-diversified, with engineering, financial and professional services, retail, culture, entertainment, education, fashion, healthcare, media, tourism and transport all contributing to its prominence.
- In addition, Paris continues to rank first for R&D, as the region exhibits a higher research & development expenditure than any other European region and more than the whole of Russia, Spain or Sweden. The Paris region concentrates a high number of large corporates with active research departments and boasts dozens of clusters specialised in high-tech, healthcare, cosmetics, aeronautics and automobile industries. In addition, the Paris-based national centre for scientific research (CNRS) is the largest fundamental research organisation in Europe with 33,000 employees and an annual budget of €3.4 billion.

Rest of France

- In addition to Paris, four French cities have strong scores in E-REGI 2014: **Lyon** (23/+5), **Toulouse** (30/-1) and **Marseille-Nice** (45/-5) and the cross-border region of **Basel-Mulhouse** (25/0), but the latter's strength is mostly due to the wealth of the Swiss city.
- Lyon gained five positions due to an increase in its wealth and R&D scores. Lyon benefits from an internationally-renowned biotech cluster, where large pharmaceutical companies such as Sanofi, innovative small businesses and 30 research centres are located. Transportation (Alstom, Renault, Veolia Transdev and Keolis) and energy sectors (EDF, Areva, Technip) are also well-represented in the capital of the dynamic Rhône-Alpes region.
- Toulouse's score improved slightly, but the city still dropped one place. Toulouse ranks sixth in Europe in terms of its R&D score, thanks to the strong presence of the aeronautics sector. Airbus is by far the largest employer in the region and its recent announcement that it will relocate its administrative services from Paris and Hamburg to Toulouse will strengthen its position further. Reflecting this economic vigour, Toulouse has been consistently ranked among the fastest-growing French cities over the last few years.
- Outside these pockets of growth, the French economy continues to stagnate. Household consumption growth only partly offsets decreasing investment and exports, and high unemployment persists. These negative developments are reflected in polarisation between Paris and most French regional cities, which are edging down in the ranking. Weaker employment prospects are reflected in the E-REGI score of all French cities, particularly in **Bordeaux** (56/-6), **Nantes** (62/-9), **Strasbourg** (76/-15), **Lille** (80/-7) and **Rouen-Le Havre** (84/-20).

Istanbul (Turkey)

- **Istanbul** (3/+4) climbs four positions in this year's ranking, breaking into the top three for the first time. The gains made by the city are mostly attributable to the sharp increase in its employment growth prospects, where Istanbul ranks first in Europe. Since the city was introduced into the index in 2009, Istanbul's score has been continuously improving. Istanbul is Turkey's major economic centre, contributing to almost a third of national GDP. Its expanding middle class and youthful population provide a large local market for services and consumer goods. The largest Turkish companies, notably the family-owned conglomerates Koç Holding and Sabancı, are both headquartered in Istanbul.
- However, the city's economic growth is barely sustainable, putting major strains on natural resources and on Istanbul's already-congested infrastructure. Mega-projects such as the recently-opened Marmaray metro line, which links the European and Asian sides of the city, will ease but not solve the problem of continued urbanisation in Turkey.

Rest of Turkey

- The other Turkish cities covered in the ranking continue to show strong employment prospects, with **Izmir** (26/-2) ranking third in terms of employment score, **Ankara** (32/-2) fifth and **Antalya** (49/-8) fourth. However, their GDP scores decreased slightly compared to last year's E-REGI, reflecting the downgrade in national GDP growth forecasts for Turkey. These cities' wealth and R&D scores remain low by European standards and are not improving.
- Additionally, the Turkish cities suffer from a very low business environment score, ranking last in Europe after Russia. Turkey's political situation has worsened over the course of last year. Social unrest and corruption scandals involving government officials have been troublesome for the country. More generally, Erdogan's tighter grip on power is prompting international concerns about the future of Turkey's fragile democracy, where few checks and balances remain in place. After serving as Prime Minister for twelve years, Recep Tayyip Erdogan was elected President in August 2014, but political uncertainties will continue at least until the general election in June 2015: the fragmentation of the country between liberal urban centres and tourism-dependent coastal regions on one hand and conservative Anatolia on the other is intensifying. Nonetheless, the Turkish economy is expected to outperform the rest of Europe in terms of GDP growth over the next five years. The country benefits from a large domestic market and from strong trade links with fast-growing Middle Eastern and Central Asian economies.

Stockholm (Sweden)

- **Stockholm** (4/+2) achieved one of its highest ever scores, gaining two positions since last year. The capital's already strong R&D score improved further, reflecting the city's high technology and innovation-led economy. Stockholm also benefits from strong GDP growth prospects, high levels of wealth and an inviting business environment. A strengthening demographic profile is fundamental to Stockholm's economic development and the creation of new jobs; Stockholm's population is growing at almost double the national rate, while the region's unemployment rate has remained relatively stable and is lower than the national average.

Rest of Nordics

- **Gothenburg** (11/-2), Sweden's second largest city, slipped two positions primarily due to weaker employment prospects, but remains a city with a consistently strong score. The Swedish economy is expected to continue to outpace the Eurozone, although there is some concern regarding the degree of household indebtedness, as this could leave consumers exposed when the central bank begins to tighten monetary policy. Other downside risks include weak external demand and an appreciating Swedish krona, constraining the recovery in exports.

- Since 2007, **Oslo** (5/-3) has consistently ranked within the top ten of the E-REGI ranking. Weaker GDP and employment prospects as well as a slightly lower wealth score mean that Oslo dropped three places. Despite this, Oslo ranks second overall for relative wealth, which remains a major driver of its strong performance. As a result of the country's oil wealth, Norwegians enjoy a very high standard of living compared with other European countries. However, Norway's non-oil economy has been struggling with regard to its external competitiveness due to a strong currency, low productivity growth and high costs. Consequently, the government has pledged to support fiscal policies aimed at boosting competitiveness and diversifying Norway's economy into other industrial and service sectors to reduce the dependence on oil.
- **Copenhagen-Malmö** (10/-2) lost two places but maintained its position in the top ten of the E-REGI ranking for the fifth consecutive year. Copenhagen is the main economic and financial centre in Denmark. Connections with neighbouring Malmö in Sweden, linked by bridge, are very strong. Copenhagen has a central focus on sustainable development with initiatives integrated into government frameworks. The region is also well-known for its significant university and medical science industries and has the third-highest score of all the city regions for R&D.
- Denmark's economy is still feeling the lagged effect of weak activity following the global financial crisis, with the economy operating far below its potential. Unemployment only just started gradually improving and this has been weighing down on domestic demand. More sustained employment growth is expected from 2015. Improved domestic demand accompanied by stronger demand growth from Denmark's main trading partners underpins the robust GDP growth outlook.
- **Helsinki** (17/-5) remains in the top 20 but records the third-highest drop in score out of all the cities in the ranking. Helsinki continues to score highly for R&D (partially driven by the government's technology investment arm, Tekes, which provides funding to develop innovations that create growth) and has the second-best business environment score. However, GDP and employment growth prospects have been heavily downgraded.
- In the first quarter of 2014, Finland entered its third recession in six years. Trade performance continues to suffer in the wake of structural changes in Finland's key industries: electronics, largely driven by Nokia's decline in the smartphone sector; and forestry where demand succumbs to the rise in online news and e-books. These structural problems are weighing on both growth and employment prospects for Finland. In addition, the country is also suffering from the crisis in Ukraine as demand from Russia, one of Finland's main trading partners, is facing a significant slowdown following trade sanctions.

Munich (Germany)

- **Munich** (6/-2) lost its position in the top 5 of the E-REGI 2014 ranking, following a downgrade to its employment growth score. With a historically-low unemployment rate of circa 2.5%, the Bavarian city faces a significant labour

shortage. Munich benefits from a well-diversified, export-oriented economy blending large corporates such as BMW and Allianz with small- and medium-sized technology and engineering businesses that form the bedrock of the German economy. Despite the weakened employment outlook, the city ranks seventh in terms of growth score, thanks to a strong GDP growth outlook and R&D expenditure.

- The lowest unemployment rate in Europe combined with a shrinking population means that Germany falls behind other countries in terms of converting economic growth into service sector jobs. As a result, in the E-REGI 2014, the employment score deteriorated for all German cities. Employment prospects have also been impacted by the planned introduction of a minimum wage between 2015 and 2017. Nonetheless, the large number of German cities with strong scores in the E-REGI 2014 – thirteen compared to six British and four French cities – reflect Germany's economic strength.

Rest of Germany

- Unlike Munich, the second-ranked German city, **Stuttgart** (8/+2), moved up the ranking to eighth position. Its score has been improving steadily since 2009, reaching a record level this year. Stuttgart thrives as an export-driven industrial powerhouse. Its high value-add economy concentrates the headquarters of Porsche, Daimler and Bosch and many research centres which explain the city's impressive R&D score.
- **Berlin** (29/+4) continues to move up the ranking. Over the last five years, Berlin's score has improved significantly, boosted by better GDP growth prospects, a stronger R&D score and a higher wealth score, reaching its highest score since 2000 this year. Berlin's urban renaissance has enhanced the city's ability to attract skilled workers, maintaining its reputation as a fertile ground for the fast-growing technology & media sectors.
- Most German cities saw their GDP, R&D and wealth scores improve, partly offsetting the fall in their employment score. **Frankfurt** (13/+1), **Mannheim-Karlsruhe** (14/+1) and **Nuremberg** (21/+1) all maintained their position in the ranking. Despite losing a few places in the index, **Düsseldorf** (31/-5) reached its best score on record, while the **Ruhr** area (50/-1) and **Leipzig-Dresden** (53/-2) now also have strong scores.
- Due to lower employment growth forecasts, **Hamburg** (34/-13) slipped thirteen positions in the ranking. A similar but less severe trend is observed in **Cologne-Bonn** (33/-6), dropping six places to 33rd over the year. After rising steadily from 2000 to 2012, **Bremen** (43/-6) and **Hannover** (44/-9) saw their overall score decrease, weighed down by weakening employment growth prospects. **Bielefeld** (60/-8) and **Saarland** (75/-15) dropped down the ranking but their respective scores did not change much.

Luxembourg (Luxembourg)

- **Luxembourg** (7/-2) benefits from the highest business environment and wealth score of all the cities. However, Luxembourg's growth score fell sharply. Economic growth is expected to be weakened by the introduction of new European rules on value-added tax on e-commerce. The new

regulation requires the country's e-commerce companies to charge rates as applied in the country where the sale originated. Luxembourg is therefore expected to suffer a significant loss in tax revenue, as it will not be able to collect VAT from companies such as Amazon selling e-books to customers in the wider EU. In addition, Luxembourg's financial services sector will continue to face increasing challenges from regulation over the next few years as the Grand Duchy accepted the automatic exchange of bank account information within the EU by 2015, a measure seen as a key step in curbing tax evasion.

Rest of Benelux

- **Brussels** (18/0) maintained its position in the index despite lower employment growth forecasts, thanks to a surge in research & development expenditure. Brussels recorded the largest increase in the R&D score in the E-REGI 2014, largely due to the success of the large Louvain-la-Neuve science park to the south east of Brussels, which was the most R&D-intensive region in the EU in 2012. R&D expenditure here represents almost 10% of regional GDP.
- Outside of Brussels, the two other Belgian cities drifted further apart, with **Liège** (77/-15) slipping fifteen positions down the ranking, while **Antwerp** (35/-3) remains a strong region. Both regions' employment prospects worsened. Labour market rigidities continue to weigh on employment growth in Belgium. In particular, wage indexation and high non-wage labour costs worsen Belgian competitiveness relative to other Eurozone countries, while rigid labour regulations deter firms from hiring younger workers. Tackling these rigidities would not only boost job creation but also increase the labour force, as the country's working age population has started to shrink. However, the ability to implement structural reforms is limited at the moment as negotiations are still ongoing to form a new federal government following the May 2014 elections, which saw the Flemish separatists win a substantial share of the vote.
- The small improvements in the scores of Dutch cities in the E-REGI 2014 mirror the fragile macroeconomic situation of the Netherlands. After reaching an historic low in the index last year, **Amsterdam** (36/+2), **Utrecht** (40/+3) and **Rotterdam-The Hague** (47/-2) embarked upon a timid recovery in their E-REGI scores. Across the board the GDP scores of the Dutch cities fell slightly, as the GDP growth outlook now trails that of many other European countries, but small upgrades to employment, R&D and wealth scores meant that their overall scores improved slightly.
- Weakness in consumer spending, caused by falling house prices and austerity measures, underpinned the recent poor economic performance of the Netherlands. Stabilisation of house prices, underpinned by improving lending conditions and a stronger economic backdrop, will mean that the drag from the housing market on confidence will begin to fade, supporting consumer spending. A better outlook for consumer spending, together with exports continuing to support growth, drives the modest recovery which is visible in the performance of the Dutch cities in the E-REGI 2014.

Zurich (Switzerland)

- **Zürich** (9/+2) improved its rank due to a strong increase in wealth score and stable employment growth prospects. In fact, all Swiss cities have strong scores in the E-REGI 2014. **Geneva** (12/+1), **Bern** (19/+1) and **Basel-Mulhouse** (25/0) also moved up the ranking slightly although their employment scores have been slightly downgraded. Switzerland enjoys more favourable demographics than its neighbours thanks to immigration but in February 2014 a tiny majority of Swiss voters approved a proposal to place restrictions on immigration. The impact of the enforcement of immigration quotas – scheduled to come into force in 2017 – is said to be minimal, but drives a more modest employment growth outlook as the labour force will become more restricted.
- The Swiss economy is likely to outperform the Eurozone over the coming years. The outlook for household consumption is strong, driven by favourable income and labour market conditions, while expansion in high value-added financial services and engineering sectors continue to drive growth. The Swiss economy relies heavily on exports. In July 2014, Switzerland became the second country to sign a free-trade agreement with China (the first one was concluded with Iceland in April 2013). The deal will cut tariffs on Swiss farm and industrial exports to China. China already imports Swiss machinery, chemicals, pharmaceuticals, and watches.

Warsaw (Poland)

- **Warsaw** (15/+31) has broken in to the top 20 for the first time since its inclusion in the E-REGI in 2001, and is now the top performing city within Central and Eastern Europe (CEE). Warsaw is one of the most improved cities in the E-REGI 2014 ranking, due to significantly upgraded growth prospects. Of all the cities in the ranking, it ranks an impressive fifth for GDP growth and sixth for employment growth. Warsaw is an economic and financial hub for the CEE region, leading in terms of foreign direct investment. The city contributes to almost one quarter of national output and its unemployment rate is very low at circa 3%.
- Following a relatively weak year of GDP growth in 2013, due to weak external demand, Polish GDP growth is expected to rebound. Improving labour market conditions and real earnings growth will increase households' purchasing power and rebalance growth towards domestic demand. So far the crisis in Ukraine and the subsequent sanctions against Russia have weakened Poland's exports to the east but have not had a material impact on the overall pace of recovery. However, growth may be disrupted if the situation worsens.
- Outside of Warsaw, the other Polish cities all recorded better scores compared to last year due to improved growth prospects. However, relatively low wealth scores mean that Polish cities (and other cities in the CEE) are less likely to compete at the top of the ranking. However, **Krakow** (51/+28) and **Poznan** (52/+24) are among the most improved cities in the E-REGI 2014, primarily as a result of upgraded

employment growth and GDP growth forecasts. They now fall in the category of cities with strong scores. **Katowice** (57/+11), **Tricity** (64/+17), **Wroclaw** (68/+14) and **Lodz** (71/+17) all gained ground as a result of better scores, reflecting the improved outlook of the national economy. **Szczecin's** (91/0) score improved compared to last year, but relatively less than the other Polish cities and so its rank remained unchanged.

Rest of Central & Eastern Europe

- In general, all CEE cities are held back in the ranking due to low wealth scores compared to the rest of Europe. Most CEE cities show similar ranks on the E-REGI 2014 than last year but there are some exceptions. Apart from the aforementioned Polish cities, the biggest improvers compared to last year were Prague, in the Czech Republic, and Ljubljana, in Slovenia, but their improvement in rank mainly reverses declines from last year. Downside risks stemming from a hesitant recovery in the Eurozone and negative impacts from the crisis in Ukraine apply to most cities in the region in the short term. Although the direct impact of the recent import bans introduced by the Russian authorities are likely to have a limited effect in most cases, the effect on general confidence in the Eurozone and its trade partners may be more significant
- **Bratislava** (22/+9) improved by nine positions to its highest ever position in the E-REGI ranking. Bratislava benefited primarily from stronger growth and employment scores. Wholesale and retail trade and professional services are expected to add the most jobs over the medium term. Slovakia's economy is expected to pick up from 2014 as austerity eases and foreign demand improves. High unemployment remains a concern at around 14% and is unlikely to fall significantly in the short term. The government needs to implement reforms to help long-term unemployed return to work, as well as encourage greater participation in the labour force by women and national minorities.
- Having improved significantly last year, the three Baltic cities show mixed results this year, although all three cities have very strong scores for GDP growth. **Vilnius** (37/-3) and **Tallinn** (63/-9) drop down the ranking. Vilnius's improved GDP score was cancelled out by its weaker employment score, while Tallinn suffered on both accounts. The Latvian capital **Riga** (54/+12) benefited from an improved business environment score after gaining membership to the Eurozone, but also saw its GDP growth outlook improve.
- **Prague** (46/+19) gained significant ground in the E-REGI 2014, as a result of improvement on all three score components (growth, wealth and business environment). Prague has a well-diversified economy with an emphasis on the industrial sector and is responsible for generating around one quarter of national GDP. Relatively lower costs compared to other European cities have encouraged many international companies to locate operations in Prague. The demographic outlook for Prague is also positive; while the population of the Czech Republic is expected to remain stable over the next five years. The Czech economy is expected to outperform the Eurozone in the medium term, after contracting in the

previous two years. Public infrastructure spending will contribute to the Czech economy, as construction of the final section of the D8 motorway linking Prague to Dresden is underway.

- **Sofia's** (81/-3) score increased marginally but it still lost three positions in the ranking as other cities' scores improved more. The recovery in Bulgaria is expected to continue, although faltering exports to the Eurozone are constraining Bulgarian export growth. Recent sanctions by Russia on food imports from the EU are also likely to dampen export volumes in the coming year. Meanwhile, domestic demand should improve as rising real incomes are helping to improve households' spending power. In addition, income will be boosted by an increase in the national minimum wage and higher pensions pay-outs in 2014.
- **Bucharest** (66/-3) also drops three places in the ranking despite a slightly stronger score compared to last year. Improved GDP and wealth scores were dragged down by downgraded service sector employment prospects. Rising wage growth and low inflation will boost purchasing power, while export growth should continue, resulting in robust GDP growth for Romania in the medium term.
- **Ljubljana** (59/+28) recovered most of the ground that it lost last year, due to improved growth and wealth scores. Slovenia narrowly avoided seeking an international bailout for its ailing banking sector in 2013. The new centre-left government faces the task of cutting Slovenia's budget deficit to 3% of GDP in 2015 under a plan agreed with the European Union. Slovenia's recovery is also dependent on a solid rise in exports in the near term.
- Having lost considerable ground last year, **Budapest** (88/-2) has fallen further down the ranking this year and now belongs to the category of weak cities due to a drop in wealth and a deteriorating business environment score. Following below-trend GDP growth in 2013, Hungary's economy is expected to recover supported by monetary easing, rising confidence, a labour market rebound and low inflation aiding consumer spending. Further ahead, monetary policy is expected to remain accommodative, which should encourage above-trend GDP growth.

Dublin (Ireland)

- After dropping down the ranking following the global financial crisis, Dublin's position improved significantly in last year's E-REGI. This year, **Dublin's** (16/0) rank remained static despite building marginally on last year's improvement with even stronger GDP and employment growth scores, maintaining its position in the E-REGI top 20.
- Domestic demand in Ireland has begun to gain momentum following years of weakness, supported by an improving labour market and rising consumer confidence. The outlook for Ireland's exports also appears relatively robust, benefiting from a strong economic outlook of its main trading partners, the UK and the US. Very low inflation remains a concern, as potential deflation would constrain the scope for rising incomes to cut the heavy burden of debt faced by households, firms and government.

Madrid (Spain)

- **Madrid** (24/+48) moved up more positions than any other city in the E-REGI 2014. A strong improvement in GDP and employment growth prospects, reflective of the nascent Spanish recovery, catapulted Madrid up the ranking. The Spanish capital still has further progress to make as GDP remains below its pre-recession levels. The unemployment rate in Madrid is lower than in Spain overall but is still high at 19%. Madrid is a major centre for international business and commerce, specialising in financial services and transport and communications. Tourism and retail trade are also important drivers of the city's economy. Madrid's economy accounts for almost one fifth of national output and is expected to grow 20% faster than the national average over the next five years.

Rest of Iberia

- Spain's second largest city, **Barcelona** (41/+34) also made significant progress in this year's ranking, moving into the top half of the ranking as a result of better GDP and employment growth prospects. Barcelona is a major cultural and economic centre in southwestern Europe with strengths in commerce, fashion, media and the arts. Its population is forecast to increase at double the national rate in percentage terms over the next five years. Tourism is also a key contributor to the economy; the Barcelona region remains the most popular tourist destination in Spain as tourist numbers totalled 15.6 million in 2013 (an 8% increase on the previous year), accounting for a quarter of all visitors to Spain.
- The remaining Spanish cities all benefited from improved growth prospects. The Spanish economic recovery has gained momentum over the past year, although further challenges and austerity lie ahead. The recovery was initially driven by increasing competitiveness as a result of falling labour costs, stimulating a strong increase in exports. Structural reforms will support a gradual improvement in activity and employment in the medium term. However, there is still much spare capacity in the economy, with the national unemployment rate around 25%, and inflation has become worryingly low. Nevertheless, the improvement in business activity is beginning to feed through to the household sector and into net job creation. These developments mean **Bilbao** (65/+12), **Seville** (83/+7), **Valencia** (86/+6) and **Zaragoza** (89/0) all saw their scores improve in the E-REGI 2014.
- **Lisbon** (78/+15) and **Porto** (92/+5) both moved up the ranking as both cities' scores were boosted by better growth scores driven largely by a better employment outlook. The outlook for GDP growth also improved for both Lisbon and Porto but still falls short of the European average.
- In Portugal, exports have been the main driver of growth. The modest recovery has lost some momentum, as exports have faltered due to a weakening in external demand. In addition, the problems at Banco Espírito Santo, Portugal's second-largest bank, which emerged over the summer of 2014, have lowered confidence in the economy and weakened credit conditions. Domestic demand remains constrained by high unemployment (around 14%), fiscal austerity and high

corporate indebtedness. However, exports are expected to recover, and tourism continues to show solid growth. In the longer term, the combination of a fast-ageing population and emigration of skilled labour means that the working-age population is due to decline and Portugal will have to rely on productivity gains or renewed immigration if potential output is to grow.

Vienna (Austria)

- **Vienna** (27/-10) dropped down the ranking due to weaker employment prospects. As for Germany, low unemployment and an expected slowdown in working-age population growth is forecast to limit job creation. The political progress of the anti-immigration Freedom party may also have a negative impact on employment as the Austrian economy in part relies on migrant workers. Financial services is forecast to see the strongest drop in employment, but other economic sectors should continue to perform well. Thanks to government subsidies of "green" investments, environmental goods and services are now a bigger driver of Austria's job market than traditional sectors such as tourism and construction.
- Austria is likely to remain one of the best performing Eurozone economies over the coming years due to competitive exports and a revival of consumer spending. However, the banking sector remains a weak spot for at least two reasons. First, banks still have to wind down their portfolio of non-performing loans. The government has just introduced a bill to parliament that, if approved, would bail in subordinated debt of the nationalised Hypo Alpe Adria Bank, reneging on guarantees issued by the federal state of Carinthia. Second, the Austrian banking sector is particularly exposed to an intensification of the crisis in Ukraine as they are the largest lenders in Central and Eastern Europe.

Milan (Italy)

- While **Milan** (38/-2) was among the best improvers in the E-REGI 2013, the city saw its score only marginally increase this year and slipped down two positions. Although Milan saw its growth score improve slightly, a weaker business environment score out most of this improvement. Milan remains the main business hub in Italy with economic strengths in areas such as publishing, finance, fashion, design, and logistics. As such, Milan remains the only Italian city in the E-REGI with a strong score.

Rest of Italy

- The ongoing concerns surrounding Italy's economy are reflected in this year's E-REGI. With the exception of **Rome** (61/+10), where both GDP and employment scores improved, all other Italian cities dropped in the ranking. The growth scores for **Bologna** (58/-3), **Verona-Venice** (70/-11), **Turin** (74/-16) did not improve enough to balance out a weaker business environment score. And in **Florence** (85/-18), **Genoa** (90/-10), **Naples** (96/-1) and **Palermo** (97/-3) the GDP scores actually deteriorated.

- Although the employment forecasts for most Italian cities have improved slightly, the labour market remains weak, with sluggish real wage growth and a high unemployment rate dampening the recovery in household consumption. On the other hand, fiscal austerity and tight credit conditions continue to heavily weigh on firms. In order to improve Italy's competitiveness, Prime Minister Renzi announced a series of structural reforms which boosted confidence in the first half of 2014, but so far only a few measures have been implemented. The political debate is now focused on the topic of reforms to the Senate and to the electoral laws, which are necessary to avoid the political gridlock that has held up structural reforms in the past. Without these, Italy will continue to trail reforming countries such as Spain and Portugal and the more competitive core countries.

Athens (Greece)

- The two main cities of Greece, **Athens** (87/+9) and **Thessaloniki** (94/+5) remain at the lower end of the ranking despite significant improvements in scores. Both cities recorded an improvement in all components of their overall score, with the largest improvement observed in their employment score compared to last year. However, both cities still have overall scores below the European average as the Greek economy remains behind in its recovery.
- While Greece's economy is still shrinking, output is declining at its slowest rate since 2008 signalling that the end of the country's gruelling recession is in sight. Confidence is slowly being restored, as evidenced by the European Commission's economic sentiment indicator for Greece which has stabilised at its highest level in five years. However, a number of obstacles still remain. One concern is unemployment which

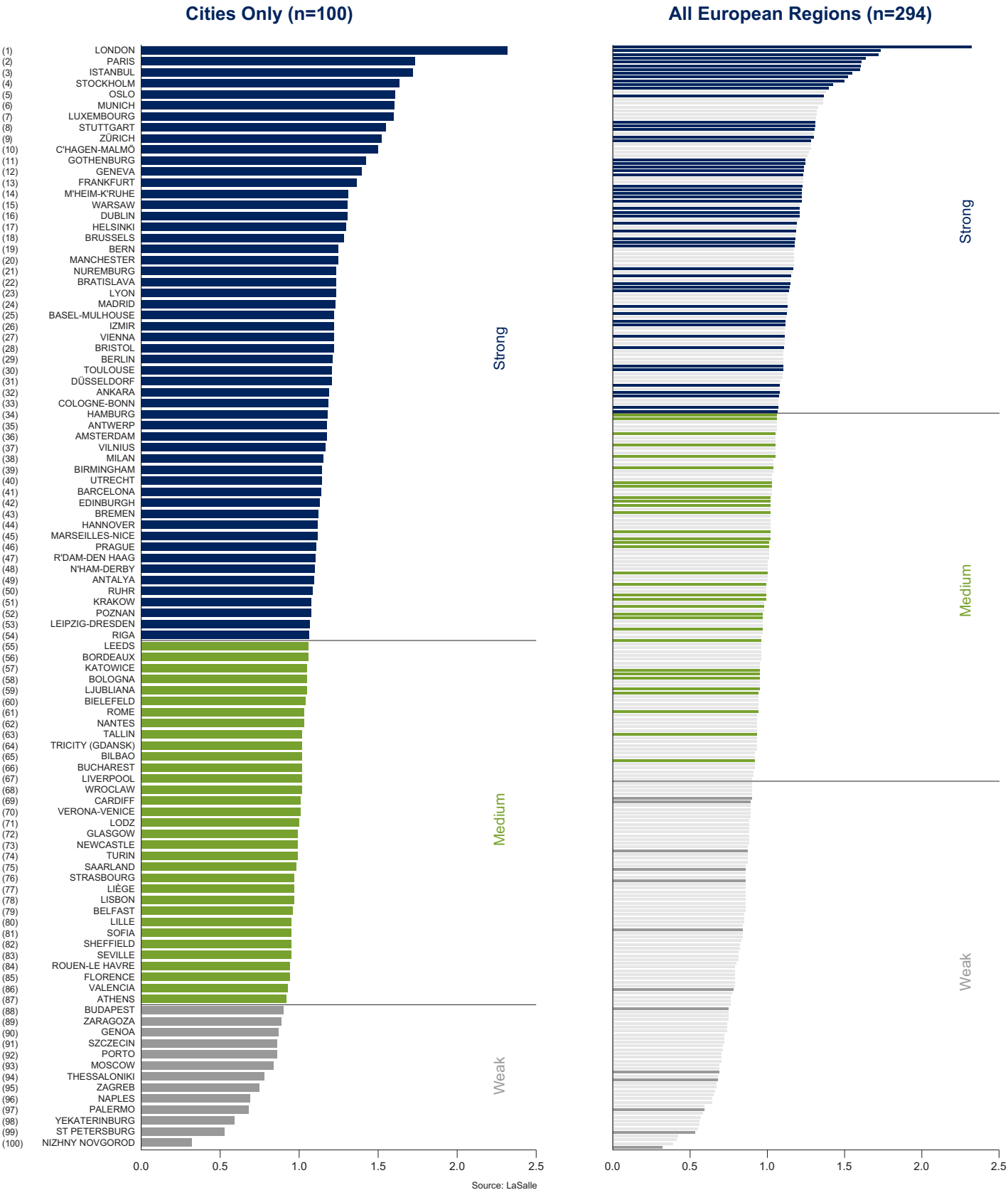
remains high at around 27%. Youth unemployment is exceptionally high and rising, recently reaching a new record of around 65%. High debt and deflation are still fundamental issues while further structural reforms are necessary to secure long-term growth. Greece's programme of economic adjustment is reversing negative trends, but the economy still has considerable ground to make up.

Moscow (Russia)

- **Moscow** (93/-8) slipped further down the E-REGI 2014 ranking. The main reasons for this drop is a strong decline in the Russian business environment score, as well as a downgrade to its GDP score. Russian GDP forecasts have been heavily downgraded in the short term in light of recent sanctions imposed by the EU and US in response to the Ukraine crisis. Despite this, Moscow still has the second-highest GDP score of all the cities included in this year's ranking. Moscow also has an above average R&D score, as a result of government-backed initiatives such as Skolkovo Tech City.
- The scores of the remaining Russian cities of **Yekaterinburg** (98/-15), **St. Petersburg** (99/-1) and **Nizhny Novgorod** (100/0) are almost entirely driven by GDP growth and all are in the top 20 performers for this category. However, potential output growth by itself is not enough to bring their overall scores above the European average. Rising geopolitical risks, reduced confidence and tighter credit conditions have dragged down the business environment score of all Russian cities. The Russian cities also have the lowest employment score of all the cities covered, as country-wide population declines continue to negatively affect their ability to generate job growth.

E-REGI 2014 Scores

■ Cities with Strong Scores ■ Cities with Medium Scores
■ Cities with Weak Scores ■ Other regions



Technical Note

The first European Regional Economic Growth Index (or E-REGI) was published by LaSalle Investment Management in 2000 in order to help identify the regions across Europe that have the greatest economic growth potential over the short to medium term. As a largely data-driven analysis, E-REGI complements more qualitative approaches to determine geographic areas of interest for real estate investment. The E-REGI analysis is updated annually and published in September.

E-REGI Coverage

The 2014 model covers 294 regions across 32 countries in Europe with a total population of more than 730 million. This report focuses on a subset of 100 major city regions (metros with ≥500,000 inhabitants and all national capitals). Compared to last year, the coverage has remained unchanged, although changes to the boundaries of a number of administrative regions (in Finland, Italy Germany, Netherlands and the UK) meant that some minor amendments had to be made. These changes are not believed to have had any fundamental impact on the results of the index.

The E-REGI analysis is undertaken on regions defined by Eurostat, which acts as the central statistical bureau for the European Union. Eurostat has adopted a classification system, the Nomenclature of Territorial Units for Statistics, referred to as “NUTS”. This classification provides a breakdown of administrative units for the production of regional statistics within the European Union and beyond.

NUTS is a hierarchical classification. The country level is referred to as NUTS 0. NUTS 1, 2 and 3 are regional levels. The E-REGI model uses the NUTS 2 level classification, which is the best proxy for the urban agglomeration. However, in formulating the NUTS-level classification, Eurostat has attempted to standardise a disparate set of national classification systems and, as a result, NUTS 2 regions do not always provide the most appropriate definition of a city region. In some cases a combination of NUTS 2 and 3 areas that better corresponds with the physical and economic agglomeration of those cities has been used for the E-REGI analysis.

E-REGI Model

The E-REGI model is expressed as the function set out in Figure 1 and presents a weighted overall score based on sub-scores for 14 variables. For each variable, the model calculates a score based on the region's performance relative to the weighted average of all regions. Thus an average location has a score of unity (“1.00”). The E-REGI ranking sorts the metropolitan regions based on the weighted overall score.

The variables used in the model are set out in Figure 2. In summary, the model combines variables on economic growth, the overall level of wealth, and the relative attraction of the business environment. The overall score is made up from three component scores:

- The **growth score** (accounting for 60% of the model) includes regional GDP output (22.5%) and service sector employment (22.5%), as the principal source of real estate demand. For both GDP and service sector employment, historic growth (to capture momentum) and forecasts, in both absolute and relative terms, is used. Additionally, expenditure on research & development (R&D) expenditure is included (15%), both in absolute terms and as a share of GDP, to capture innovation potential, an important indicator of economic dynamism.
- The **wealth score** (accounting for 20% of the model) acts as a further screen in order to prevent that regions which are merely catching up from a lower base are not unduly represented. Market intelligence suggests that wealth levels are correlated with demand for real estate.
- The **business environment score** (accounting for 20% of the model) have been included, as future economic strength, and real estate investment, is likely to be partially determined by the attractiveness of the business environment, particularly to foreign investors. Best prospects are likely to be in those regions that can offer the most flexible labour markets, a favourable tax regime, and those that are best regulated.

Data Sources

Data for the E-REGI model is primarily provided by Oxford Economics, which supplies historic data and provides forecasts on NUTS 1, 2 and 3 regional level for GDP and service sector employment. From 2014, Oxford Economics also provides the risk scores that underpin the business environment scores. The data, which are provided on national level, was previously provided by IHS Global Insight. As a result of this change in data provider, some inconsistencies between 2013 and 2014 business environment scores were unavoidable. The R&D expenditure data are sourced from Eurostat.

The E-REGI model is based upon data which LaSalle Research & Strategy believes to be reliable. Whilst every effort has been made to ensure accuracy and completeness of the data used, we cannot offer any warranty that factual errors may not occur. National statistical offices across Europe continue to make progress in their efforts to improve data comparability and accuracy. As such, economic data are commonly revised many years after events have occurred.

Figure 1

$$\text{E-REGI} = F[\text{GDP}, \text{EMPm}, \text{R\&D}, \text{WEALTH}, \text{BEnv}, \text{EMU}]$$

Where: GDP	Change in Regional GDP
EMPm	Change in number of Employees in Market Services
R&D	Expenditure on Research & Development
WEALTH	Level of GDP per Capita
BEnv	Quality of Operating Environment for Business
EMU	EMU/EU Participation factor

Figure 2

1.	Growth Components:	60%
	A. Absolute Growth (15%)	
	Forecast Employment Growth 2014-18	7.5%
	Forecast GDP Growth 2014-18	7.5%
	B. Percentage Growth (30%)	
	Forecast Employment Growth 2014-18	12.5%
	Forecast GDP Growth 2014-18	12.5%
	Employment Growth 2011-13	2.5%
	GDP growth 2011-13	2.5%
	C. Research & Development (15%)	
	R&D expenditure % of GDP 2010-12	10%
	R&D expenditure 2010-12	7.5%
2.	Wealth / Level of Development	20%
	GDP per Capita 2013	
3.	Business Environment Components:	20%
	A. Country Business Environment	
	Sovereign Default	3.3%
	Political Stability	3.3%
	Trade Credit	3.3%
	Regulatory Environment	5%
	B. EMU/EU Participation	5%
	TOTAL	100%

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