



EUROPE'S CITIES IN A GLOBAL ECONOMY: TRENDS, CHALLENGES AND OPPORTUNITIES

LONDON CONFERENCE OCTOBER 29TH, 2013

This background paper is produced for the conference

EUROPE'S CITIES IN A GLOBAL ECONOMY

or

OCTOBER 29TH 2013 AT JPMORGAN CHASE. 25 BANK STREET, LONDON, E14 5JP.

The conference is hosted by the Global Cities Initiative, a joint project of JPMorgan Chase and the Brookings Institution, and the Centre for London.

The **Global Cities Initiative** aims to equip metropolitan leaders with the information, policy ideas, and global connections they need to bolster their position within the global economy. Combining Brookings' deep expertise in fact-based, metropolitan-focused research and JPMorgan Chase's longstanding commitment to investing in cities, the five-year initiative aims to:

- help city and metropolitan leaders in the U.S. and abroad better leverage their global assets by unveiling their economic starting points on such key indicators as advanced manufacturing, exports, foreign direct investment, freight flow, and immigration.
- provide metropolitan area leaders with proven, actionable ideas for how to expand the global reach of their economies, building on best practices and policy innovations from across the nation and around the world.

 create a network of leaders from global cities intent upon deepening global trade relationships.

The **Centre for London** is a politically independent, not-for-profit think tank focused on the big challenges facing London. It aims to help London build on its long history as a centre of economic, social, and intellectual innovation and exchange, and create a fairer, more inclusive and sustainable city. Through its research and events, the Centre acts as a critical friend to London's leaders and policymakers, promotes a wider understanding of the challenges facing London, and develops long-term, rigorous and radical solutions for the capital.

NEW GCI REPORT: TEN TRAITS OF GLOBAL FLUENCY FOR METROPOLITAN AREAS - INTERNATIONAL EDITION

At the conference The Global Cities Initiative will also launch a new report: The Ten Traits of Globally Fluent Metropolitan Areas (International Version). This report extends a proposition recently developed with US metropolitan areas in mind, extolling the need for US cities to think and engage globally in order to connect with future sources of trade and investment, and to overcome the domestic focus of their economic development strategies which was characteristic throughout the 20th century. The international version of the report takes the same ten traits and applies them to the situation of a much wider group of metropolitan areas globally, assessing the key factors of successful global engagement for three types of metros:

- Established cities in developed nations which must confront new economic realities aging societies, insufficiently diversified economies, high infrastructure burdens, rising immigration, competition from other maturing regional markets, and new patterns of trade and investment.
- Larger cities in emerging economies that must now play the primary mediating roles for their nations and regions, acting as hubs and junction boxes for new global interactions, as the world economy's centre of gravity shifts eastwards and southwards.
- Cities recovering from long-term political turmoil or 'regime change', and which have become more open to globalisation after a generation or more when their national politics and international engagement were constrained by totalitarianism, conflict, instability or corruption.

EXECUTIVE SUMMARY

THE NEW ECONOMIC CYCLE OFFERS FRESH CHALLENGES AND OPPORTUNITIES FOR EUROPE'S CITIES

- 1. Global economic integration continues apace despite the interruption of the global financial crisis and recession. The volume of goods exported worldwide has more than tripled since 1990.¹ For European cities, open-ness to international trade, and roles in its production, is more important than ever.
- 2. European cities have a low-growth profile by global standards. Since 1993, the 20 largest metropolitan areas in Europe have achieved annual income growth of 1.6%, barely a quarter of the 6.2% recorded by their counterparts in the emerging world.²
- 3. Europe has a decisively polycentric system of cities. Bucking the global trend, inward urban migration has been slow for 30 years in Europe. Whereas East Asia has 39 metropolitan areas with a population greater than five million, Europe only has 10. This means that European cities must compete much more on quality than quantity. Europe depends upon successful 'middleweight' metropolitan cities within successful national economies for a substantial proportion of its global trade.
- 4. There are two truly global cities in Europe with the genuine scale, quality and experience to function as all-round global hubs London and Paris. Within an enlarged economic region, Istanbul and Moscow also possess the size, status, location and market access to become hubs for global business clusters. This quartet of European economic capitals is steadily growing in size, productivity and investment attraction.
- 5. Increasing specialisation and cross-border complementarity means that a European system of cities is emerging. National systems and nation states still matter, and they shape the performance of all cities.
- 6. The 'blue banana' arc of successful economic development in Western Europe, first identified in 1989, is still visible today but different cities are succeeding. Berlin, Cambridge and Stockholm have outperformed Amsterdam, Birmingham and Milan, and are enhancing their own global specialisations in sectors such as digital & creative industries, biotechnology and low-carbon goods.

- 7. Cities in central Europe are also emerging onto the global scene but at different paces, and with varied success. The nexus of central European capitals (Berlin, Budapest, Prague, Vienna, Warsaw) have not yet developed a combined growth dynamic. Polish cities, aided by purposeful national policies, are making substantial progress.
- 8. Infrastructure, skills, education, culture, sustainability and quality of life remain core strengths that European cities combine more successfully than any other continental group.

 The continent's best-endowed cities also exhibit many of the traits of global fluency; a cultural and trade legacy of internationalism, excellent cross-border connectivity, a compelling identity and reputation, and an ethos of cutting-edge innovation.
- 9. Smaller cities across Europe, especially outside the 'blue banana', are struggling to retain population and talent and to build productivity.

 Many require new strategies and pathways towards internationalisation that may involve better relationships with neighbouring cities and a new assessment of how to compete in global markets.
- 10. Cities to the south and east of Europe have lost much of the impetus gained in the last economic cycle, and are experiencing the negative effects that globalisation can bring. Many are low-risk cities in medium-risk nations, but face critical levels of youth unemployment that require urgent and innovative solutions. Most possess elements of international engagement notably tourism, design and culture but need to grasp and embed other traits of global fluency.

¹ WTO [2013], 'Trade to remain subdued in 2013 after sluggish growth in 2012 as European economies continue to struggle', www.wto.org/english/news_e/pres13_e/pr688_e.htm

² Data based on Alan Berube (2012), 'Global MetroMonitor', Brookings Institution, www.brookings.edu/research/interactives/global-metro-monitor

1. INTRODUCTION

Perhaps more than any other continent, the history of Europe is one of city networks emerging to facilitate and coordinate international trade and exchange. From the trading Hanseatic League, to the Italian merchant city-states, the finance and maritime centres of Amsterdam, the cultural imperial powerhouses of Vienna and Moscow, it was cities rather than nation-states that were the original nodes of international commerce. Then, as now, cities offered the density, market and economic specialisation to support exchange across seas and borders.^{3†}

Inter-city and inter-continental trade were major contributors to Western Europe recording the first major sustained economic growth surge over the rest of the world, between 1500 and 1800.⁴ Today, global trade and urbanisation are on a combined upward curve that has lasted over 50 years and is set to continue for another 50.

There are over 80 European metropolitan areas with a population greater than 500,000. Each of them participates in globalisation because they possess distinctive specialisations and positions in complex global supply chains. But their future productivity and wealth creation rest partly on taking steps to improve their investment credentials and export capability, not simply to other regions in Europe, but beyond into wider and growing global markets.

This note assesses the recent trends in European city traderelated performance, as measured in over 100 quantitative and perception-led benchmarks and studies, including work undertaken by Brookings Institution and LSE Cities. It draws from and applies existing data and analysis from these studies, to Europe as a whole. It identifies where the continent's cities remain strong, which cities appear to be adapting to new global business demand, and which factors appear now to be critical to the revitalisation of Europe's cities in the next phase of globalisation.

2. EUROPEAN CITIES: A RETROSPECTIVE

While Europe's cities have long been centres of global trade, the context for recent and current phases of globalisation began at the end of the Second World War.⁵

In the period from 1945 to 1973, successive trade and labour agreements saw urban centres in Europe's north experience rapid immigration from rural areas and from the south. The majority of the continent's most productive metropolitan areas were located within a triangle linking Amsterdam, Milan and Paris, which incorporated leading Swiss and West German cities. Despite rapid growth and industrialisation in Mediterranean cities such as Rome and Seville, Europe only possessed four metropolitan regions with a broad global scope: London, Paris, Rhine-Ruhr and the Randstad.⁶

The 1973 oil crisis had a major impact on the trajectory of European cities. It revealed the vulnerability of their oil-dependent economies and accelerated the process of de-industrialisation. The prolonged economic downturn that followed was a major factor in the emergence of new Europe-wide sectors led by financial and professional services. Corporate activity and office development in London and Paris intensified after 1973, decoupling both from the Rhine-Ruhr and Randstad.⁷

By 1989, a new geography of Europe had emerged in a continent that was no longer dominated by manufacturing, but instead was generating highly productive tertiary occupations. London and Paris were pre-eminent in this new model, and the most successful cities were located along a central axis described by Sir Peter Hall as "the blue banana."

This arc broadly stretched from Manchester to Milan (see Fig. 1). Many of the cities within this core (including Rotterdam, Stuttgart and Turin) had partly withstood the pressures to de-industrialise, and instead developed increasingly capital intensive, highly specialised and innovative manufacturing capabilities. Those outside the arc, including those within the expanding European Economic Community, faced higher trade costs and difficulties competing with this productive core market. A major 1989 assessment of European city dynamism found that eight of the 10 leading cities were located in this arc. Milan placed third after London and Paris, while cities such as Venice, Bonn, Strasbourg and Dusseldorf were all highly prominent.8

³ Alan Berube and Joseph Parilla (2012), 'Metro Trade', Brookings Institution, www.brookings.edu/-/media/research/files/papers/2012/11/26%20metro%20 trade/26%20metro%20trade.pdf.

[†] In this paper Europe is defined in broader terms, to incorporate all metropolitan regions west of the Urals, including those within EU and non-EU nation-states.

Daron Acemoglu, Simon Johnson and James Robinson (2005), 'The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth,' The American Economic Review, 95: (3)

⁵ Peter Newman and Andy Thornley (2002), Urban Planning in Europe: International Competition, National Systems and Planning Projects, London: Routledge.

⁶ Peter Hall (1966), The World Cities, London: Palgrave Macmillan.

Martine Meijer (1993), 'Growth and Decline of European Cities: Changing Positions of Cities in Europe', Urban Studies, 30.

⁸ WF Lever (1993). 'Competition within the European Urban System'. Urban Studies. 30.

FIG.1: EUROPE'S PRODUCTIVE 'BLUE BANANA', IN THE EARLY 1990'S



FIG.2: ASSESSMENTS OF LEADING EUROPEAN CITY HIERARCHIES PRIOR TO THE ESTABLISHMENT OF THE SINGLE EUROPEAN MARKET IN 1992 $^\circ$

YEAR	AUTHORS	TOP-TIER	SECOND TIER
1966	Peter Hall	London, Paris, Rhine-Ruhr, Randstad	
1986	John Friedmann	London, Paris, Frankfurt, Rotterdam, Zurich	Brussels, Milan, Vienna, Madrid
1989	DATAR, France	London, Paris	Milan
1990	Cushman & Wakefield	London, Paris, Frankfurt	Brussels, Amsterdam, Dusseldorf, Zurich
1991	Saskia Sassen	London, Paris	Brussels, Milan, Vienna, Madrid

Into the 1990s, the benefits accruing to the cities in this European nucleus also drove up costs, and that allowed other cities further afield to compete. High rents, aging populations, congestion, pollution and declining liveability were all factors that prompted a more extensive European city-system to emerge during the 1990s and 2000s.

Growth extended outwards towards modernising, entrepreneurial and youthful cities such as Barcelona, Dublin, Glasgow and Warsaw. Many began to break out of national or sub-national hierarchies for the first time and achieve their own distinctive international growth path and

identity. A new competitive awareness gradually prompted active initiatives among their civic and business leaderships to attract mobile investment, firms, events and students.

By the height of the boom, in the mid-2000s, several new categories of internationally-facing European cities had emerged. These were first detailed in full by the EU Commission's State of European Cities report in 2007 (see below), which was part of a flourishing new literature on the European urban system. ¹⁰ The report defined 13 different types of city by size, wealth and function. ¹¹

 $^{^{\}rm 8}~$ WF Lever (1993), 'Competition within the European Urban System', Urban Studies, 30.

⁹ WF Lever (1993), 'Competition within the European Urban System', Urban Studies, 30; Peter Newman and Andy Thornley (2002), Urban Planning in Europe: International Competition, National Systems and Planning Projects, London: Routledge; Cushman & Wakefield (2011), 'European Cities Monitor', www.berlin-partner.de/fileadmin/ chefredaktion/pdf/studien-rankings/2011_en_European-Cities-Monitor.pdf, John Friedmann (1986), 'The World City Hypothesis', Development and Change, 17, 69-83;

¹⁰ Willem van Winden, Leo van den Berg and Peter Pol (2007), 'European Cities in the Knowledge Economy: Towards a Typology', Urban Studies, 44.

FIG.3: EUROPEAN CITY-TYPES MAPPED

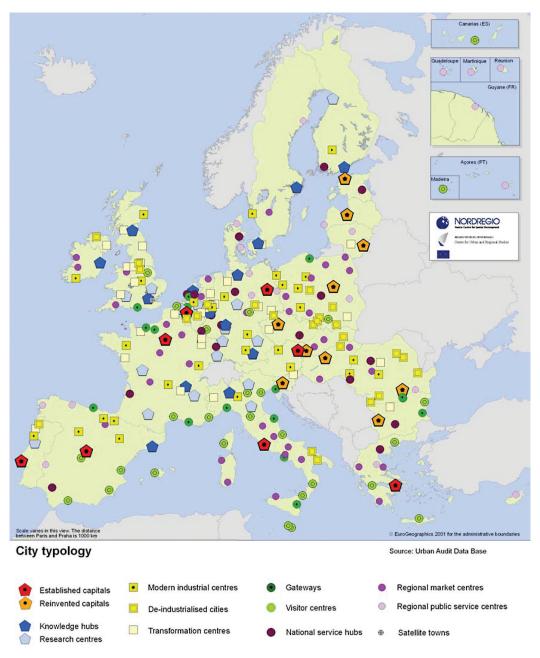


FIG. 4: EUROPEAN TYPOLOGY OF CITIES, AS STATED IN STATE OF EUROPEAN CITIES REPORT 2010 12

	EXAMPLES	DESCRIPTION
INTERNATIONAL HUBS		
Knowledge hubs	London, Munich, Stockholm	Large, high-performing diverse centres
Established Capitals	Berlin, Madrid, Vienna	Historic, culture-rich, high-skill capitals
Reinvented Capitals	Prague, Tallinn, Warsaw	Fast-modernising Eastern European capitals
SPECIALISED POLES		
National service hubs	Hannover, Seville, Utrecht	Public sector, retail and trade cities
Transformation poles	Birmingham, Glasgow, Turin	Post-industrial diversifying cities
Gateways	Antwerp, Marseille, Gdansk	Low-skill, low employment port cities
Modern industrial centres	Cork, Gothenburg, Poznan	Production hubs for global firms
Research Centres	Cambridge, Eindhoven, Bologna	Small education and science leaders
Visitor Centres	Krakow, Malaga, Verona	Attractive tourist hubs

3. NEW CYCLE. NEW EUROPE?

Since the abrupt 2008 financial crisis and global recession, European cities have endured a turbulent five years. Many still possess unique assets, but the sources of growth momentum appear to have changed, perhaps permanently. As the new business cycle picks up pace, the prospects for Europe's economy have become heavily dependent on its cities being able to enhance their trade position, and to offer a combination of quality and scale that can support the principal international business clusters.

In recognition of the roles to be played by Europe's cities in the ongoing recovery, the EU has called for more investment and priority to be directed to urban centres. Its premise is that cities host the public and private resources and regeneration opportunities that can best kick-start growth.¹³ In 2013, Johannes Hahn, EU Commissioner for Regional Policy, remarked that:

"Development of our cities will determine the future economic, social and territorial development of the European Union... if we can't get it right in our cities, we won't get it right at all." 14

Today, Europe has an unusually polycentric system of cities compared to North America or East Asia. Since the mid-1980s, there has been surprisingly little inward migration into cities. Although Europe's population is approximately 70% urbanised, potentially rising to 80% by 2050, a much smaller proportion live in major cities (fewer than 5 million) compared to the United States or East Asia. With the exceptions of London, Paris, Moscow and Istanbul, large city urbanisation effects have until recently not been the primary economic drivers in Europe as a whole in a way they have been elsewhere around the world. 15 This is illustrated by the number of metropolitan areas with a population greater than 5 million in different global regions. The US and Canada has less than half the population of Europe, but has as many metropolitan areas larger than 5 million people. East Asia has almost four times as many large metros, yet only twice the population.

http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/urban/ stateofcities_2010.pdf

¹³ URBACT (2013), 'European Cities play a key role for economic recovery: Interview with Andrea Cozzolino,' www.blog.urbact.eu/2013/02/european-cities-will-play-a-key-role-in-economic-recovery-interview-with-andrea-cozzolino/.

¹⁴ European Commission (2013), 'Johannes Hahn: News' http://ec.europa.eu/commission_2010-2014/hahn/headlines/news/detail/index_en.cfm?LAN=EN&id=791&lang=en.

Lewis Dijkstraa, Enrique Garcilazo & Philip McCann (2013), 'The Economic Performance of European Cities and City Regions: Myths and Realities', European Planning Studies, 21: (3).

FIG.5: SIZE, WEALTH AND URBAN AGGLOMERATION IN KEY GLOBAL REGIONS 16

	TOTAL POPULATION ¹⁷	TOTAL GDP/\$TN	NUMBER OF >5M METROS
Europe	770m	21	10
North America (US/Can)	350m	18.5	10
Latin America	600m	6	8
East Asia ¹⁸	1570m	15	39

The relative absence of megacities in Europe is partly a product of the number of nation-states, each with its own urban system and policy priorities. Many national governments - including Germany and Spain - pursued different internal forms of polycentrism in recent decades, and in 1999 the European Spatial Development Perspective enshrined polycentrism and balanced development as a regional aspiration. But in a new global framework where the sources of growth have changed, Europe's competitiveness appears to depend as much on the capacity of its global cities to play global roles as on the complementary specialisations of the middle weight cities.

Recent research into economic patterns in Europe have identified several important trends:

• Population growth is occurring in the largest or capital cities at the expense of second and third tier cities. While this pattern is by no means universal, it is especially evident in geographically larger European countries, where international distances are greater. It is highly pronounced in the case of London, Stockholm, Paris and Warsaw. The twin processes of European integration and globalisation are encouraging new continental dynamics whereby Europe is relying on the established headquarter strengths of London and Paris to act as the gateways for business, investment and tourism. Meanwhile second and third tier cities are relying on niche roles in international value chains to achieve competitive performance.

- Smaller cities are struggling for productivity, especially in Western Europe. The recent Eurozone slump has temporarily derailed the ambitions of its smaller internationalised cities. Many that are not among the largest 6-10 in their country are recording significantly lower output than the national average. The clearest examples are in Italy, Germany, the UK, Spain and Poland, with the only obvious exception being France, where the variation in economic performance across cities is noticeably smaller.
- Investment into European cities is increasingly global.

 Investors from Asia, the Middle East, North America and Latin America are much more active in office space, retail, hotel, port and residential property markets. Global investment is increasingly pivotal to European cities adapting and competing in sectors such as life sciences and media. Despite a relative decline in global FDI share, Europe still attracts more FDI than any other continent (\$293bn in 2012).

Alongside and partly in response to these trends, European cities have responded proactively to the new cycle with a range of medium and long-term growth and investment strategies. This has improved our understanding of the different kinds of European cities, in terms of their approach to international markets and opportunities. The evolution since the 2007 State of European Cities typology reflects an emerging consciousness about European cities as a system, not just a collection of closely-located urban areas. The pattern in the strategic agendas of Europe's internationally-facing cities signals an underlying move towards integration as a continental system participating in globalisation, and a recognition of the need to fulfil distinctive roles within that system.

¹⁶ Emilia Istrate and Carey Anne Nadeau (2012), 'Global MetroMonitor', Brookings Institution, www.brookings.edu/research/interactives/global-metro-monitor-3; IMF (2013), 'World Economic Outlook Database, April 2013', www.imf.org/

¹⁷ Europe's population is currently measured at 697m. The 770m figure is calculated by subtracting from 697m the population of Russia that lives East of the Urals, and adding the population of Turkey, which is currently omitted from European population figures.

¹⁸ East Asia is comprised of China (inc. Hong Kong), Japan, South Korea, North Korea, Taiwan and Mongolia.

¹⁹ New Economy Manchester [2011], 'Funding the future: Investment trends in five major European cities', http://neweconomymanchester.com.

²⁰ Ernst & Young (2013), 'European Attractiveness Survey', www.ey.com/Publication/ vwLUAssets/European-Attractiveness-Survey-2013/\$FILE/European-Attractiveness-Survey-2013.pdf.

TYPOLOGY OF EUROPEAN CITY STRATEGIES

World cities

- Attributes: Large (>5m) population, \$300m+ economy, established financial and headquarter capitals, dynamic business services ecosystem, supported by national government.
- Strategic priorities: Infrastructure upgrades responsive to growth, vigilance on business climate, more favourable governance and fiscal arrangements.

Examples: London, Paris, Istanbul, Moscow

Established regional leaders

- Attributes: Diversified knowledge base, excellent quality of life, high levels of diversity, first-rate road/rail/air platform.
- Strategic priorities: Ensure housing access and affordability, integrate tourist and business brand.
 Examples: Amsterdam, Munich, Stockholm

Technopoles

- Attributes: Pockets of high competitiveness and specialisation, export-oriented firms, advanced R&D, regional alignment of priorities.
- Strategic priorities: Curb over-reliance on key firms, fully accomplish regeneration, support SMEs to compete abroad.

Examples: Helsinki, Stuttgart, Turin

Revived post-industrial cities

- Attributes: Gateways to regional market, mix of services, retail and science, mature higher education offer, benefits from serving open EU market.
- Strategic priorities: Build international HE economy, attract and retain entrepreneurs, leverage sport and culture, improve rail/air links.

Examples: Barcelona, Lyon, Manchester, Warsaw

Institutional centres

- Attributes: Hosts financial, regulatory and/or political institutions, clusters of NGOs, Highly skilled populations, High public services burden.
- Strategic priorities: Improved offer for tourists/ investors, metropolitan co-ordination, retain quality of life advantages.

Examples: Brussels, Frankfurt, Geneva, Oslo, Vienna, Zurich

Green cities

- Attributes: Advanced green economy, engineering prowess, robust growth and jobs base.
- Strategic priorities: Energy efficiency and smart urban design, create new market links in key clusters.

 Examples: Bristol, Copenhagen, Freiburg,
 Hamburg

Cities in transition

- **Attributes:** Shrinking or stagnant population, high unemployment and marginalisation.
- Strategic priorities: Become less reliant on government, attract new sources of investment, provide conditions for creative workers.
 Examples: Donetsk, Genoa, Leipzig, Ostrava

4. JOBS AND VALUE-ADDED: WHICH EUROPEAN CITIES ARE SUCCEEDING?

In the core economic and employment data, we can see a stark contrast in performance among European cities since the global financial crisis (see Fig.6). Some have flourished, others are stable, and some appear to be trapped in a low trajectory.

Some of these trends are tied to national economic strength. Polish, Turkish, German and Bulgarian cities have tended to generate strong job and income creation, while those in Greece, Latvia, Hungary and Italy have almost invariably struggled. But the range of performance within each nation indicates the extent to which cities are managing national economic constraints in very different ways.

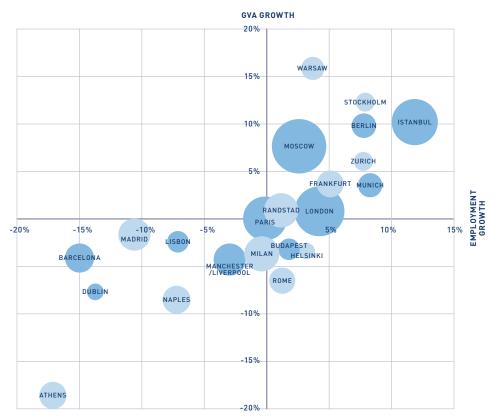
Since 2007, the most dynamic major European city has been **Istanbul**, which recorded 10% growth in jobs and in gross value added (GVA) in the past five years. Other stand out performers are **Warsaw**, which has recorded the fastest GVA growth among European capitals (+16% since 2007), and **Stockholm**, which has recorded very impressive job and GVA results despite already having had one of the highest employment and GDP per capita figures in the

continent. Stockholm also continues to punch above its weight across multiple benchmarks because of its excellent performance in higher education, technology roll-out, green infrastructure and research capability.

At the opposite end, **Athens** has recorded the worst job and GVA results, declining by an alarming 17-18% in each category since 2007. Although no other city has suffered nearly as much, the cities of **Barcelona** and **Naples** have experienced serious challenges in recent years, recording worse job and GVA results than the capital cities in their respective countries.

Meanwhile a number of the most prominent financial centres have weathered the storm of the financial sector turbulence, and have returned to positive growth. **London** emerged from the 2008-9 challenges in good condition, with substantial growth in employment. **Moscow** and **Frankfurt**, the Russian and German financial capitals, have recorded impressive GVA growth since 2007, while **Paris** has achieved moderate results.

FIG.6: EMPLOYMENT AND GVA GROWTH IN 23 LEADING EUROPEAN METROPOLITAN AREAS BETWEEN 2007 AND 2012(BUBBLE SIZE DENOTES POPULATION)²¹ SOURCE: LSE EUROPEAN METROMONITOR.



²¹ LSE (2013), 'European MetroMonitor', http://labs.lsecities.net/eumm/m/metromonitor

5. ALL-ROUND PERFORMANCE OF EUROPE'S CITIES

5.1 THE ESTABLISHED GLOBAL CITIES: LONDON AND PARIS

In terms of how these economic results have influenced overall urban performance, London and Paris continue to lead the way in comprehensive indexes comfortably (see Fig.7). Europe's two leading centres are some distance ahead in terms of their global scale, and despite the volatility associated with the financial crisis, are set to define Europe's recovery in the new business cycle.

In 2012 London moved to first position in the Global Power City Index and a close second in the Cities of Opportunity study. The British capital's economic clout is boosted by a growing reputation for innovation, entrepreneurship, and business friendliness. After its acclaimed hosting of the Olympics, London gained greater recognition for its high

number of cultural assets, its very strong links with global markets, and sustained investment in commuter rail transport. The city is set to remain Europe's pre-eminent gateway for investors, firms and visitors.

As Europe's other established global city, **Paris** has performed strongly since 2011 despite its deeper immersion in the Eurozone slump. Its business environment has long been rated behind London's, but the French capital maintains world-class intellectual and technical strengths, which when combined with its inimitable vibrancy, prompts exceptional demand for conventions, research and business services.

FIG.7: EUROPE'S TOP 15 CITIES IN THE COMPREHENSIVE BENCHMARK STUDIES

		EIU/ CITIGROUP HOTSPOTS	AT KEARNEY GLOBAL CITIES INDEX	MORI MEMORIAL FOUNDATION GLOBAL POWER CITY INDEX	UN STATE OF THE WORLD'S CITIES 'CITY PROSPERITY INDEX'	
	Last updated	Feb-12	Apr-12	Dec-12	Jul-12	
	# of cities assessed	120	66	40	69	
01	London	2	2	1	2	
02	Paris	4	3	3	9	
03	Amsterdam	17	26	7	13	
04	Frankfurt	11	23	12	_	
05	Stockholm	20	27	16	2	
06	Berlin	31	20	8	-	
07	Zurich	7	25	18	14	
08	Brussels	34	9	19	16	
09	Barcelona	41	24	13	17	
10	Dublin	27	44	-	7	
11	Madrid	28	18	22	-	
12	Copenhagen	23	42	20	15	
13	Milan	47	41	29	18	
14	Moscow	58	19	37	25	
15	Istanbul	74	37	25	-	

5.2 EUROPE'S SECOND TIER OF GLOBALLY COMPETITIVE CITIES

Behind London and Paris, there are six Western European cities that exhibit the strongest all-round qualities of competitiveness, quality of life, infrastructure and sustainability. Amsterdam and Frankfurt currently head this chasing group. Amsterdam has recorded strong results in investment, research and accessibility, and although Frankfurt is no longer a serious rival to London

or Paris as a financial centre, it remains competitive due to its wealth, airport hub and infrastructure efficiency. **Berlin** continues to rise up the European rankings due to its cultural and environmental provision, while **Zurich** and **Stockholm** outperform their size due to outstanding achievements in terms of investment, quality of life and sector diversification.

5.3 EUROPE'S CHALLENGED REGIONS AND THE CRISIS OF YOUTH UNEMPLOYMENT

Barcelona, Madrid and Dublin have all slipped behind the second group due mainly to their countries' macro-economic woes. Until recently, Barcelona had been something of an outlier in Southern Europe, recording excellent growth and progress over the two decades prior to the financial crisis. In 2012 and 2013, benchmark results indicate that the city is not immune to wider national and regional trends, even if it remains a low risk city in a medium risk nation. The city has undertaken initiatives to become a technology-smart and more entrepreneur-friendly city to add to its dominant tourist brand, but their impact may take time.

Milan has fallen even further behind due to weak scores in overall wealth creation. The struggles of Italy's finance capital reflects the difficulty that several Southern European cities have had in leveraging their past prestige, social richness or cultural assets in the post-crisis years. Rome, Milan, Athens, Madrid and Barcelona may still retain a compelling image among prospective visitors – as indicated by the finding of

City RepTrak's Global 2012 City Reputation Index. But national economic fundamentals have radically affected their jobs base and investment capacity.

Perhaps the major challenge for more troubled regions is to reverse the alarming slump in employment since the global financial crisis. Up to 20 million unemployed people are currently looking for work across European cities, and many more are under-employed. In major Greek, Spanish and Italian cities, a near-majority of the potential workforce in its twenties is out of work and searching for work (see Fig.8).

Despite the number of young people continuing to decline by as much as 10% per decade, pervasive youth unemployment and lack of demand for young labour is unprecedented in modern Europe.²² In September 2013, an €815m EU Employment and Social Innovation programme was agreed in order to improve access to microfinance and enhance cross-border worker mobility up to 2020.

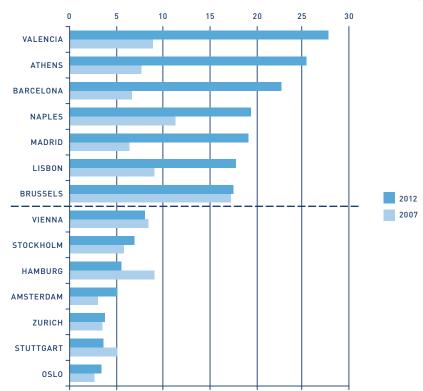


FIG. 8: UNEMPLOYMENT RATES IN 7 HIGH-EMPLOYMENT AND 7 LOW-EMPLOYMENT METROPOLITAN REGIONS, 2007 AND 201223

²² Daniel Dorling (2013), 'Generation jobless', New Statesman, Aug 22nd, www. newstatesman.com/2013/08/generation-jobless

²³ Eurostat (2013), 'Unemployment rate by NUTS 2 regions', http://epp.eurostat.ec.europa.eu/

6. NATIONAL SYSTEMS OF CITIES AND NATIONAL GOVERNMENTS STILL MATTER

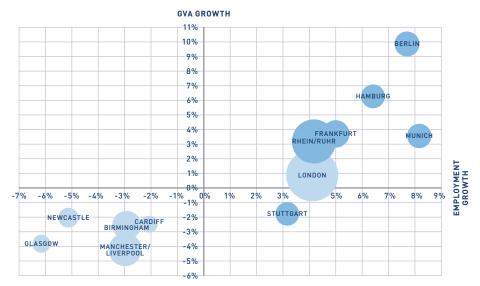
Despite the growth in cross-border trade and exchange in Europe, urban performance is still closely linked to national geography. **German cities,** for example, have by some distance outperformed **British cities** since 2007 (see Fig.9). London is conspicuous as the only one of six major British cities to record positive employment or GVA growth in the past five years, whereas all German cities have grown their jobs base by at least 3%. The performance of Berlin, Munich and Hamburg in particular has far exceeded that found anywhere in the UK. Glasgow in particular is experiencing considerable difficulties rebuilding its jobs base, while the larger regional metros in England perform only marginally better.

Economic performance is backed up by stronger results in other areas of urban provision. The German cities, led by Berlin, Düsseldorf, Munich and Frankfurt, are Europe's strongest national group in terms of satisfying residents' economic, educational and environmental needs. Its national urban system, a network with different specialisations and advantages, has benefited from supportive state governments, and in some cases powerful systems of self-government.

Within Eastern Europe, there has also been widespread variation, with little pattern in performance among capital cities or financial centres when compared to smaller domestic cities (see Fig.10). In **Turkey**, for example, Istanbul's growth has been strong, but has been clearly surpassed by the exceptional growth taking place in the secondary centres of Ankara and Izmir since 2007. By contrast, Bucharest is by far **Romania**'s strongest performer, while several of its smaller cities struggle to generate jobs and value.

Polish cities have been very prominent in rising up the outsourcing city rankings, and are among the only cities in Europe to remain competitive with centres in India and the Philippines. Warsaw has attracted an impressive number of global firms, now rivalling Vienna. The capital's position as the leader of an invigorated and better connected national urban system is prompting more financial services activity and investment in infrastructure. Polish cities are exhibiting some of the strengths that propelled growth in Spanish cities in the 1982-2007 period.

FIG. 9: COMPARATIVE GVA AND EMPLOYMENT GROWTH AMONG 6 BRITISH AND 6 GERMAN CITIES, 2007 TO 2012²⁴



²⁴ LSE [2013], 'European MetroMonitor', http://labs.lsecities.net/eumm/m/metromonitor

FIG.10: COMPARATIVE GVA AND EMPLOYMENT GROWTH IN TURKISH, POLISH AND ROMANIAN (CITIES), 2007 TO 2012²⁵



7. INFRASTRUCTURE STRENGTHS ARE A PLATFORM FOR FUTURE GROWTH

As a collective group, European cities retain an impressive core infrastructure base, which is arguably superior to any other global region. A majority of cities ranked in the top 50 of Mercer's infrastructure assessment are European. German and Scandinavian cities unsurprisingly to the fore, due to low congestion, high public transport and bicycle use, and well maintained systems and utilities. ²⁶ In a compilation of globally-focused infrastructure studies, we find that Copenhagen is Europe's leading city, rivaled only by Singapore globally (see Fig.11). A number of cities that are struggling on some economic or investment measures nevertheless indicate healthy infrastructure systems ready for future growth – notably Barcelona and also Lisbon. Despite the strain of their size and scale, London and Paris have strong and competitive systems.

The picture is not wholly positive, however. Among major European cities, Milan and Brussels have clear limitations in the fields of congestion and mobility. More broadly, many national governments and investment banks, incuding in the UK, have become unconvinced that major investment in infrastructure modernisation is a worthwhile undertaking in second cities that already exhibit demandside weaknesses.²⁷ The reluctance or inability to invest is in some cases further hampering the business environment in these cities.

 $^{^{25}}$ LSE (2013), 'European MetroMonitor', http://labs.lsecities.net/eumm/m/metromonitor

²⁶ Mercer (2012), '2012 Quality of Living Ranking Highlights – Global', http://uk.mercer.com/articles/quality-of-living-survey-report-2011

²⁷ European Institute for Urban Affairs, Liverpool John Moores University, et al. (2012), 'Second Tier Cities in Europe:In An Age of Austerity Why Invest Beyond the Capitals?', www.ljmu.ac.uk/EIUA/EIUA_Docs/Second_Tier_Cities.pdf

FIG.11: PERFORMANCE OF 20 EUROPEAN CITIES IN GLOBAL TRANSPORT AND INFRASTRUCTURE RANKINGS, 2012-13

		PWC/PNYC CITIES OF OPPORTUNITY, 'CITY GATEWAY'	PWC/PNYC CITIES OF OPPORTUNITY, 'TRANSPORTATION & INFRASTRUCTURE'	COPENHAGENIZE BICYCLE FRIENDLY CITIES	INRIX TRAFFIC CONGESTION SCORECARD	EIU HOTSPOTS - 'PHYSICAL CAPITAL'	MERCER - TOP CITIES FOR INFRASTRUCTURE	UN STATE OF THE WORLD'S CITIES 'INFRASTRUCTURE INDEX'
	Last updated	Sep-12	Sep-12	Apr-13	Apr-13	Feb-12	Dec-12	Jul-12
	# of cities assessed	27	27	150	199	120	50	69
01	Copenhagen	-	-	2	75	2	4	1
02	Barcelona	-	-	17	104	2	-	10
03	Frankfurt	-	-	-	127	2	2	-
04	Vienna	-	-	-	118	2	16	9
05	Lisbon	-	-	-	27	64	-	10
06	London	1	8	-	195	25	6	1
07	Paris	2	8	19	194	20	12	9
08	Budapest	-	-	18	53	55	-	21
09	Zurich	-	-	-	137	2	24	1
10	Munich	-	-	13	155	-	2	-
11	Stockholm	22	5	-	-	1	18	10
12	Dublin	-	-	11	87	25	34	9
13	Amsterdam	-	-	1	184	1	23	10
14	Berlin	18	11	10	77	20	29	-
15	Madrid	6	8	-	142	17	34	-
16	Milan	19	17	-	196	25	-	1
17	Brussels	-	-	-	199	25	42	1
18	Moscow	13	20	-	-	55	-	27
19	Istanbul	14	23	-	-	80	-	-
20	Birmingham	-	-	-	175	36	44	-

8. EUROPE'S CHALLENGE TO IMPROVE BUSINESS AND INVESTOR FRIENDLINESS

Very few European cities can any longer be assured of sizeable economic growth and job creation, given the sluggish character of global growth, exacerbated by diminished budgets and widespread risk aversion. This has led to a growing focus on European city business climate as a tool for economic development, new job creation, and investment attraction. Cities throughout the continent are altering coordination arrangements and revising their growth and investment strategies given new sector directions and market priorities.

Index analysis of city performance in terms of business and investor friendliness (see Fig.12) indicate a number of important trends:

 London excels within Europe, as the city with the strongest transport and logistics platform to connect to local and international markets, most open to corporate investment, most efficient in its dealings with business, and most able to foster and promote entrepreneurship. No city on the continent offers as dense or productive agglomerations of firms and talent to support market entry.

- **Dublin, Warsaw and Bucharest** are three smaller capitals working hard to attract new firms and foreign investment. All three have recorded impressive investment project results in recent years and are praised for their local business climate.
- The economic potential of Moscow and Istanbul
 is attracting major real estate and other sector
 investment without either city yet providing an
 especially appealing environment for foreign
 businesses to operate. Istanbul's index results are
 marginally more auspicious in this area.
- Some cities appear to be outperforming their national framework in terms of attracting investors and businesses. Barcelona and Paris are recording stronger investment and investor-friendliness results than would be indicated by national studies.

9. DESTINATION POWER: TAPPING INTO NEW TOURIST AND EXPAT MARKETS

The years since the global financial crisis have ushered in a shift in the centre of gravity of global tourism. The rise in the purchasing power of the BRIC and Gulf state middle classes has seen a surge in regional tourism in East Asia, the Middle East and Latin America, at the expense of traditional European destinations. In 2008-9, 38 European cities comprised the top 100 most visited globally by foreign travellers, but three years later six had dropped out of the top 100 and only one (Sofia) had entered it. ²⁸ A number of top 100 cities have experienced a significant drop in overall numbers, in particular **Rome, Dublin, Bucharest, Amsterdam, Prague** and **Brussels** (see Fig.13). More than three quarters of the European cities fell in overall rank over the three year period.

Yet some cities have bucked the trend and have managed to achieve rapid tourism growth despite the slowdown. The leading trio in this respect are **Warsaw, Berlin** and **Istanbul.** Warsaw has risen a remarkable 34 places since 2008, and

achieved nearly 70% traveller growth, decisively overtaking the more established centres of Milan and Brussels.

Despite the challenges in tourism markets, historic European cities continue to maintain a globally compelling image. According to one 2012 survey of residents of advanced industrialised nations, 18 of the 25 most well regarded cities in the world are in Europe.²⁹ European cities have virtues of tolerance, diversity, open-ness, culture, history and entertainment that are admired by workers and tourists alike.

This esteem is reflected in tangible choices such as where businesses and institutions choose to locate annual conferences and events. European capital cities continue to attract very large numbers of rotating international meetings (see Fig.14). Madrid recorded the largest growth in meetings in Europe, and now hosts over 160 annually, among the top five cities in the world. Berlin, London and Vienna have all cemented their positions as major meetings destinations, while others to rise quickly include Istanbul, Prague and Belgrade.

²⁸ Euromonitor International (2010, 2013), 'Top City Destination Ranking', http://blog.euromonitor.com/2010/01/euromonitor-internationals-top-citydestination-ranking.html; http://blog.euromonitor.com/2013/01/top-100cities-destination-ranking.html.

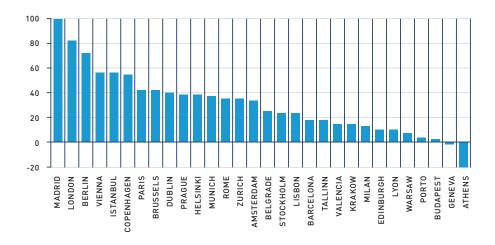
²⁹ Reputation Institute (2012), 'City RepTrak', www.reputationinstitute.com/thought-leadership/city-reptrak

FIG.12: 20 EUROPEAN CITIES' PERFORMANCE IN INVESTMENT AND BUSINESS-FRIENDLINESS BENCHMARKS

		PWC/PNYC CITIES OF OPPORTUNITY, 'EASE OF DOING BUSINESS'	IBM GLOBAL LOCATION TRENDS	CUSHMAN & WAKEFIELD EUROPEAN CITIES MONITOR, 'CLIMATE GOVERNMENTS CREATE'	FDI EUROPEAN CITIES OF THE FUTURE 2012/13	KPMG/PIA GLOBAL INVESTMENT MONITOR, 'OVERALL RANKING'	AON PEOPLE RISK INDEX
	Last updated	Sep-12	Nov-12	Sep-11	Jul-12	Mar-12	Jun-12
	# of cities assessed	27	100+	36	100+	100+	131
01	London	4	1	3	1	1	4
02	Dublin	-	17	1	8	13	33
03	Amsterdam	-	7	5	15	20	19
04	Zurich	-	-	5	18	-	14
05	Edinburgh	-	-	20	11	-	_
06	Paris	14	2	17	2	6	37
07	Stockholm	6	-	19	10	-	16
08	Bercelona	-	11	16	22	10	47
09	Frankfurt	-	25	11	-	11	44
10	Warsaw	-	-	5	21	-	57
11	Brussels	-	-	12	19	-	38
12	Prague	-	-	10	20	-	51
13	Berlin	16	23	15	9	-	41
14	Madrid	15	9	18	-	16	46
15	Copenhagen	-	-	30	12	-	9
16	Bucharest	-	15	4	-	-	102
17	Vienna	-	-	33	3	-	38
18	Istanbul	23	16	8	-	-	88
19	Moscow	24	-	32	4	4	90
20	Milan	18	-	34	-	-	58

FIG.13: TOP 6 AND BOTTOM 6 PERFORMING EUROPEAN CITIES BY VISITOR NUMBERS SINCE GFC

	VISITORS 2008/09 (M)	VISITORS 2011/12 (M)	% CHANGE	RANK CHANGE IN TOP 100
Nice	1.23	2.13	+73%	+34
Warsaw	1.99	3.35	+68%	+23
Budapest	2.87	4.37	+52%	+13
Istanbul	6.68	9.77	+46%	0
Antalya	8.3	12.05	+45%	0
Berlin	2.75	3.71	+35%	+11
Prague	4.03	3.76	-7%	-4
Amsterdam	4.53	4.2	-7%	-6
Kiev	3.7	3.37	-9%	-8
Athens	2.31	1.79	-23%	-32
Bucharest	3.15	2.35	-25%	-22
Dublin	4.54	3.25	-28%	-18



CULTURAL AND EDUCATIONAL ASSETS

European cities' enduring popularity is also to a large extent due to unique cultural and educational assets. This is firstly visible in the quality and prestige of its historic universities. In a recent assessment, six of the top ten (and 12 of the top 30) cities for undergraduate students are in Europe, because of the quality of teaching, student living standards and subsequent employability. Paris and London rank first and second, but cities such as Vienna, Zurich, Munich and Stockholm also excel. Fig. 15 displays the university strength in depth across Western Europe, especially in British, Swiss and Dutch cities. A clear majority of universities in European cities rose in the global rankings in 2013, as the competitiveness of higher education provision remains highly resilient.

In addition to and alongside historic universities, European cities host an abundance of specialist research centres, including in medical and environmental sciences. Europe's strong national health care systems have generated productive R&D spillovers and spurred experimentation and innovation that has not been easy for other emerging regions to replicate.

Furthermore Europe's very long-term record of investment in media, performing arts, design, architecture, sport and music has produced a cultural depth that is unique, with these sectors and their institutions much more embedded in the everyday knowledge economy than in most other parts of the world. Across several studies European cities excel for their distinctive blend of international and cultural organisation headquarters, corporate offices, lifestyle variety and graduate employment opportunities. Cities with all of these assets are attractive to mobile talent, institutional investors, and fund managers even during periods of downturn, as well as to the fast growing international student community.

Within the Central and Eastern Europe region, where these assets are not as fully developed, Vienna is clearly the dominant city for basic infrastructure, sector innovation and educated workers (see Fig.16). Even Berlin is some distance behind, despite signs of leadership in niche technology sectors.

³⁰ ICCA (2009, 2013), 'The Association Meetings Market', www.iccaworld.com/cnt/docs/2008-Statistics-Report-CountryCity-Rankings.pdf.

FIG.15 LOCATION OF EUROPEAN UNIVERSITIES IN THE GLOBAL TOP 250, 2013. $^{\rm 31}$

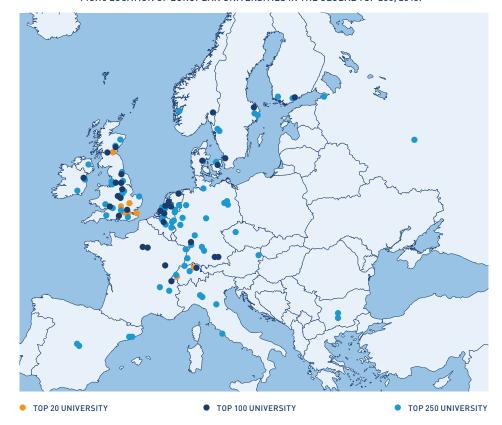


FIG.16 PERFORMANCE OF 7 CENTRAL AND EASTERN EUROPEAN CITIES ON QUALITY OF LIFE, ENVIRONMENT AND CULTURAL METRICS

		QUALITY	OF LIFE		Е	NVIRONME	NT	CULTURE
	UN STATE OF THE WORLD'S CITIES 'QUALITY OF LIFE INDEX'	EIU LIVEABILITY RANKING	EIU LIVEABILITY RANKING UBS PRICES AND EARNINGS, ANNUAL INCOME NET		EIU/CITIGROUP HOTSPOTS, 'ENVI- RONMENT AND NATURAL HAZARDS'	UN STATE OF THE WORLD'S CITIES 'ENVIRONMENT INDEX'	SIEMENS/EIU EUROPEAN GREEN CITY INDEX	EIU/CITIGROUP HOTSPOTS, 'SOCIAL AND CULTURAL CHARACTER'
Last Updated	Jul-12	Aug-12	Sep-12	Dec-12	Feb-12	Sep-11 Dec-0		Feb-12
# of Cities Assessed	69	140	72	50	120	69	30	120
1 Vienna	13	2 20 1		1	8	13	4	11
2 Berlin	- 22		10	16	7	-	8	5
3 Budapest	17	55	63	-	1	17	17	22
4 Warsaw	21	71	58	58 –		21	16	51
5 Prague	rague 34 60 49		49 –		32	15	24	16
6 Bucharest	35	84	62	-	108	38	28	70
7 Sofia	-	88	64	-	-	-	29	-

³¹ QS (2013), 'World University Rankings, 2013', www.topuniversities.com/university-rankings/world-university-rankings/2013

10. ECONOMIC DIVERSIFICATION, TECHNOLOGY, AND INNOVATION

A number of important trends also appear in terms of innovation and new sector development as European cities seek to diversify and re-balance their economies (see Fig.17).

First, Paris and London are already best placed to capitalise on new developments in the digital and life sciences sectors, as the pair dominate the rankings for high-tech research output, entrepreneurial support, talent and data application. Although both are surpassed by Boston and San Francisco, they are well placed to be at the forefront of creating new sources of value and growth.

Second, vibrant public-private research environments in Berlin, Munich and Stockholm appear to be yielding success in terms of competing with the leading global start-up cities.³²

Third, although Moscow's all-round research and innovation base is still weak, there are signs in terms of intellectual capital and investor demand that the Russian capital may be fostering a high-tech sector capable of competing on the world stage.³³

FIG 17. PERFORMANCE OF 20 EUROPEAN CITIES IN INDEXES ASSESSING INNOVATION, TECHNOLOGY AND TALENT

		GLOBAL POWER CITY INDEX, RESEARCH	2THINKNOW CON- SULTING INNOVATION CITIES GLOBAL INDEX	PWC/PNYC CITIES OF OPPORTUNITY, 'INTELLECTUAL CAPITAL AND INNOVATION'	PWC/PNYC CITIES OF OPPORTUNITY, 'TECH-NOLOGY READINESS'	STARTUP GENOME BEST START-UP ECOSYSTEMS	BUCK CONSULTANTS EUROPEAN TECH CITIES INDEX	ERICSSON NETWORKED SOCIETY CITY INDEX	AT KEARNEY, GLOBAL CITIES INDEX, 'INFORMATION EXCHANGE'	AT KEARNEY GLOBAL CITIES INDEX, 'HUMAN CAPITAL'	EIU/CITIGROUP HOTSPOTS, 'HUMAN CAPITAL
	Last Updated	Dec-12	Feb-13	Sep-12	Sep-12	Nov-12	Aug-12	Nov-12	Apr-12	Apr-12	Feb-12
	# of Cities Assessed	40	133	27	27	100	31	25	66	66	120
01	Paris	3	5	3	12	11	1	6	2	6	4
02	London	4	7	6	8	7	2	3	6	2	23
03	Stockholm	21	16	1	4	-	18	2	25	32	27
04	Munich	_	6	-	-	-	7	-	34	30	-
05	Berlin	16	13	12	16	15	4	-	14	37	43
06	Zurich	18	72	-	-	-	16	-	10	18	7
07	Copenhagen	30	8	-	-	-	8	-	23	40	3
08	Amsterdam	17	9	-	-	-	10	-	22	50	28
09	Brussels	32	33	-	-	-	-	-	4	21	43
10	Barcelona	24	56	-	-	-	10	-	28	22	29
11	Vienna	25	3	-	-	-	29	-	19	15	30
12	Frankfurt	34	15	-	-	-	-	-	12	42	33
13	Madrid	29	94	16	18	-	6	-	16	33	14
14	Moscow	26	74	17	14	14	-	12	37	20	82
15	Dublin	-	-	-	_	-	27	-	33	43	1
16	Rome	-	75	-	-	-	18	-	36	39	48
17	Prague	-	55	-	-	-	22	-	-	-	65
18	Budapest	-	58	-	-	-	20	-	-	-	79
19	Milan	35	46	14	20	-	25	-	43	38	48
20	Istanbul	31	89	27	21	-	-	14	44	27	112

Alex Wood (2013), 'Forget Berlin, Stockholm's Start-Up Scene Has Come of Age', http://techcitynews.com/2013/08/30/stockholms-startup-scene-comes-of-age/

Adrien Henni (2013), 'Moscow City launches investor-friendly startup incubator', East-West Digital News', www.ewdn.com/2013/09/05/moscow-city-launches-investor-friendly-startup-incubator/

11. OUTLOOK: EUROPE'S DRIVERS IN THE NEW GLOBAL CYCLE

- The majority appear to have maintained important infrastructure, human capital and sustainability advantages over other global regions. For the higherperforming cities, these combined assets will likely yield productivity returns in the medium term once growth fully returns and new trade relationships are established.
- Many of the mid-sized, 2-5 million population cities stretching from Lyon to Warsaw, from Oslo to Valencia, record very healthy scores for entrepreneurship, multi-lingual talent, quality of life, and regional connectivity that are not easily replicable elsewhere. These attributes continue to fuel investment from beyond the continent.
- Within an enlarged Europe, Istanbul and Moscow now have the size, strategic location and large domestic markets to become global hubs for firms and investment in line with their political and cultural significance. But neither has yet built the social and physical infrastructure, nor become fully open to skills and investors, in the ways that characterise more established world cities.
- The emergence of megacities in faster growing regions as significant actors on the world stage presents a new dimension of economic opportunity as well as new challenges. These emerging markets

will continue to drive global growth, attracting around half of global FDI. Their cities will also become much bigger sources of FDI outflows. Emerging market firms such as Huawei and Tata will become global leaders in much larger numbers, and will increasingly make outbound investments in developed economies. European cities are well placed to serve these new centres in a variety of ways, such as:

- Opportunities for two-way supply chain coordination between large and small firms.
- Lucrative new visitor and student markets, at all age groups.
- Co-operation in health and environmental sectors.
- Providing design, engineering and consultancy solutions for serious infrastructure strains.
- Support for emerging creative and consumeroriented firms to move up the value chain with improved technological and digital solutions.

European cities have already begun to pursue these opportunities not only through upgrading sister-city relationships, but also by initiating serious economic partnership. One example is the new Manchester-China Forum which aims to radically scale up commercial connectivity with China. Over the next decade each European city will need to identify and leverage its own comparative advantages in order to participate most effectively in a new network of global cities.