

THE WORLD'S MOST COMPETITIVE CITIES

TOP RATED CITIES, TOP RATE

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World's Most Competitive Cities rankings: Cincinnati, Ohio

Electronics	3
Food & Beverage	3
Automotive	4
Chemicals & Plastics	4
Aerospace	5
Business & Financial Services	5
Machinery, Equipment & Construction	5

ED STATE: WELCOME TO OHIO.

jor metropolitans, Ohio is realizing the benefits of long-term rior quality of life. The result: cities like Cincinnati and Columbus that **Ohio is building the future.**

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Automotive	2
Transportation & Logistics	3



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The state of the 21st century city.

As a result of a robust talent pipeline, intelligent investments and a clearly defined vision for future growth, both Cincinnati and Columbus were ranked in the top five of the **World's Most Competitive Cities** by Ernst & Young.

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Fred M. Glickman Vice President, International Operations Enterprise Florida Inc.



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Headquartered in Atlanta, Georgia, Conway, publisher of Site Selection magazine, the Conway Analytics Report and a family of online industry newsletters, has been a trusted advisor to corporations, government economic development and investment promotion agencies around the world since 1954. In addition to its publishing endeavors, Conway owns and manages Conway Events, organizer of worldwide FDI events including the annual WORLD Forum for FDI; Berlin-based corporate and FDI advisory firm Conway Advisory; and New York-based Conway PR & Marketing, a leading PR and lead-generation firm.



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Founded in 1981 as a commercial venture with Oxford University's business college, Oxford Economics has become one of the world's foremost independent global advisory firms, providing reports, forecasts and analytical tools on 200 countries, 100 industrial sectors and over 3,000 cities to a worldwide client base that comprises over 1,000 international organizations, including leading multinational companies and financial institutions. Headquartered in Oxford, England, with regional centers in London, New York, and Singapore, Oxford Economics employs over 250 full-time people. The firm's location strategies practice advises corporate clients on foreign direct investment and corporate location strategies worldwide.

CITIES AND COMPANIES BOTH SEEK A COMPETITIVE EDGE

by ADAM BRUNS



herever our future is going, it is going to be defined in cities." So said Elaine Trimble, Siemens' Director

of Urban Infrastructure, in DNV's *Future of Spaceship Earth* report, released in 2016.

Attempting to measure the competitiveness of a boundary-shifting, data-rich entity like a metro area may seem like a fool's errand. But it's something stakeholders across the corporate strategy and economic development spectrum are perennially trying to do.

I asked Amy Liu of the Brookings Institution how she defined a competitive city, and she said they're places that have strong sectors producing cutting-edge solutions for the world. "They have innovative, competitive industries," she said. "They have talent and, increasingly, a digitally savvy workforce keeping up with the pace of technological change in our economy. And they are truly globally connected. Competitive cities are taking advantage of the highly mobile firms, talent and capital in the world today."

In this third edition of *World's Most Competitive Cities*, you'll learn which metro areas are taking full advantage — and which types of companies are taking full advantage by locating in them.

Some of these cities are familiar world capitals. And some might be on their way to that status. In all, 148 cities made it into the top five in at least one sector in their world region. A total of 69 made the top five at least twice or earned first place in a sector. The 19 that made the top five at least six times are spotlighted

in full-page profiles sprinkled throughout the rankings, while business intelligence about the other 50 appears in the second half of the report.

Unprecedented Scale vs. Small is Beautiful

"Developing world cities are set to double their urban population in the next 30 years, and triple the land area they occupy," said the Lincoln Institute of Land Policy, UN-Habitat, and New York University on the recent release of their *Atlas of Urban Expansion*. "From 1990 [to] 2015, the area occupied by cities in less developed countries increased by a factor of 3.5; if that rate continues, the total amount of land taken over by urban land use would be equivalent to the entire country of India."

India itself demonstrates some of the problems that scenario entails. Yet it's also home to competitive areas such as Pune and Hyderabad. Such contradictions come with the territory, and will continue to do so until that day when every human and business dynamic is somehow preceded by proper planning.

INSEAD's 2017 Global City Talent Competitiveness Index found the small cities of Copenhagen, Zurich and Helsinki at the pinnacle. None of them appear in this report ... but they might soon, if that's where companies will indeed find the talent.

"As talented individuals can increasingly operate from anywhere, physical and technical connectivity and quality of life are competitive advantages for smaller cities," said INSEAD. "The importance of clusters cannot be underestimated."

Nor can the importance of evaluating city competitiveness using real-world data. We hope you find this guide useful in that endeavor.



he report ranks the top locations within each world region based on their competitiveness in multiple sectors. Our methodology differentiates locations based on their proven ability in attracting and retaining corporate facility investment in a particular sector, as well as their performance across multiple economic indicators. The report did not pre-select cities but let analysis uncover the locations that stood out as the most competitive.

The rankings, arranged by industry sectors and by world region, were computed by adding two layers of data:



Number of facility investment projects from the Conway Projects Database

We examined actual private-sector investment activity in the metropolitan areas, demonstrating their abilities to attract and retain investment in physical facilities. The Conway Projects Database provided investment projects since January 1, 2013, involving new or expanded facilities, with an investment amount of \$1 million or higher, at least 20 new jobs created or a minimum of 20,000 sq. ft. of new space.



Metropolitan and regional area-level economic indicators provided by our external partners.

- EY Quantitative Economics and Statistics (QUEST): metrics include corporate tax, number of companies, industry employment and growth, labor force growth, innovation/R&D, GDP PPP, location quotient measuring the relative concentration of an industry within a metropolitan area, EY Attractiveness Index.
- Oxford Economics: Metropolitan area GDP growth, five-year forecast.



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Additional analysis was provided by Tractus Asia Ltd. (www.tractus-asia.com), a leading management consulting firm headquartered in Bangkok, Thailand, with offices in China, India, Thailand, Hong Kong, Indonesia, Myanmar, Singapore and Vietnam. For the last 20 years and with a team of 60 professionals, Tractus has advised and assisted over 1,000 multinational companies and public- and private-sector clients in making intelligent decisions about where to locate and how to structure their direct investments in or from Asia.



fter a century of aviation, some things have changed and some have not: Even the early pioneers needed the right real estate, logistics and workforce. Today, the industry's heritage continues to stand it in good stead, as locations from Cincinnati and Hartford to Seattle and Paris continue to thrive thanks to investments made decades ago. At the same time, newcomers in such places as Morocco, the UAE and Southeast Asia are making a play for vital work in this lucrative sector.

In the United States, new orders for defense aircraft and parts (including drones) have recently grown sharply for the first time in years; and notwithstanding long lead times, this will eventually show up in increased production figures benefiting those communities with suppliers that support this activity.

That may explain why, even after struggles and loss of major work to plants in other locations, Seattle continues to be the No. 1 location in North America: The infrastructure of suppliers and talent infusing the region endures.

Washington is home to more than 1,350+\
aerospace-related business establishments, and as recently as 2014, the industry generated \$85.7 billion in economic activity throughout the state.

Globally, the aerospace faces considerable headwinds including rising jet fuel prices, weakness in China, and heightened terrorism concerns. Nevertheless, there still remains a civilian aircraft order backlog of 5,700 planes.

Among the places surging to meet both industry and passenger demand are India and China. Airbus, which is placing a \$40-million complex in New Delhi, predicts India will need over 1,600 new passenger and freighter aircraft in the next two decades.

But you'll also find clusters of strong industry activity — including in the very active maintenance, repair and overhaul (MRO) segment — in such places as Singapore, Malaysia and a resurgent Japan in Asia; in Hamburg, Birmingham, Madrid and Paris in Western Europe; and in Perm, Izmir, Brno and Lodz in Eastern Europe and Central Asia.

PHOTO COURTESY OF GETTY IMAGES



Adam Bruns **Site Selection**

he 2016 edition of the IBM-PLI Global Location Trends report ranked Hungary No. 5 globally in jobs per million inhabitants, ahead of places such as Singapore, Saudi Arabia and Costa Rica. Its busy capital city was a big reason why.

Budapest not only leads in pure numbers as tracked by Site Selection magazine's Conway Projects Database, but in an impressive range of industries: The metro area appears in the top five in Eastern Europe & Central Asia in 10 of the 12 sectors analyzed in this report — the most appearances of any city in the world. Projects include a \$19-million, 300-job investment by Germany's Knorr-Bremse Rail Systems and a \$6-million, 110-job logistics base from hauling company Karzol-Trans.

The region struggles with a symptom of its success: the need for more talent and workforce. But its value continues to shine in terms of both affordability and progressive outlook.

GE has invested in Hungary for 27 years, including a Global Operations Center in Budapest that employs 1,700. Its latest foray is a new 400-job digital hub in the city that was inaugurated in October 2016.

"The Industrial Internet represents a neverbefore-seen potential for the Hungarian and

Central European economy," said Peter Stracar, CEO for GE CEE. "The region has the talent, knowledge and infrastructure to actively participate in the productivity revolution, and the digitization of industry must be at the core of this mission."

Work also has begun on the largest Ericsson R&D facility outside Sweden, which started construction 10 months after the opening of the Ericsson Garage incubator, a catalytic site for the company's 5G for Hungary program, which aims to deliver industry pilots of 5G solutions in areas including the Internet of Things, energy and utilities, public infrastructure and retail.

Budapest and Hungary's government are setting the stage appropriately. At a November digital economy summit in the city, Hungary's Minister for National Economy Mihály Varga signed an agreement with transport officials from neighboring countries on coordinating traffic regulations with regard to autonomous cars and cross-border digital infrastructure.

"Switching to an innovation-driven economy, industrial development and the support of this development process are crucial tasks for the government, as boosting R&D, innovation and productivity are the key drivers of economic growth," said the Ministry.

SECTOR LEADER IN:

























• Perm

- Perm is a regional engineering cluster and one of Russia's largest bases for the production of aircraft engines and components.
- The Aerospace Faculty of the Perm National Research Polytechnic University trains a highly specialized workforce.

O Izmir

- The Izmir aerospace cluster has 33 companies that employ 5,500 workers.
- The region offers several research institute and academic programs related to aerospace, including the IYTE (Izmir Higher Technology Institute) and the Izmir Economic University's Department of Aerospace Engineering.

Top 5 Cities

- 1 Perm, Russia
- 2 Izmir, Turkey
- 3 Brno, Czech Republic
- 4 Lodz, Poland
- 5 Budapest, Hungary

Brno

- Brno University of Technology has an Institute of Aerospace Engineering focused on education, applied research and aircraft testing.
- Brno hosts one of Honeywell Technology Solutions' (HTS) R&D centers in Europe and an Environmental and Combustion Controls manufacturing facility.

O Lodz

 The headquarters of Airbus Helicopters Poland is established in Lodz.

Company	Metro Area	Country	Inv. US \$Million	Jobs
OJSC Perm Engine Co.	Moscow	Russia	\$665	
Elbit Systems	Tbilisi	Georgia	\$85	300
Pratt & Whitney	Istanbul	Turkey	\$75	
MTU Aero Engines	Rzeszow	Poland	\$53	250
Airbus Helicopters Romania S.A.	Ghimbav	Romania	\$43	







Top 5 Cities

- 1 Hamburg, Germany
- 2 Birmingham-West Midlands, UK
- 3 Madrid, Spain
- 4 Paris, France
- 5 Bremen, Germany

OHamburg

- The aviation industry cluster of the Hamburg Metropolitan Region has more than 40,000 highly qualified specialist personnel.
- The cluster features Airbus, Lufthansa Technik and Airport Hamburg, and more than 300 small and medium-sized enterprises.

Birmingham

- The Midlands aerospace cluster is home to over one-quarter of the UK aerospace industry, 7 percent of Europe's and 3 percent of the world's, with over 45,000 full-time-equivalent jobs due wholly to revenues from manufacturing for the aerospace market (airports and military bases excluded).
- The Midlands aerospace supply chain is made up of about 300 companies, including aircraft engine manufacturer Rolls-Royce, which accounts for one in four jobs.

• Madrid

- The Madrid aerospace cluster is made up of 144 companies that include Airbus, EADS CASA, EADS Astrium Crisa, ITP, CESA and Grupo TAM and directly employ 20,000 persons.
- It benefits from a network of more than 48 research groups devoted to aerospace-related R&D activities.

Paris

- Of the total French workforce involved in aerospace R&D, the Paris Region employs 90 percent for business aviation, 60 percent for propulsion and equipment and 50 percent for space transportation.
- The ASTech Paris Region aerospace cluster concentrates 43
 percent of the French aerospace research budget with about
 28,000 researchers in its territory.

O Bremen

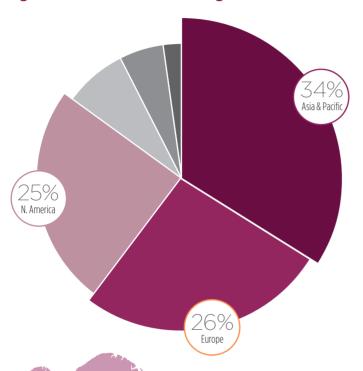
- The Bremen space and aeronautics sector includes more than 140 companies and 20 institutes, and a workforce of about 12,000 employees.
- Considering the number of residents, Bremen has the highest employment density in the aerospace sector in Germany.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Rolls-Royce	Sunderland	United Kingdom	\$161	
EADS-CASA	Madrid	Spain	\$150	7,000
Bombardier	Belfast	United Kingdom	\$142	20
Airbus Group	Aix-Marseille-Provence	France	\$13	
Safran	Paris Metro Area	France	\$68	300





Regional Distribution of Passengers Carried in 2015



Top 5 Cities

- 1 Singapore
- 2 Nagoya-Chukyo, Japan
- 3 Seremban, Malaysia
- 4 Bengaluru, India
- 5 Penang, Malaysia

Asia & Pacific	34.1
Europe	26.3
North America	24.9
Latin America & Caribbean	7.4
Middle East	5.3
Africa	21

Singapore is a base for over 100 aerospace companies and accounts for a quarter of the total Asian MRO market.

Metro Area	Country	Inv. US \$Million	Jobs
Singapore	Singapore	\$700	800
Chukyo Major	Japan	\$288	
Tianjin	China	\$166	
Seremban	Malaysia	\$160	100
Seremban	Malaysia	\$130	
	Metro Area Singapore Chukyo Major Tianjin Seremban	Metro AreaCountrySingaporeSingaporeChukyo MajorJapanTianjinChinaSerembanMalaysia	Metro AreaCountryInv. US \$MillionSingapore\$700Chukyo MajorJapan\$288TianjinChina\$166SerembanMalaysia\$160



PHOTO COURTESY OF GETTY IMAGES

Katie Ballard

he Dallas-Fort Worth metro area (DFW) attracted more than \$17 billion in announced investment and 65,000 announced new and retained jobs for mobile capital investments from 2011 through 2016. In recent years, the cities north of Dallas — including Plano, Richardson, and Frisco — have seen significant growth in business attraction, primarily corporate offices. Availability of land and labor, ease of access to major highways, and business attraction initiatives have been contributing factors to this development.

DFW had the second highest population growth of any metro area (behind Houston) from 2010 through 2016 — adding 807,000 people. Over this period, DFW employment has grown by 14 percent — adding nearly 440,000 new jobs since 2011. As of January 2017, DFW had one of the lowest major-metroarea unemployment rates in the country at 3.9 percent.

There are 12 major four-year universities in the region and seven community college districts, with more than 370,000 currently enrolled students. In Plano, over half of the residents (55 percent) have at least a bachelor's degree, compared to 31 percent in the US overall. The DFW metro area ranks 7th among US cities in terms of high-tech jobs (208,300), reflecting

DFW's historical strength in aerospace and defense and growing IT cluster.

To meet growing demand by companies for large corporate campuses and demand by employees for urban living, developers KDC have projected they will spend a total of \$3 billion to develop a 255-acre multi-use development in Plano. This development (Legacy West) is nearly complete and will feature more than 5 million square feet of commercial office space, residential housing, hotels, and retail. Several companies announcing headquarters relocations are locating within the Legacy West complex, including Toyota, JPMorgan Chase, and Liberty Mutual.

DFW captured one in 10 announced data center projects in the US from 2011 through 2016, totaling \$3.5 billion of investment. The largest project was a \$1-billion Facebook data center in Fort Worth. Currently, approximately half of Texas' colocation data centers are in DFW (81 of 171). Such projects have come from RagingWire in Garland; Aligned Data Centers, Skybox Data Centers and Stream in Plano; and Patronus Data Centers in Frisco. This growth has been driven by recent headquarters relocations to the Dallas area, coupled with available land, competitive utility rates, and an overall business-friendly environment.

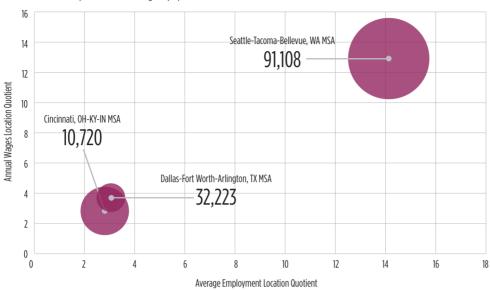




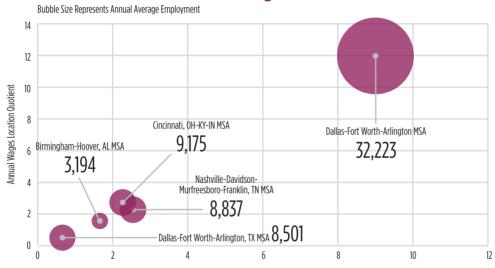


Aerospace Product & Part Manufacturing

Bubble Size Represents Annual Average Employment



Motor Vehicle Parts Manufacturing



Top 5 Cities

- 1 Seattle-Tacoma-Bellevue, WA, USA
- 2 Dallas-Fort Worth-Arlington, TX, USA
- 3 Hartford-West Hartford-East Hartford, CT, USA
- 4 Phoenix-Mesa-Scottsdale, AZ, USA
- 5 Cincinnati, OH-KY-IN, USA

,,				
Metro Area	Country	Inv. US \$Million	Jobs	
Dallas-Fort Worth-Arlington, TX	United States	\$1,200	1,000	
Charleston-North Charleston, SC	United States	\$1,000	2,000	
Indianapolis-Carmel-Anderson, IN	United States	\$600		
Cedar City, UT	United States	\$380	1,200	
Montréal, QC	Canada	\$275		
	Metro Area Dallas-Fort Worth-Arlington, TX Charleston-North Charleston, SC Indianapolis-Carmel-Anderson, IN Cedar City, UT	Metro Area Country Dallas-Fort Worth-Arlington, TX United States Charleston-North Charleston, SC United States Indianapolis-Carmel-Anderson, IN United States Cedar City, UT United States	Metro AreaCountryInv. US \$MillionDallas-Fort Worth-Arlington, TXUnited States\$1,200Charleston-North Charleston, SCUnited States\$1,000Indianapolis-Carmel-Anderson, INUnited States\$600Cedar City, UTUnited States\$380	





Top 5 Cities 1 Tijuana, Mexico

- 2 Sorocaba, Brazil
- 3 Aguadilla, Puerto Rico
- 4 Querétaro, Mexico
- 5 Mexicali, Mexico



- The Tijuana Aerospace hub employed over 11,690 highly skilled workers in 2015, twice as many as in 2006.
- Over 37 Tier I companies and industry suppliers in aerospace operate in the city.
- Four universities offer aerospace educational programs.

Sorocaba

 Sorocaba is a major business aircraft maintenance hub, where Jet Aviation, Embraer, Pratt & Whitney, Gulfstream have established regional service centers.

Aguadilla

 Since October 2015, Aguadilla is home to the Aeronautical & Aerospace Institute of Puerto Rico (AAIPR), a major education center in aerospace.

Querétaro

- Querétaro is home to the National Aeronautics University of Querétaro (UNAQ).
- The Aero Cluster of Querétaro had a 6.6 percent growth in personnel in 2015, growing to 8,000 workers.



Company	Metro Area	Country	Inv. US \$Million	Jobs
Spectrum Aeronautical	Mexicali	Mexico	\$300	250
Safran México, S.A. De C.V.	Querétaro	Mexico	\$100	
GE Aviation Systems	Petropolis	Brazil	\$55	
Zodiac Aerospace	Querétaro	Mexico	\$50	600
Honeywell Aerospace	Aguadilla	Puerto Rico	\$35	







Morocco

- 100 new aerospace companies were established in Morocco in the last 12 years.
- The aerospace sector accounts for 4.5 % of total exports.
- Morocco's "2014-2020 strategy" plans the creation of 23,000 new jobs in aerospace and US\$300 million in public investment and subsidies every year until 2020.
- A total of 94 hectares of subsidized real estate is being dedicated to the aerospace cluster: 67% is in the Casablanca area, 20% in the Tangiers area.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Aerolia	Casablanca	Morocco	\$54	500
Daher Aerospace X	Tangiers	Morocco	\$16	250
Latelec	Casablanca	Morocco	\$11	300
Sagem	Casablanca	Morocco	\$7	150
Druznet	Isfiya	Israel	\$3	30



is evolving toward the briefer but more comprehensive term "mobility."

Autonomous and connected vehicles are everybody's next trend, and facility and testing ground investment is proceeding apace. "Being a Michigander, I believe we have a significant head start on almost everybody and a very supportive legislature," said GM economist Chief Economist Mustafa Mohaterem about the niche in remarks at a Kentucky Automotive Industry Association conference covered by Site Selection in September 2016. "North America is very well positioned to be a very significant player.'

Detroit continues to lead all North American metro areas in automotive strength, followed by strong clusters in and around Columbus and Nashville. But despite protectionist sentiment in the US, investment continues at a torrid pace in Mexico, where four of the top five cities in Latin

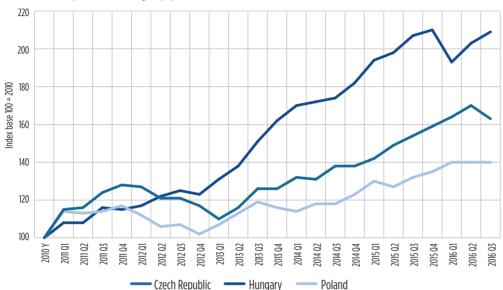
decision to invest \$1 billion in a second plant in Kecskemét, Hungary, outside Budapest, that will employ 2,500, and VW's new van plant in Poznan, Poland. Top cities in our rankings include Prague, Skopje and Katowice in Central & Eastern Europe; and Birmingham, Barcelona and Stuttgart in Western Europe. Leaders in Africa and the Middle East are topped by Dubai and now Lagos (where a new investment has come from Ford), with the two South African cities of Johannesburg and Pretoria continuing to rank highly as well.

No Japanese region shows up in this year's rankings largely because recent one-time problems such as an explosion at a key steel plant and two earthquakes earlier in the year slowed production, notes Oxford Economics. Next year, auto production in Japan should make up for lost ground.

PHOTO COURTESY OF ADOBE STOCK

Motor Vehicle Parts Manufacturing





In 2016, car production in the Czech Republic rose by 8.3 percent over 2015 to more than 1.34 million vehicles, led by a 12.5-percent rise at Skoda Auto.

Automotive Industry Association of the Czech Republic

Top 5 Cities

- 1 Prague, Czech Republic
- 2 Skopje, Macedonia
- 3 Katowice, Poland
- 4 Ostrava, Czech Republic
- 5 Budapest, Hungary

Colocion Colpois					
Company	Metro Area	Country	Inv. US \$Million	Jobs	
Jaguar Land Rover	Nitra	Slovakia	\$2,000		
Audi	Budapest	Hungary	\$1,251	2,100	
Volkswagen	Warsaw	Poland	\$1,120	2,300	
Fiat Auto Poloni	Katowice	Poland	\$768	420	
Hyundai	Istanbul	Turkey	\$714		



PHOTO COURTESY OF GETTY IMAGES

Dan Levine Oxford Economics

istorically, the economic performance of the major German cities move closely in tandem, and recent experience has been no exception. Consistent with this year's rankings, however, Oxford Economics forecasts that Berlin's GDP growth rate over the five-year period 2017-21 will average 1.6 percent annually, slightly above that of the other major German cities (Frankfurt, Munich and Hamburg).

Part of Berlin's success is that it has a well-established reputation as a creative and technological hub and it is a premier gateway to Eastern and Central Europe. Moreover, the city has a highly-educated workforce that is made even stronger by the city's reputation as a great location to attract global talent.

More than 44,000 new companies are launched in Berlin annually, which is one reason why the German capital is emerging as a top location for commercial real estate. A 2015 report released by the Urban Land Institute and PricewaterhouseCoopers ranked Berlin in the top spot among cities with the best investment prospects in the real estate market.

Berlin's fast-growing information and communication sector will remain a key engine of growth, particularly since the city is the center of Germany's creative economy. Berlin may benefit further as an attractive alternative to London for new and expanding creative and digital companies post-Brexit.

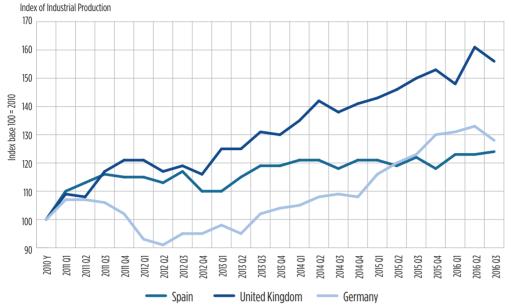
Still, some observations regarding Germany's other major cities are worth noting. For example, Munich is now leading major German cities in office-based employment growth — notwithstanding that city's strong association with manufacturing.

Frankfurt, on the other hand, appears to have an office employment market that is struggling somewhat, likely because of problems in the large German financial institutions that are based in that city. Finally, it is worth noting that Germany's tight labor supply has been augmented in recent years by liberal immigration policies. Given contemporary political discussions, this is a trend worth tracking, as it has important implications for German cities, particularly Berlin.









"The automobile industry values the EU for enabling the free movement of goods, people, services and capital, all key to growth and competitiveness. Today, vehicle manufacturers operate almost 300 plants across the continent, often manufacturing engines in one country and assembling vehicles in another, something that would be impossible without the four freedoms. At the same time, the industry employs 12.2 million Europeans across the value chain and contributes 6.5 percent to the EU's GDP."

— Statement by the European Automobile Manufacturers' Association, March 2017, on the occasion of the 60th anniversary of the Treaty of Rome that created the EU

Top 5 Cities

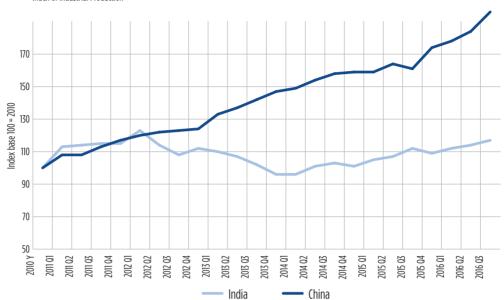
- 1 Birmingham-West Midlands, UK
- 2 Barcelona, Spain
- 3 Stuttgart Region, Germany
- 4 Berlin-Brandenburg, Germany
- 5 Liverpool City Region, UK

outer and out products a		,		
Company	Metro Area	Country	Inv. US \$Million	Jobs
Jaguar Land Rover/Tata Motors	Birmingham	United Kingdom	\$2,494	1,700
Daimler/Mercedes Benz	Stuttgart	Germany	\$1,352	
Volkswagen Autoeuropa	Lisbon	Portugal	\$829	
Jaguar Land Rover Automotive	Birmingham	United Kingdom	\$762	1,300
Porsche Automobile	Stuttgart	Germany	\$761	1,000





Index of Industrial Production

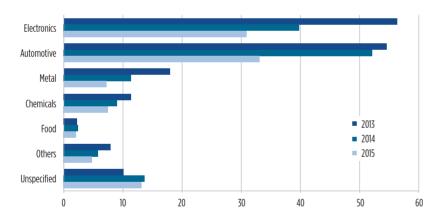


Top 5 Cities

- 1 Suzhou, China
- 2 Chongqing, China
- 3 Shanghai, China
- 4 Chennai, India
- 5 Wuhan, China

Estimated Annual Supply of Industrial Robots

At Years End in Asia/Australia by Industries 2013-2015

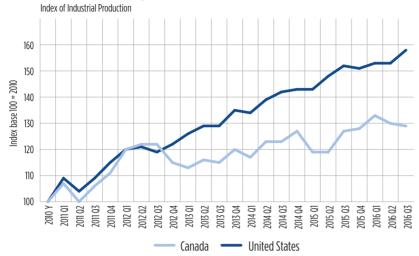


From 2010 to 2015, Asia's operational stock of industrial robots rose 70 percent to 887,400 units, with China's uptake comprising 43 percent of all sales, reported the International Federal of Robotics in February 2017. Automotive robot sales in China rose 4 percent in 2015, to 54,500 units sold.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Volkswagen	Wuxi	China	\$2,500	
Honda Cars India Limited	Delhi	India	\$2,412	
Dongfeng Peugeot Citroën Automobile	Chengdu	China	\$2,000	
AB Volvo	Taizhou	China	\$2,000	
Volkswagen	Wuxi	China	\$1,620	





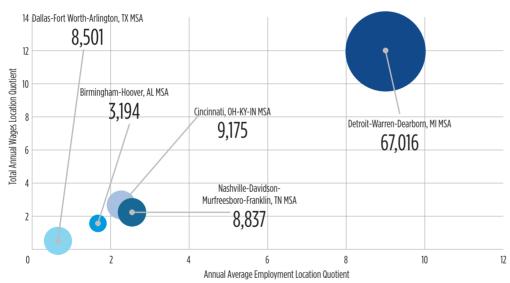


Top 5 Cities

- Detroit-Warren-Dearborn, MI, USA
- 2 Columbus, OH, USA
- 3 Nashville-Davidson-Murfreesboro-Franklin, TN. USA
- 4 Cincinnati, OH-KY-IN, USA
- 5 Dallas-Fort Worth-Arlington, TX, USA

Motor Vehicle Parts Manufacturing

Bubble size represents annual average employment



U.S Bureau of Economic Analysis

Company	Metro Area	Country	Inv. US \$Million	Jobs
Chrysler	Windsor, ON	Canada	\$2,000	
General Motors Co.	Dallas-Fort Worth-Arlington, TX	United States	\$1,400	600
Faraday Future	Las Vegas-Henderson-Paradise, NV	United States	\$1,375	4,500
Mercedes-Benz U.S. International	Tuscaloosa, AL	United States	\$1,300	300
Ford Motor Co.	Louisville/Jefferson County, KY-IN	United States	\$1,300	2,000

Adam Bruns Site Selection

> **SECTOR** LEADER IN:

here may be only one statistic you need to know about Dubai's competitive profile: From 2015 to 2020, the emirate's population is expected to grow faster (at 18.5 percent) than any other prominent global city except Beijing, according to UN figures cited by Newmark Grubb Knight Frank in its 2017 Global Cities report.

Other numbers only add to the demographic appeal. That same report showed prime office rent for upper floors of skyscrapers in Dubai as eminently affordable (\$43.50 per sq. ft.) compared to Shanghai (\$72), Sydney (\$90.75) and even Mumbai (\$53). In The Economist's 2016 Liveability Rankings, Dubai was among the most improved metro areas in the world, moving up by 4.6 percent to No. 74 out of 140 cities.

Another relevant number: 2020. That's the year Dubai will host the World Expo, an event serving as a catalyst for an entire menu of business, environmental and social programs.

Equidistant from London and Seoul, Dubai's

accessibility to so much of the business world has earned the emirate its own star on the map among the corporate elite. Now it's gaining the attention and investment of the global startup community too.

Iragi-American Muhammed Mekki is cofounder, with fellow McKinsey & Co. consultant Louis Lebbos, of AstroLabs, the only Google for Entrepreneurs Tech Hub in the Middle East and North Africa region. The hub launched in October 2015 in the DMCC Free Zone, which since its establishment in 2002 has blossomed to encompass 11,500 registered companies. The pitch to Google wasn't hard. "It's the place where the most serious entrepreneurs are based and the venture capital is concentrated," Mekki says of Dubai.

Mekki says surveys show a lot of actively searching talent is interested in the region. And he knows firsthand about multicultural appeal, as people from 30 countries are among the founding members of AstroLabs: "You have the ability to locate any talent you want in Dubai. Say you have tech talent in Eastern Europe and Russia, with part in Asia or the US — you can bring everybody here and get residency and base a global team out of Dubai."

Transport and logistics infrastructure is critically important, and the growing network of Emirates Airlines adds to the convenience. That infrastructure is in the midst of a rocket-booster thrust into the future.

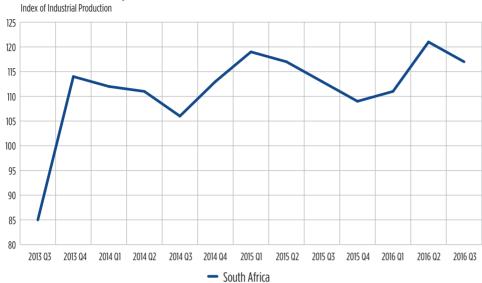
Elon Musk-backed Hyperloop Technologies is developing a transport method using electric propulsion to accelerate an autonomous vehicle through a tube at faster-than-airline speeds in a low-pressure environment. In August 2016 the company signed a deal with logistics developer DP World to explore how Hyperloop technology could help move cargo from ships docked at Dubai's Jebel Ali Port to a new inland container depot. By October, DP World — which operates 77 marine and inland terminals on six continents — had stepped up with the R&D funds to continue the work.

"The world is changing quickly and we want to be involved in the potential this kind of innovation presents, connecting markets and economies around the world and realizing our vision to lead the future of world trade," said DP World Group Chairman and CEO Sultan Ahmed Bin Sulayem."

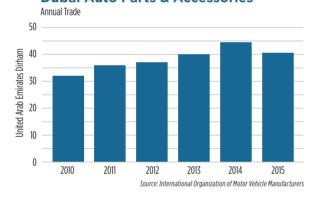








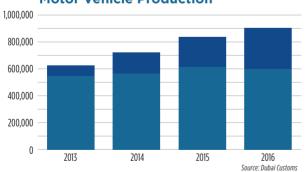
Dubai Auto Parts & Accessories



Top 5 Cities

- 1 Dubai-Sharjah-Ajman, UAE
- 2 Lagos, Nigeria
- 3 Abu Dhabi, UAE
- 4 Johannesburg, South Africa
- 5 Pretoria-Tshwane, South Africa

Motor Vehicle Production



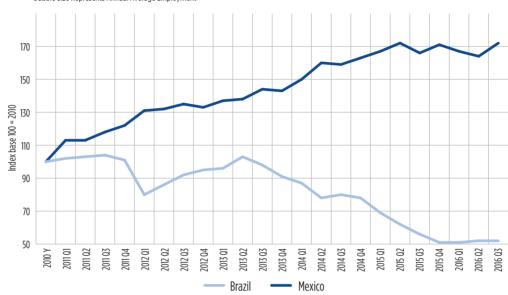
Company	Metro Area	Country	Inv. US \$Million	Jobs
Psa Peugeot Citroen	Kenitra	Morocco	\$632	
Renault	Tangiers Metro Area	Morocco	\$540	
Gibela/Passenger Rail Agency Of Sa	Johannesburg Metro Area	South Africa	\$200	
Ford Motor Company	Pretoria	South Africa	\$170	1,200
Advanced Manufacturing Solutions	Abu Dhabi	United Arab Emirate	s \$140	





Motor Vehicle Parts Manufacturing

Bubble Size Represents Annual Average Employment



Top 5 Cities

- 1 Querétaro, Mexico
- 2 São Paulo, Brazil
- 3 Monterrey, Mexico
- 4 Saltillo, Mexico
- 5 San Luis Potosí, Mexico

The Mexican Automotive **Industry Association** reported that light vehicle production during the first quarter of 2017 reached 943,702, a record number,

and 17.1% higher than the first quarter of 2016.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Nissin Mold Co.	Lagos de Moreno	Mexico	\$3,000	30
Nissan Motor Co.	Salvador	Brazil	\$1,500	1,500
Nissan/Daimler	Querétaro	Mexico	\$1,360	
Ford Motor Co.	Irapuato	Mexico	\$1,300	2,000
Audi	Puebla-Tlaxcala	Mexico	\$1,300	



eys to this sector? Language capabilities, low data latency, time zone, institutional clusters (for finance in particular) and workforce availability all figure prominently, against the standard required backdrop of affordable office space.

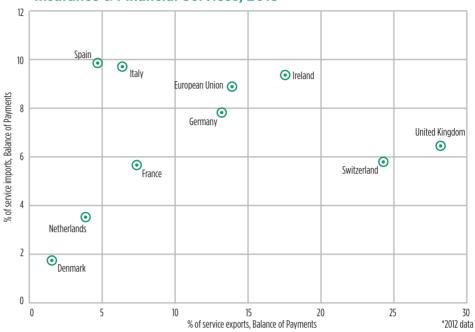
Whether companies are outsourcing, in-sourcing or rearranging services operations, this sector is always churning. Nowhere is the churn more dynamic than in the UK and Western Europe. In no sector will Brexit figure more prominently than this. Already, it has raised sufficiently serious uncertainties in some segments of the international financial services sector to cause a re-evaluation of some near-term financial services sector investments. Less understood but potentially just as important might be a reassessment of some business service operations as well, as companies determine how best to serve the UK, EU and EMEA markets.

But that's for the future. These rankings focus on what's already happening, including strong activity in three UK cities — London, Birmingham and Belfast — dominating the Western Europe charts, with the other two top-five cities in nearby Ireland. Warsaw, Budapest and Prague continue their perennial high performance in Eastern Europe, where large-headcount services operations proliferate. In Africa and the Middle East, again the UAE shines, but Nairobi and Addis Ababa make an appearance. In the Asia Pacific, Pune, Beijing and Manila lead the way.

Latin American business services capitals include San José, Costa Rica; Guatemala City; Santo Domingo, Medellín and Campinas, Brazil. And North America is led — as it is in many sectors — by Chicago, just ahead of Atlanta, Phoenix, Dallas and Cincinnati. Meanwhile, even though it misses out on our top five, Toronto is a frequent short-list city for many corporations.

BUSINESS & FINANCIAL SERVICES

Insurance & Financial Services, 2015



Top 5 Cities

- 1 London, UK
- 2 Dublin, Ireland
- **3** Birmingham-West Midlands, UK
- 4 Cork, Ireland
- 5 Belfast, UK

Dublin is a major global hub for fund administration, aircraft leasing, insurance and a range of wholesale banking activities. Ireland's International financial services sector employs 25,000, and includes operations from half of the world's top 50 banks.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Nordea Bank	Copenhagen	Denmark	\$159	
Firstrand Bank	Cardiff	United Kingdom	\$143	600
Deutsche Bank	Birmingham	United Kingdom	\$96	
Citi	Belfast	United Kingdom	\$84	600
Concentrix Corp./Synnex Corp.	Belfast	United Kingdom	\$60	1,000

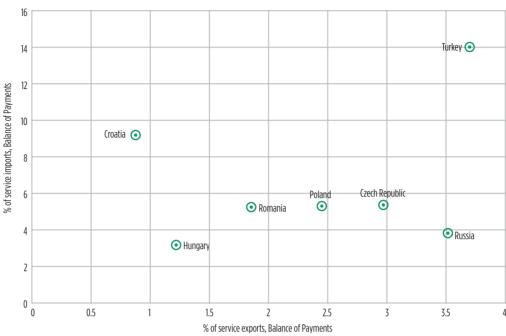


"London is currently the center of financial services in Europe and we expect that to continue in the foreseeable future. However, many firms may need a physical EU27 nexus for some of their activities if they are to retain EU clients after a Brexit."

— Marcel Van Loo, EY EMEIA Financial Services Regional Managing Partner, January 2017



Insurance & Financial Services, 2015



Top 5 Cities

- 1 Warsaw, Poland
- 2 Budapest, Hungary
- 3 Prague, Czech Republic
- 4 Istanbul, Turkey
- 5 Krakow, Poland

BPO, SSC, IT and R&D Centers in Poland



Total number of jobs at business services centers, of which 177,000 are at foreign centers and 35.000 are at Polish centers.



Number of business services centers with at least 1,000 employees



Total number of business services centers, in Poland, of which 676 are foreign centers.

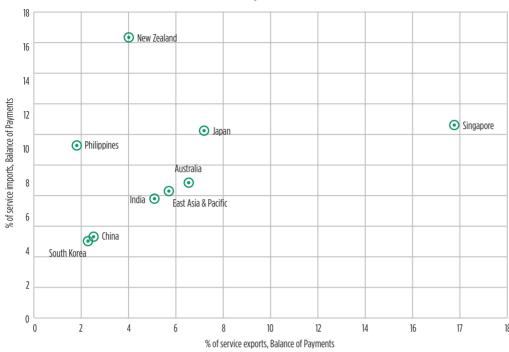


Employment growth in foreign centers in Poland in the last year (Q1 2015 - Q1 2016) more than in previous years

Company	Metro Area	Country	Inv. US \$Million	Jobs
General Electric	Budapest	Hungary	\$71	2000
Bank Of China	Budapest	Hungary	\$33	126
HB Reavis	Budapest	Hungary	\$28	275
Mbank S A	Lodz	Poland	\$26	
Blackstone	Athens	Greece	\$22	
Citibank	Budapest	Hungary	\$16	250



Insurance & Financial Services, 2015



Source: International Monetary Fund, Balance of Payments Statistics Yearbook and data files.

In opening Diageo's new 1,000-employee services center in Bengaluru in February 2017, CEO Ivan Menezes said he hoped to make India the spirits company's No. 1 market over the next decade.

Top 5 Cities

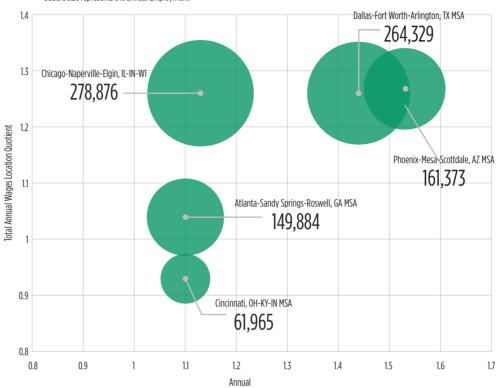
- 1 Pune, India
- Beijing, China
- Manila, Philippines
- 4 Shanghai, China
- 5 Mumbai, India

,,				
Company	Metro Area	Country	Inv. US \$Million	Jobs
Oversea Chinese Banking Corp.	Shanghai	China	\$167	
Igate	Pune	India	\$70	
Synnex	Sydney	Australia	\$45	100
Maybank	Mumbai	India	\$28	18
Startek	Manila	Philippines	\$9	

BUSINESS & FINANCIAL SERVICES



Bubble size represents the annual Employment



Top 5 Cities

- 1 Chicago-Naperville-Elgin, IL-IN-WI, USA
- 2 Atlanta-Sandy Springs-Roswell, GA, USA
- 3 Phoenix-Mesa-Scottsdale, AZ, USA
- 4 Dallas-Fort Worth-Arlington, TX, USA
- 5 Cincinnati, OH-KY-IN, USA

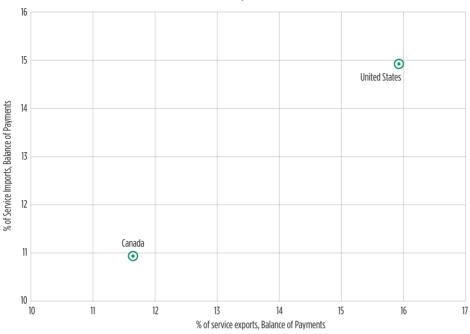
Goldman Sachs forecasts that ultimately \$660 billion in revenue could migrate from traditional financial services to FinTech payments, crowdfunding, wealth management and lending.

> — U.S. Department of Commerce International Trade Administration 2016 FinTech Top Markets Report

Company	Metro Area	Country	Inv. US \$Million	Jobs
Convergys	Cincinnati, OH-KY-IN	United States	\$820	
Sunera	Tampa-St. Petersburg-Clearwater, FL	United States	\$785	41
Travelers Indemnity Co.	Omaha-Council Bluffs, NE-IA	United States	\$700	25
State Farm Insurance	Phoenix-Mesa-Scottsdale, AZ	United States	\$600	5,000



Insurance & Financial Services, 2015



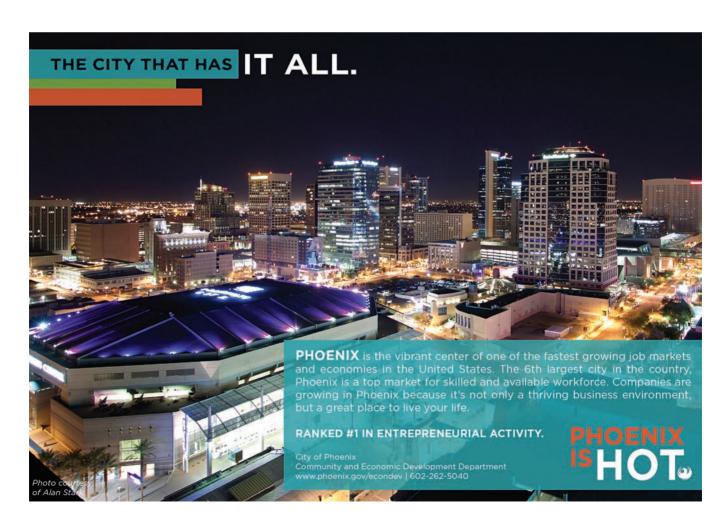




PHOTO COURTESY GETTY IMAGES

Dan Levine Oxford Economics

SECTOR a
LEADER IN: b

















bu Dhabi has been moving to rebalance its economy in response to low global oil prices. Nationally, the UAE has taken measures to restore its fiscal balance — for example, by slowing expenditures on non-essential projects, restraining spending overall, and increasing tax revenue through an expected increase in VAT and corporate tax rates.

At the same time, Abu Dhabi is a strong beneficiary of the government's effort to diversify toward a more knowledge-based economy. These efforts will be further supported through investments currently underway in preparation for the Dubai World Expo 2020; an event that will further enhance the city's reputation as one of the region's premier business hubs.

Abu Dhabi attracts a great deal of foreign direct investment, and much of that is in real estate. For example, an estimated 25 percent of inbound foreign direct investment reported last year was non-resident purchases of real estate.

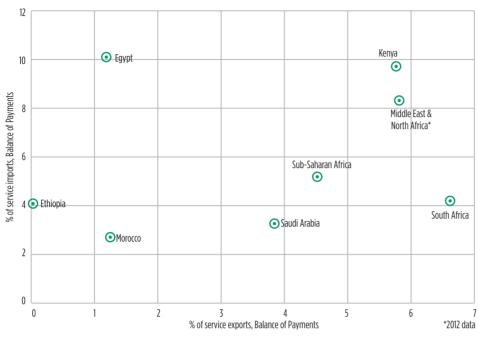
Still, a very sizable percentage of projects were investments in the finance and insurance sector.

Of special note is the amount of foreign direct investment being made in manufacturing. According to the Statistics Centre of Abu Dhabi, FDI in manufacturing jumped in 2016 to \$5.2 billion. Recent projects tracked by Conway Projects Database have included investments by Al Gharbia Pipe Co. (\$300 million, 370 jobs) and US brake disc and caliper maker Advanced Manufacturing Solutions (\$170 million).

Much of this increase was attributed to the concerted effort underway to improve services and further develop the specialized industrial zones established by the government specifically to attract manufacturing investment. The zones offer a variety of attractive benefits including favorable tax treatment, free repatriation of profits, and reduced energy costs, and are an important component of Abu Dhabi's effort to diversify its economic base.



Insurance & Financial Services, 2015



With Nairobi's international financial center at its core, financial services is one of the sectors within the economic pillar of Kenya's Vision 2030 plan, which aims to transform the country into a middle-income economy by year 2030.

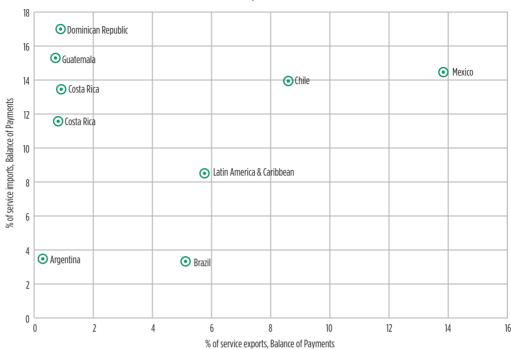
Top 5 Cities

- 1 Dubai-Sharjah-Ajman, UAE
- 2 Nairobi, Kenya
- 3 Abu Dhabi, UAE
- 4 Addis Ababa, Ethiopia
- 5 Cape Town, South Africa

Selected Corporate Facilities investinents, 2013-2017				
Company	Metro Area	Country	Inv. US \$Million	Jobs
Amzone International	Dubai-Sharjah-Ajman	United Arab Emirate	s \$20	
Mastercard	Nairobi	Kenya	\$11	
Fidelity Bank	Nairobi	Kenya	\$7	
Centre Point Logistics	Dubai-Sharjah-Ajman	United Arab Emirate	S	



Insurance & Financial Services, 2015



Top 5 Cities

- 1 San José-Heredia, Costa Rica
- 2 Guatemala City, Guatemala
- 3 Santo Domingo, Dominican Republic
- 4 Medellín, Colombia
- 5 Campinas, Brazil

Tholons identified San José, Costa Rica as the No. 1 outsourcing destination in Latin America. The business services sector in Costa Rica has seen employment grow by a factor of 44 and the number of companies bloom from six to 139 since the year 2000.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Banco Santander	Campinas	Brazil	\$493	
Alorica	Santo Domingo	Dominican Republic	\$250	1,000
BBVA Banco Francés	Buenos Aires	Argentina	\$221	
Banco Agricola	San Salvador	El Salvador	\$55	
Atento	Guatemala City	Guatemala	\$46	1,200



CHEMICALS & PLASTICS

he strongest growth prospects for this sector, says Oxford Economics, are in the United States, where shale production has driven down natural gas prices. Many of the proposed projects are on hold as investors wait for more clarity regarding future oil prices. But a number are moving ahead, including Shell's long-anticipated cracker complex in Pennsylvania and multiple projects along the Gulf Coast, including a tie-up between SABIC and ExxonMobil for what will be the world's largest steam cracker plant near Corpus Christi. So it's no surprise to see Houston and Baton Rouge at the top of the North America rankings.

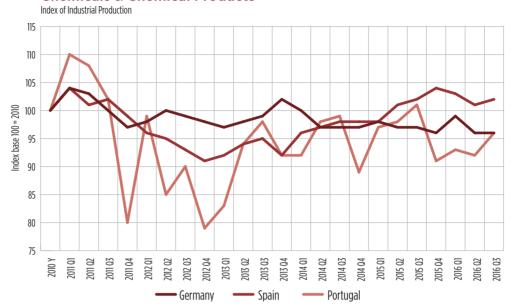
Clusters with critical mass also continue to form in Bogotá, São Paulo and Campinas; in the Polish cities of Katowice and Lodz;

and in Shanghai, Suzhou, Singapore and Jakarta (where Lotte Chemical Titan is investing \$4 billion) in the Asia Pacific. Cities in Spain and Portugal lead the way in Western Europe, and Abu Dhabi, Cairo and Johannesburg top the charts in Africa & the Middle East.

'Production of soaps and detergents in the developed economies should remain strong, given solid consumer spending, says Oxford Economics' Dan Levine. "The rising number of middle-class households in the developing world (China, Mexico, and India) should support increased investment in this industry in those locations as well," including in and around our chart-toppers Tijuana, Monterrey and Pune.

PHOTO COURTESY OF GETTY IMAGES

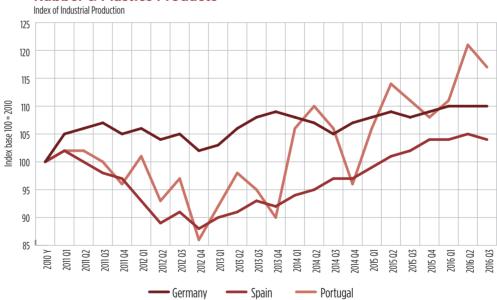




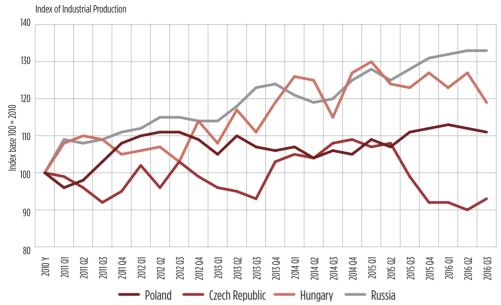
Top 5 Cities

- 1 Barcelona, Spain
- 2 Porto, Portugal
- 3 Tarragona, Spain
- 4 Berlin-Brandenburg, Germany
- 5 Cologne, Germany

Rubber & Plastics Products



Company	Metro Area	Country	Inv. US \$Million	Jobs
Energy Recovery Systems	Antwerpen	Belgium	\$4,079	
Sunshine Kaidi New Energy Group Co.	Kemi	Finland	\$1,102	
BASF	Ludwigshafen am Rhein	Germany	\$1,069	200
Urenco	Chester	United Kingdom	\$612	
Yara International	Porsgrunn	Norway	\$350	



Rubber & Plastics Products



Top 5 Cities

- 1 Katowice, Poland
- 2 Lodz, Poland
- 3 Ulyanovsk, Russia
- 4 Otrokovice, Czech Republic
- 5 Kazincbarcika, Hungary

Company	Metro Area	Country	Inv. US \$Million	Jobs
Mitsubishi/Gap Instaat Yatirim	Garabogaz	Turkmenistan	\$1,300	
Nexen Tire Co.	Prague	Czech Republic	\$1,180	
Turkmenkhimiya Group	Mary	Turkmenistan	\$1,000	
Mitsubishi/Phosagro/Sojitz	Moscow	Russia	\$785	
Apollo Tyres	Budapest	Hungary	\$675	



Dan Levine
Oxford Economics

SECTOR
LEADER IN:

ão Paulo is Brazil's (and Latin America's) largest city and as such cannot escape the pain caused by Brazil's on-going recession. During 2016, for example, Oxford Economics estimates that the São Paulo regional economy declined by 5.3 percent. Moreover, the decline was widespread, affecting the city's manufacturing, construction and consumer-related sectors. High consumer debt levels and Brazil's shrinking financial sector (largely based in São Paulo) added further downward pressure on the city's economy.

Within that context, it is surprising that the city should rank as strongly as it did in the current survey. Part of the explanation is likely that some of the investments being reported reflect companies seeking to arbitrage weak currency and labor markets in Brazil. For example, the Brazilian Central Bank reports that during the first half of 2016 (the most recent period available) a total of \$2.3 billion in foreign direct investment was made in the auto industry — an industry that is largely based in the São Paulo region. This was very likely attributable in part to foreign manufacturers taking advantage of the weak real by sourcing supplies to Brazilian manufacturers.

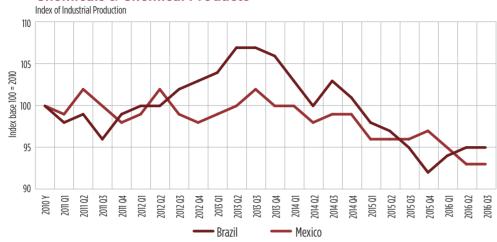
Indeed, the data in the Conway Projects

Database shows facility investments in the Greater São Paulo region over the past few years by Toyota (Porto Feliz), Daimler (Iracemapolis) and China's BYD, in addition to Honda a little further inland in Itirapina.

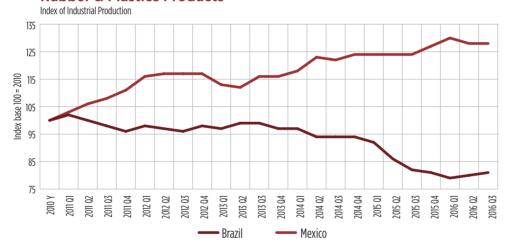
Attracting further manufacturing investment is important to the economic recovery of both Brazil and São Paulo. Increasing the export of manufactured goods would provide an important boost to the regional and national economies and help offset continued weakness in the commodity markets (that have until recently fueled much of Brazil's growth).

Even in a climate of economic weakness, the city and surrounding region maintain important attractions for investors. The state of São Paulo hosts many of Brazil's top universities, and this talent continues to attract research and development projects to the region, particularly in the pharmaceutical industry (heavily concentrated in the São Paulo region).

In fact, the current weakness in the national and regional economies might make this an opportune time for companies seeking to establish a Latin American regional headquarters, technical operation or research center to consider São Paulo.



Rubber & Plastics Products

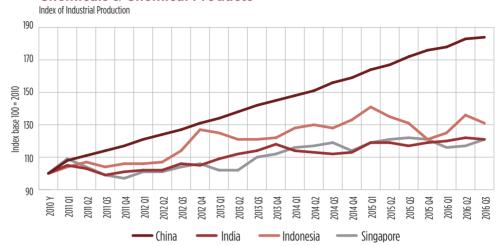


Top 5 Cities

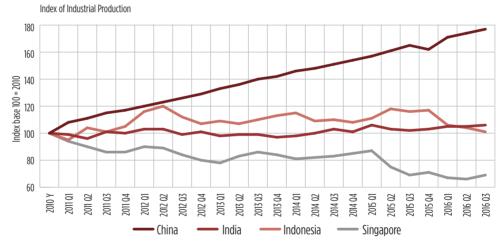
- 1 Bogotá, Colombia
- 2 São Paulo, Brazil
- 3 Campinas, Brazil
- 4 Tijuana, Mexico
- 5 Monterrey, Mexico

Company	Metro Area	Country	Inv. US \$Million	Jobs
Nova Chemicals Corp.	Lacombe County	Brazil	\$1,000	
Synthos	Porto Alegre	Brazil	\$640	
Goodyear Tire & Rubber Co.	San Luis Potosi	Mexico	\$500	
Yara International	Rio Grande	Brazil	\$283	1,000





Rubber & Plastics Products



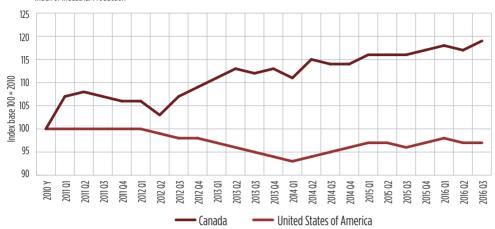
Top 5 Cities

- 1 Shanghai, China
- 2 Suzhou, China
- 3 Singapore
- 4 Jakarta-Jabodetabek, Indonesia
- 5 Pune, India

Company	Metro Area	Country	Inv. US \$Million	Jobs
Indian Oil Corp.	Jagatsinghpur	India	\$3,154	
Xianda Seawater Resources Development Co.	Wuxi	China	\$2,500	
Matix Fertilizers	Chennai	India	\$1,765	
Honeywell International	Suzhou	China	\$1,000	
Tian Hong Rec Silicon Materials Co.	Yulin	China	\$1,000	
Ptt Global Chemical Public Co.	Eastern Seaboard Region	Thailand	\$1,000	
Huchems Fine Chemical Corp.	Tanjung Kidurong	Malaysia	\$1,000	400







Rubber & Plastics Products



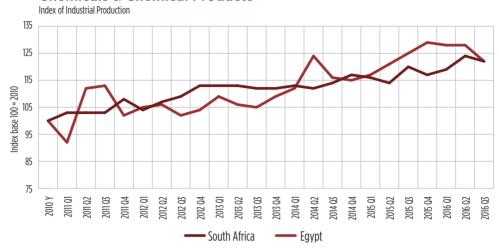


Top 5 Cities

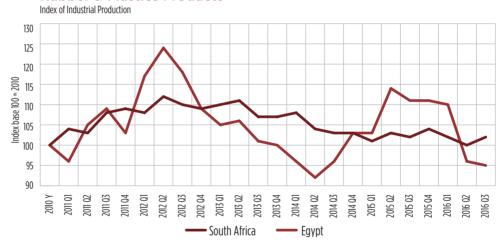
- 1 Houston-The Woodlands-Sugar Land, TX, USA
- 2 Baton Rouge, LA, USA
- 3 Chicago-Naperville-Elgin, IL-IN-WI, USA
- 4 Cincinnati, OH-KY-IN, USA
- 5 Atlanta-Sandy Springs-Roswell, GA, USA

Company	Metro Area	Country	Inv. US \$Million	Jobs
G2 LNG	Lake Charles, LA	United States	\$11,000	272
Lake Charles LNG/BG	Lake Charles, LA	United States	\$10,000	250
Formosa Petrochemical Corp.	New Orleans-Metairie, LA	United States	\$9,400	1,200
SCT&E	Lake Charles, LA	United States	\$9,250	200
Fund Connell USA Energy & Chemical	Houston-The Woodlands-Sugar Land, TX	United States	\$4,500	500





Rubber & Plastics Products



Top 5 Cities

- 1 Abu Dhabi, UAE
- 2 Cairo, Egypt
- 3 Johannesburg, South Africa
- 4 Nairobi, Kenya
- 5 Dubai-Sharjah-Ajman, UAE

Company	Metro Area	Country	Inv. US \$Million	Jobs
Royal Dutch Shell	Basra	Iraq	\$11,000	162
Maaden/Mosaid/Sabic	Dammam	Saudi Arabia	\$7,000	
Brass Fertilizer Co./Haldor Topsøe	Lagos	Nigeria	\$3,500	
Al-Jubail Petrochemical Co.	Al Jubayl	Saudi Arabia	\$3,400	
Bawabet Al Kuwait Holding Co.	Suez	Egypt	\$3,000	



ELECTRONICS

rom giant TVs to ever-larger smartphones, the world craves screen time — and that requires more and bigger screens. That constant need has driven major new liquid-crystal-display investments in Asian markets in particular, including several Chinese and Indian cities. That may explain in part why Shanghai heads the Asia Pacific rankings in this sector, followed by Chennai, Singapore and Ho Chi Minh City in surging Vietnam, where ON Semiconductor not long ago invested in a \$75-million expansion. ON was among the world's revenue leaders in 2016.

IHS Markit reports that the global semiconductor market posted a year-end growth rate of 2 percent in 2016, helped especially by tech embedded in cars. Global revenue came in at \$352.4 billion.

IHS Markit says electronics equipment sales (including an astounding 225 million TVs as recently as 2013) account for as much as 4.4 percent of the global manufacturing economy. Production of electronics and computers has

slowed recently, most acutely among Asian producers in Japan, Korea and, to a lesser extent, China. United States and European production has held up reasonably well, explaining why traditional leaders such as Austin (where Samsung and Cirrus Logic have expanded), Berlin and Barcelona stay at the top. Meanwhile, the precision assembly and manufacturing reputations of San José, Costa Rica, and Tijuana continue to be based on real work and production, as those cities lead the Latin American region.

Slowing smartphone sales are adversely impacting semiconductor production, and much of the industry's supply chain is shifting its focus to higher-end devices such as those used in data centers and cloud computing. Some places already are set for that migration: Highranked cities such as Singapore and Dublin are good examples of places with an electronics heritage where investors such as Accenture and Microsoft (in Dublin) and Google and Twitter (in Singapore) see the opportunity to marry data center heft with cloud-based services.



PHOTO COURTESY OF GETTY IMAGES

Dan Levine Oxford Economics



he popularity of Barcelona as a tourist destination sometimes masks the city's continued economic dependence on traditional manufacturing. For example, Barcelona is home to a number of automotive companies including Nissan and SEAT-VW, each with a large assembly plant in the region. But overall, manufacturing in Barcelona has been an underperforming sector.

Nonetheless, during 2016 the city's economic growth rate of 3.2 percent closely tracked Spain's national GDP growth rate of 3.3 percent. Barcelona's diverse economy, especially its large business services sector, has helped offset the weakness in manufacturing. Moreover, Spain's improving economy has helped lift employment throughout the country, although it must be remembered that the national unemployment still hovers near a shockingly high 18 percent. In Barcelona, employment grew by a very healthy 2.6 percent in 2016, but overall the city's

employment is still approximately 10 percent below its 2008 peak. And the regional economy continues to see a decline in working-age population.

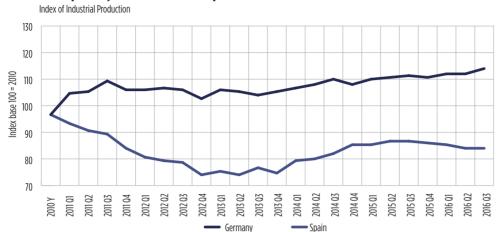
Oxford Economics forecasts that Barcelona's growth (although strong) will lag behind that of Madrid's over the next five years. Spain's capital continues to have strong sector growth in both the trade and information and communications sectors.

That said, the Catalonia region has a strong technology ecosystem, and the region has been successful competing for projects in software, logistics and support services.

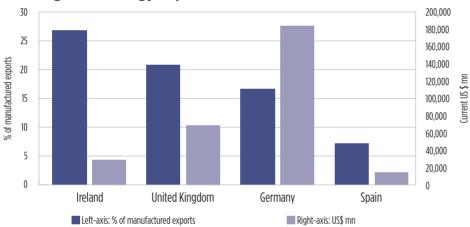
Moreover, Barcelona continues to invest in core infrastructure projects attractive to foreign investors. For example, Barcelona Catalonia is a major initiative that will develop land and buildings for the knowledge economy, and there are other similar property developments near major research centers that are intended to promote business-university collaboration.



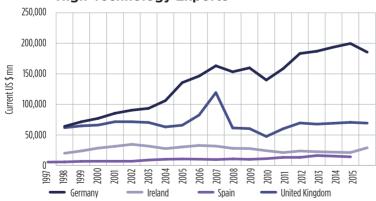




High-Technology Exports in 2015



High-Technology Exports



Top 5 Cities

- 1 Berlin-Brandenburg, Germany
- 2 Barcelona, Spain
- Dublin, Ireland
- 4 Nuremberg, Germany
- 5 Magdeburg, Germany

Company	Metro Area	Country	Inv. US \$Million	Jobs
Sew-Usocome	Stuttgart Region	Germany	\$76	
Comet	Flamatt	Swiss Confederation	n \$62	250
Hoerbiger Holding	Vienna	Austria	\$61	
Haldor Topsoe	Copenhagen	Denmark	\$56	27
RLC Engineering Group	Belfast	United Kingdom	\$55	80

Maggie Chin and Herminio Andres Tractus Asia

megacities. It is ranked third in the world by population behind No. 1 Tokyo and New Delhi. At over 24 million residents it is larger than the entire population of Australia. Shanghai's population, geographic location at the mouth of the Yangtze River Delta region — the largest concentration of economic activity in China — and diversity of industries and economic activity, place it high on the short-list of the world's most competitive cities. In fact, Shanghai has been ranked as China's most competitive city by the Hong Kong-based China Institute of City Competitiveness for the last four years. Shanghai's economic output, over US\$513 billion in 2016, accounts for about 4.5 percent of China's total GDP and would rank it just above Sweden at No. 21 of the world's economies if it were a country. Its GDP per capita of US\$32,600 is equivalent to the average of the European Union.

hanghai is one of the world's few

Driven by the combination of government policy and the decline in the cost competitiveness of China's manufacturing sector, Shanghai is in the midst of an economic transformation from an economy driven by manufacturing to one powered by services.

Shanghai's competitiveness has been

influenced by China's central government policies. Minimum wages have been pushed up by about 15 percent annually over the last decade. In addition Shanghai's tightening environmental regulations and land re-zoning from industrial to commercial and residential are pushing the migration of several manufactories from the city to the western areas of Shanghai's suburbs and the western region of the Yangtze River Delta, encouraging companies to locate only highly productive knowledge-based and capital intensive operations in the metro area.

Shanghai is the epicenter of a much broader regulatory reform championed by the central government and highlighted by the China (Shanghai) Pilot Free Trade Zone (FTZ), established in September 2013. Companies located within the Zone are subject to much less regulatory burden than in the rest of China.

Shanghai's efforts to shift the focus of its economy towards one driven by consumption, services and higher value-added activities is beginning to have its intended effect. According to Invest in Shanghai, output of services activities, including retail and wholesale, financial services, logistics and transportation and software and IT, has grown by over 9.5 percent. This shift is also reflected in FDI statistics. FDI in services reached US\$16.3 billion in 2016, accounting for 88.2 percent of all FDI in Shanghai.

While much of the world is looking inward, Shanghai is countering this trend. It is the most multinational and cosmopolitan city in China, with more than 38,000 foreign companies. They account for over two-thirds of its total trade, 61 percent of its GDP, and one-third of the city's tax revenue and employment.

Shanghai also has become an important center of global innovation. In 2016, 15 new foreign R&D centers (from the likes of TRW Automotive and Akzo Nobel) were established, bringing Shanghai's total to 411 — and more than 40 of these are global R&D centers. The number of regional multinational (MNC) headquarters also grew steadily. In 2016, 45 MNCs set up new regional headquarters in Shanghai, among which 15 were Asia Pacific headquarters, including Husqvarna and Lear Corporation. By the end of 2016, the cumulative number of regional headquarters in Shanghai reached 580.



SECTOR LEADER IN:







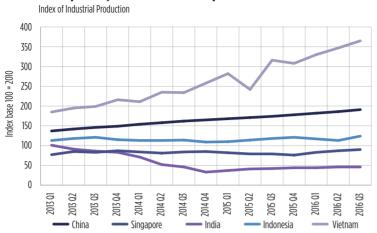








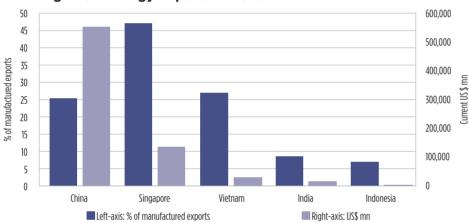




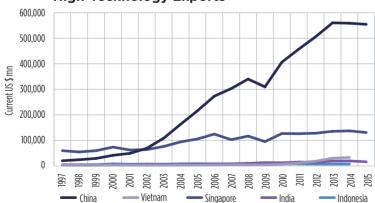
Top 5 Cities

- 1 Shanghai, China
- 2 Chennai, India
- **3** Singapore
- 4 Ho Chi Minh City, Vietnam
- 5 Jakarta-Jabodetabek, Indonesia

High-Technology Exports in 2015



High-Technology Exports

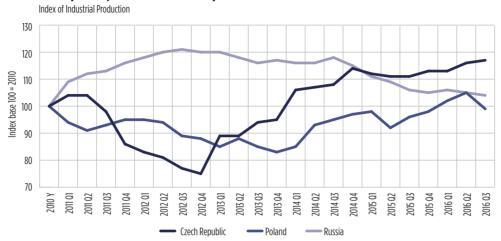


Company	Metro Area	Country	Inv. US \$Million	Jobs
Samsung Electronics Co.	Seoul	South Korea	\$14,700	
Boe Technology Group Co.	Fuqing	China	\$4,728	
Boe Technology Group Co.	Chengdu	China	\$3,530	
Hon Hai/Innolux Corp.	Kaohsiung	Taiwan	\$2,590	2,300
Wuhan China Star Optoelectronics Technology Co.	Wuhan	China	\$130	5,000

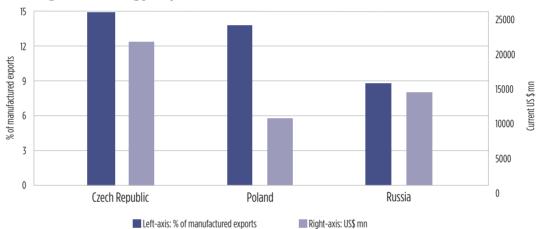








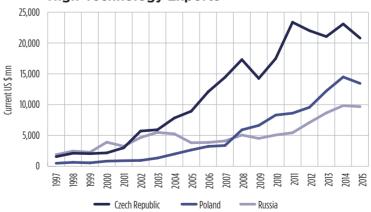
High-Technology Exports



Top 5 Cities

- 1 Brno, Czech Republic
- 2 Trutnov, Czech Republic
- 3 Katowice, Poland
- 4 Naberezhnye Chelny, Russia
- 5 Pilsen, Czech Republic

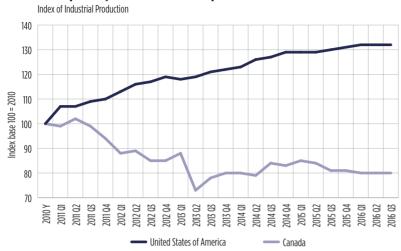
High-Technology Exports



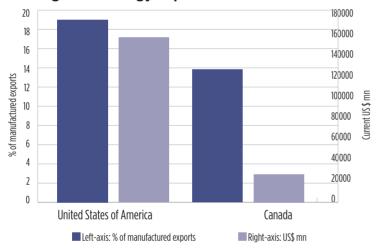
Company	Metro Area	Country	Inv. US \$Million	Jobs
Aselsan	Istanbul	Turkey	\$157	
Arcelik Anonim Sirketi	Gaesti	Romania	\$120	
Arctic SA	Gaesti	Romania	\$116	



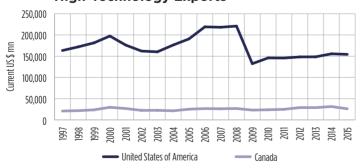




High-Technology Exports



High-Technology Exports

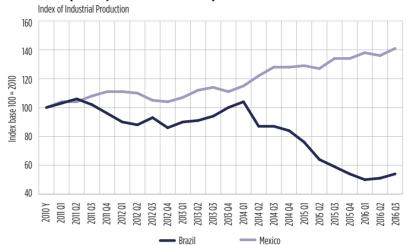


Top 5 Cities

- 1 Chicago-Naperville-Elgin, IL-IN-WI, USA
- 2 Austin-Round Rock, TX, USA
- 3 Cincinnati, OH-KY-IN, USA
- 4 New York-Newark-Jersey City, NY-NJ-PA, USA
- 5 Houston-The Woodlands-Sugar Land, TX, USA

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Company	Metro Area	Country	Inv. US \$Million	Jobs
Coastal Power Systems	Houston-The Woodlands-Sugar Land, TX	United States	\$900	
Soraa	Buffalo-Cheektowaga-Niagara Falls, NY	United States	\$750	375
Sensaras	New York-Newark-Jersey City, NY-NJ-PA	United States	\$450	31
General Electric	Louisville/Jefferson County, KY-IN	United States	\$280	
Woodward	Fort Collins, CO	United States	\$169	600

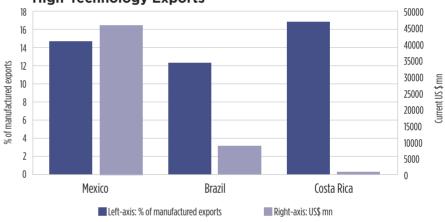




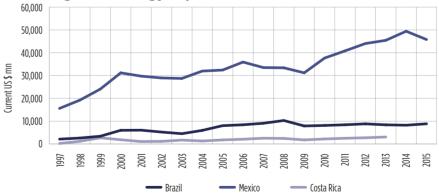
Top 5 Cities

- 1 San José-Heredia, Costa Rica
- 2 Tijuana, Mexico
- 3 Guadalajara, Mexico
- 4 São Paulo, Brazil
- 5 El Salto, Mexico





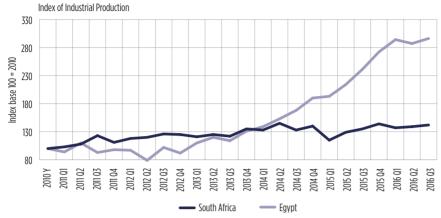




Company	Metro Area	Country	Inv. US \$Million	Jobs
Electrolux	Curitiba	Brazil	\$114	800
Mabe	Saltillo	Mexico	\$80	
Schneider Electric	Querétaro	Mexico	\$65	300
Toshiba	Belo Horizonte	Brazil	\$59	600
Mabuchi Motor Co.	Querétaro	Mexico	\$57	



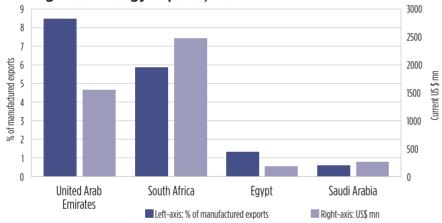




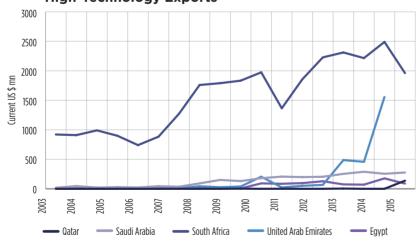
Top 5 Cities

- 1 Tenth of Ramadan City, Egypt
- 2 Dubai-Sharjah-Ajman, UAE
- 3 Cape Town, South Africa
- 4 Doha, Qatar
- 5 Dammam, Saudi Arabia

High-Technology Exports, 2014



High-Technology Exports



Company	Metro Area	Country	Inv. US \$Million	Jobs
General Electric	Lagos	Nigeria	\$250	300
Avic International	Nairobi	Kenya	\$200	
Siemens	Tangiers	Morocco	\$109	675
Industrial Systems Group	Dammam	Saudi Arabia	\$53	
Hisense	Cape Town	South Africa	\$34	1,200



nergy supply and demand continues to rebalance globally. Most of the rebalancing is market driven as lower prices discourage capital spending and exploration by energy firms — trends that will begin to impact supply. But there are signs the oil patch in Texas, for instance, is heating up again. And certainly traditional energy-friendly moves by the US presidential administration are going to help keep high-ranking areas in Texas and Louisiana atop the heap, while also sending an indirect boost to resurgent activity in Western Canada (note the LNG projects in BC listed on p. 57, located outside metro areas).

Energy isn't confined to petroleum, but some areas are as proficient at fostering renewables as they are at fostering petrochemical activity: Texas is No. 1 in wind energy generation, for example, and is home to its share of renewables-driven production. Aberdeen, Scotland — in Western Europe's top five along with Dublin and Berlin,

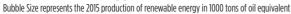
among others — is another example of a metro area poised to serve a multiplicity of energy solutions with know-how, infrastructure and ingenuity.

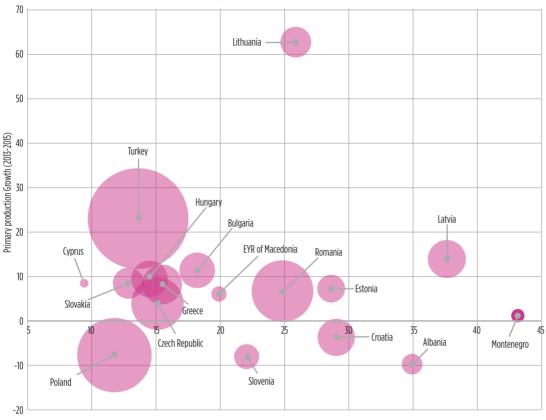
The oil refining industry is still expanding, with most capacity growth occurring in China and the Middle East. Suzhou, Seoul, Bengaluru and Wuxi top our rankings for the Asia Pacific. Rio and Mexico city top the charts in Latin America, and Moscow, Warsaw and Izmir lead the way in Eastern Europe & Central Asia.

India will also see rising demand for oil products, and this will limit that country's ability to be a net supplier to the rest of the world, notes Oxford Economics. But if that means more domestic energy use in conjunction with the "Make in India" campaign's aim to increase manufacturing, employment and incomes, the country may find the trade-off worthwhile.

PHOTO BY HEATHER OVERMAN

Renewable Energy





Share in gross final energy consumption (2015)

Source: Furostats

"The Russian oil industry has managed to perform well and both investment and production are growing, despite low oil prices. Investment in the energy sector — which should rise by 15% in 2016 to 3.6 trillion rubles (\$55.5 billion) — has materialized, despite the challenging market environment."

— OPEC monthly report, December 2016

Top 5 Cities

- 1 Moscow, Russia
- 2 Warsaw, Poland
- 3 Izmir, Turkey
- 4 Budapest, Hungary
- 5 Karvina, Czech Republic

Company	Metro Area	Country	Inv. US \$Million	Jobs
State Oil Company of Azerbaijan	Istanbul	Turkey	\$5,700	
Tupras	Istanbul	Turkey	\$3,000	500
Hidroelectrica	Budapest	Hungary	\$155	13
Siemens/Power Machines	St. Petersburg	Russia	\$134	





PHOTO COURTESY OF GETTY IMAGES

Adam Bruns Site Selection

ow can something named for high speed at the same time function as a powerful anchor? When the something in question is HS2, the High Speed 2 rail network that in February received the official go-ahead known as royal assent. That means 351 miles of new track that, in phase one, will reduce Birmingham-to-London journey times to 49 minutes.

HS2, whose developer entity will be headquartered in Birmingham, is expected to create around 25,000 jobs and 2,000 apprenticeships during construction. "It will also support growth in the wider economy, worth an additional 100,000 jobs," says the Transport Ministry, as it links eight major UK cities.

That means an uptick in real estate demand. According to a market report on UK office space from JLL, the total amount of more than 1 million sq. ft. of spec office space under construction in Birmingham during Q4 2016 was nearly four times the total in Q4 2015. HS2, says the UK government, will fuel economic benefits worth over £103 billion (US\$129 billion).

"Birmingham is booming," J. Tate Godfrey, executive director of the Industrial Asset Management Council, wrote me from the city's train station in February 2017. "An incredible number of cranes in sight in the downtown area is a highly visible indicator of Birmingham's

recent economic development success."

Among the 12 sectors examined in our analysis for this report, the UK industrial capital was top five in half: aerospace, automotive, business & financial services, food & beverage, machinery/equipment and transportation/ logistics. Among projects tracked by Site Selection's Conway Projects Database over the past two years have been facility investments by Jaguar Land Rover, Advanced Computer Software Group (hundreds of jobs at a regional HQ), Six Degrees Technology Group (a data center near the city's "Silicon Canal") and financial services powerhouse HSBC, which, in a sign of things to come, is relocating 1,000 jobs from London on top of the 2,500 jobs already resident in Birmingham.

"Long known for manufacturing, Birmingham has seen an uptick in service jobs from the financial sector," notes Godfrey. "This will have a very positive impact on housing and retail, and should add considerable diversity to its downtown area."

"We've already seen some relocations because HS2 Ltd brought its headquarters here," said JLL's Jonathan Carmalt in a March 2017 report. "However, now we expect a wave of further lettings. We're not just talking to related industries and suppliers, but occupiers attracted to the city's heightened profile and the quality of life we are able to offer."

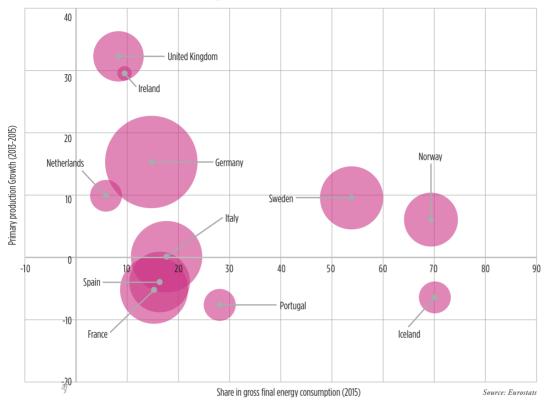






Renewable Energy

Bubble Size represents the 2015 production of renewable energy in 1000 tons of oil equivalent



Energy UK reports that 637,000 people work directly or indirectly in the sector, which invested £18 billion (US\$22 billion) in 2015.

Top 5 Cities

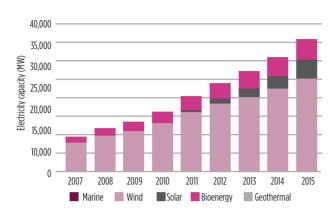
- 1 Berlin-Brandenburg, Germany
- 2 Dublin, Ireland
- 3 London, UK
- 4 Lyon, France
- 5 Aberdeen, UK

Company	Metro Area	Country	Inv. US \$Million	Jobs
ExxonMobil	Antwerp	Belgium	\$1,000	
GE Oil & Gas UK	Florence	Italy	\$600	
Total	Antwerp	Belgium	\$500	

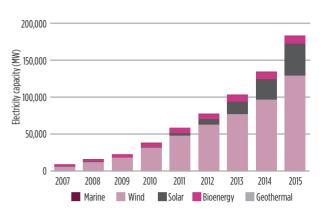




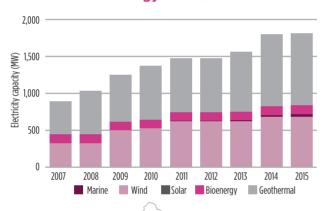
Renewable Energy in India



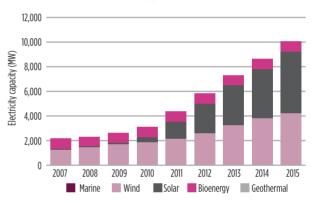
Renewable Energy in China



Renewable Energy in New Zealand



Renewable Energy in Australia



Top 5 Cities

- 1 Suzhou, China
- 2 Seoul, South Korea
- 3 Bengaluru, India
- 4 Wuxi, China
- 5 Hyderabad, India

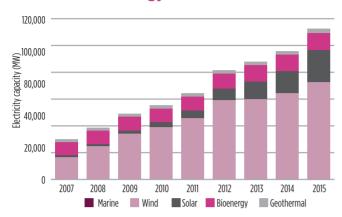
According to India's Department of Industrial Policy and Promotion (DIPP), the petroleum and natural gas sector attracted FDI worth US\$6.8 billion between April 2000 and December 2016.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Ptt/Aramco	Hai Phong	Vietnam	\$22,000	
SK Hynix	Seoul	South Korea	\$12,683	
Sinopec	Wuxi	China	\$6,640	
Indian Oil Corp.	Jagatsinghpur	India	\$5,546	
Jaiprakash Associates	Delhi National Capital Region	India	\$5,208	

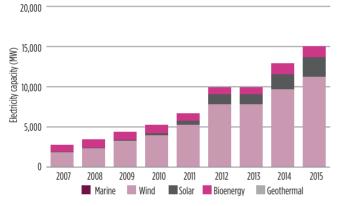




Renewable Energy in The United States



Renewable Energy in Canada



Source: IRENA (2016), Renewable Energy Statistics 2016, The International Renewable Energy Ivency. Abu Dhabi.



According to JPMorgan Chase, in 2014 11.8% of employment and 4.7% of wages in Greater Houston were tied to the oil and gas industry.

Top 5 Cities

- Houston-The Woodlands-Sugar Land, TX, USA
- 2 New Orleans-Metairie, LA, USA
- 3 Pittsburgh, PA, USA
- 4 Dallas-Fort Worth-Arlington, TX, USA
- 5 Lafayette, LA, USA

Company	Metro Area	Country	Inv. US \$Million	Jobs
Kitsault Energy	Kitsault, BC	Canada	\$34,000	
Steelhead LNG Corp.	Port Alberni, BC	Canada	\$30,000	
Kitimat Clean	Kitimat, BC	Canada	\$25,000	3,000
WCC LNG Holdings	Prince Rupert, BC	Canada	\$25,000	
LNG Canada	Kitimat, BC	Canada	\$25,000	



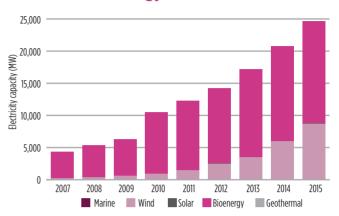




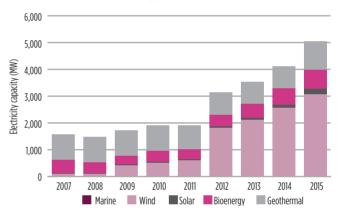
"Further opening of the power sector to private participation helps Mexico mobilize the \$10 billion per year that it needs to meet an 85% increase in electricity demand to 2040."

World Energy Outlook2016, InternationalEnergy Agency

Renewable Energy in The Brazil



Renewable Energy in Mexico



Top 5 Cities

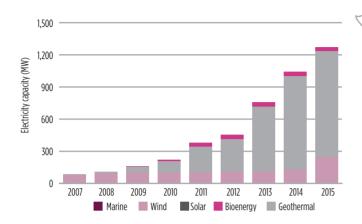
- 1 Rio de Janeiro, Brazil
- 2 Mexico City, Mexico
- 3 San Luis Potosí, Mexico
- 4 Campinas, Brazil
- 5 Hermosillo, Mexico

Company	Metro Area	Country	Inv. US \$Million	Jobs
Chevron Corp./YPF Sa	Buenos Aires	Argentina	\$1,240	
Empresas Ica, S.A.B. De C.V.	Ciudad Madero	Mexico	\$1,000	
Repsol Ypf Sa	La Paz	Bolivia	\$640	
Petróleos Mexicanos	Mexico City	Mexico	\$274	
Gdf Suez Sa	Antofagasta	Chile	\$200	

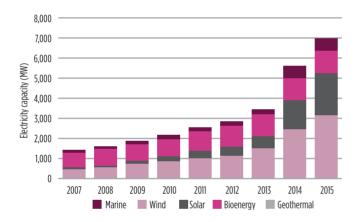




Renewable Energy in The Middle East



Renewable Energy in Africa



Top 5 Cities

- 1 Dubai-Sharjah-Ajman, UAE
- 2 Dammam, Saudi Arabia
- 3 Cape Town, South Africa
- 4 Luanda, Angola
- 5 Casablanca, Morocco

The Dubai Clean
Energy Strategy
aims to provide
7% of Dubai's
energy from clean
energy sources
by 2020. It will
increase this target
to 25% by 2030 &
75% by 2050.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Dangote Oil Refining Co.	Lagos	Nigeria	\$14,000	2,000
Chevron Nigeria	Lagos	Nigeria	\$9,500	
Intel	Jerusalem	Israel	\$6,000	
Oman Oil Refineries And Petroleum Industries Co.	Al Sohar	0man	\$2,800	
Bawabet Al Kuwait Holding Co. S.A.K.	Alexandria	Egypt	\$2,500	

FOOD & BEVERAGE

hen it comes to tallying corporate facility projects globally, the only sector that gives chemicals/
pharmaceuticals and transportation equipment a run for their money is food and beverage. It's not just about production and processing: As company leaders across many sectors know well, it pays to have a local presence, be it in the form of a regional HQ, a distribution center or R&D.

When it comes to food, regional affiliation is important for reasons that go well beyond branding. As non-GMO rules come into effect in EU and other territories, local production and supply chains are requirements, not just a feelgood maneuver. Safety and science matters more than ever before against a backdrop of contamination incidents. Moreover, the general preference for local sourcing and freshness translates to what is either a return to economic development's roots or a bit of a role reversal: Whereas we're used to seeing farmland assembled and sold for industrial development, now we're seeing more food processing taking place in proximity to the productive farmland itself.

Our rankings bear this out. We identify two Vietnam cities among the top three

in the Asia Pacific; growth in Cairo and Lagos; and, in the US, the presence of small but powerful Sioux City standing in among giants such as Chicago, Cincinnati and No. 1 Dallas-Fort Worth. The same dynamic brings Guayaquil, Ecuador, into the company of Brazilian cities with teeming populations.

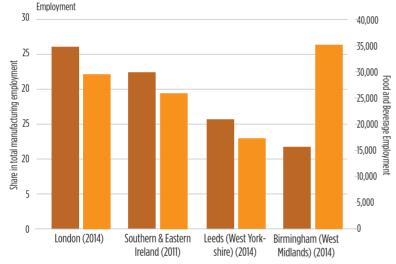
"The factors we're addressing — food safety/regulations, plant efficiency, cold storage, demographics/consumption patterns — impact siting and operational decisions for food processing facilities," Chris Copenhaver, co-lead of the Food and Beverage Practice at Cushman & Wakefield, told Site Selection in 2016. "A food manufacturer's ability to operate within a complex regulatory environment while efficiently operating their plant and effectively managing their food supply chain — which may have a 'cold chain' component — all while being laser-focused on satisfying the preferences and changing tastes of the end consumer, is the name of the game. An inability to achieve any of these objectives can cripple food enterprises. Siting considerations are often made with the goals of making the achievement of these objectives possible.'

PHOTO COURTESY OF GETTY IMAGES





Food & Beverage



- Share of Food and Beverage Employment in manufacturing total
- Manufacturing of Food and Beverages Employment

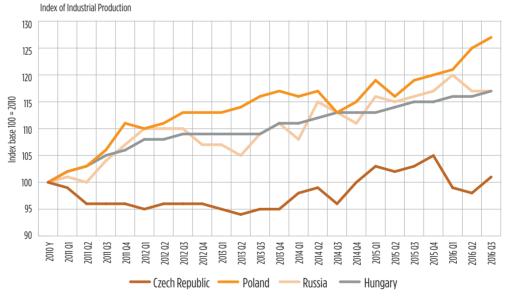
Top 5 Cities

- 1 London, UK
- 2 Dublin, Ireland
- 3 Birmingham-West Midlands, UK
- 4 Leeds City Region, UK
- 5 Cork, Ireland

Company	Metro Area	Country	Inv. US \$Million	Jobs
Nestlé Holdings	Tutbury	United Kingdom	\$468	425
Nestlé Nespresso Sa	Romont	Swiss Confederation	\$308	125
Nestlé	Leeds City Region	United Kingdom	\$306	
Danone	Cuijk	Netherlands	\$262	
Arla Foods	Liverpool City Region	United Kingdom	\$256	700



Beverage Products

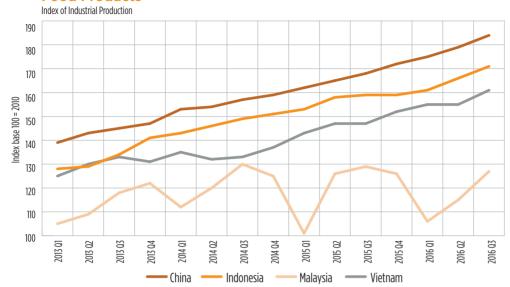


Top 5 Cities

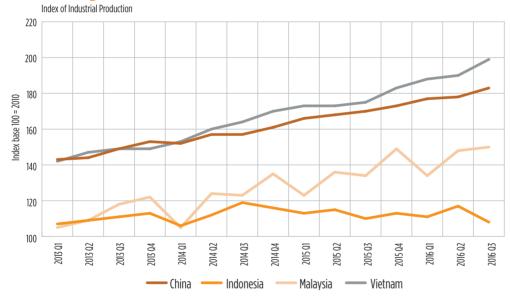
- 1 Budapest, Hungary
- 2 Lodz, Poland
- 3 Prague, Czech Republic
- 4 Moscow, Russia
- 5 Belgorod, Russia

Company	Metro Area	Country	Inv. US \$Million	Jobs
Diana	Shebekino	Russia	\$300	20
Unvia Trading	Tselina	Russia	\$280	500
Tonnies Lebensmittel	Moscow	Russia	\$266	
Agro-Invest	Moscow	Russia	\$209	





Beverage Products



Top 5 Cities

- 1 Ho Chi Minh City, Vietnam
- 2 Jakarta-Jabodetabek, Indonesia
- 3 Hanoi Capital Region, Vietnam
- 4 Guangzhou, China
- 5 Kuala Lumpur-Klang Valley, Malaysia

Colocted Col polate Lacinities in resulting Leve Levi				
Company	Metro Area	Country	Inv. US \$Million	Jobs
Coca-Cola	Sitarganj	India	\$1,500	
Mead Johnson Nutrition Co.	Singapore	Singapore	\$325	180
Ferrero Food Co.	Hangzhou	China	\$300	300
Cargill	Wuxi	China	\$250	
Hershey Food	Iskandar Malaysia	Malaysia	\$250	



Katie Ballard

hicago's young and educated workforce, geographic connectivity, and recent population growth have proven a successful formula for attracting investment. Businesses announced nearly \$15 billion of investment and over 64,000 announced new and retained jobs in the Chicago area from 2011 through 2016.

In recent years, a number of high-profile headquarters relocations have suggested that headquarters are headed back to central business districts after spending decades in suburban office parks. Eight out of every 10 announced jobs tied to headquarters projects in the Chicago metro area from 2011 to 2016 were for projects within the city.

Based on company statements, the following factors most contributed to Chicago's attractiveness:

- 1. Access to a young, talented workforce increasingly choosing to locate in urban areas (see moves by McDonald's and Motorola Solutions).
- 2. Easy public transportation / employee lifestyle preferences (see Kraft Heinz and Beam Suntory).
- 3. Incentive packages offered by the City of Chicago and the State of Illinois (see Braintree

and Coyote Logistics, which cited talent too).

4. Potential research partnerships with institutions located in the Chicago area (ConAgra, major HQ move from Omaha is reported to be tied in part to ongoing research efforts with the University of Illinois).

Chicago's central location, logistics infrastructure and population center make it an ideal hub for distribution/e-commerce projects. Over the past five years, companies have announced more than \$4 billion of investment and 17,000 planned jobs in such projects in the Chicago area. Three counties accounted for 80 percent of the jobs: Will County, Cook County, and Kenosha County (Wisconsin). During this period, there were more than 7,000 announced distribution-related jobs in Will County, over half of which were in Joliet, home to a large intermodal center and the intersection of major rail lines.

The largest project was a 2,000-job Amazon distribution center in Joliet. In 2014, one in every 20 workers in the Joliet labor market were in the transportation and warehousing industry — approximately 10 percent more concentrated in these sectors than the Chicago metro area overall.























Beverage Products



Top 5 Cities

- 1 Dallas-Fort Worth-Arlington, TX, USA
- 2 Chicago-Naperville-Elgin, IL-IN-WI, USA
- 3 Cincinnati, OH-KY-IN, USA
- 4 Sioux City, IA-NE-SD, USA
- 5 Houston-The Woodlands-Sugar Land, TX, USA

Company	Metro Area	Country	Inv. US \$Million	Jobs
Darling International	Hamilton, ON	Canada	\$645	
Oakrun Bakery	Hamilton, ON	Canada	\$340	
Keurig Green Mountain	Atlanta-Sandy Springs-Roswell, GA	United States	\$337	550
Trinchero Family Estates	Stockton-Lodi, CA	United States	\$300	400
HP Hood	Flint, MI	United States	\$285	195



PHOTO COURTESY OF GETTY IMAGES



ver the next 15 years, Oxford Economics expects that African cities and East African cities in particular will have the fastest growing urban economies in the world. Nairobi's forecast annual growth rate of 5.9 percent over the period 2017-2012 lags behind that of Kigali (Rwanda) or Addis Ababa (Ethiopia) but is nonetheless extraordinarily robust. The city is the industrial and commercial center of Kenya (a country with one of the most vibrant economies in East Africa). Nairobi hosts the regional offices of a great many Western companies, including leading banks and consumer product manufacturers. In 2015 Kenya attracted more FDI than any other African country, and Nairobi clearly benefits from this activity. The result is economic growth that is strong across the board, but especially so in the transportation, storage, and information and communications sectors, which together are expected to average an annual 7.1-percent growth rate during the forecast

Several key competitive strengths are fueling this growth. The city is the air transportation hub for East Africa, with connections to major markets throughout the world. Trade is

further enhanced by the activity at the Port of Mombasa, the busiest in East Africa. Further supporting FDI growth in Nairobi is the city's well established hotel and hospitality industry, which originally developed in tandem with the country's strong tourist industry, but now is an important strength as Nairobi solidifies its position as the business and commercial center for East Africa.

One new program in Kenya is worth noting as well. In early 2016, the government of Kenya began implementing its newly created Special Economic Zone ("SEZ") program. SEZs provide a host of benefits for FDI projects including significantly reduced customs, VAT and corporate tax rates plus some relaxation of work permit limitations. The first three zones were established one year ago in Kisumu, Mombasa and Lamu, and target manufacturing.

Of more interest to potential investors in Nairobi, however, is the allowed participation of business centers, regional headquarters and technology parks in the SEZ program. If the government chooses to establish an SEZ in Nairobi that targets these types of projects, the city's value proposition for investors will be that much stronger.

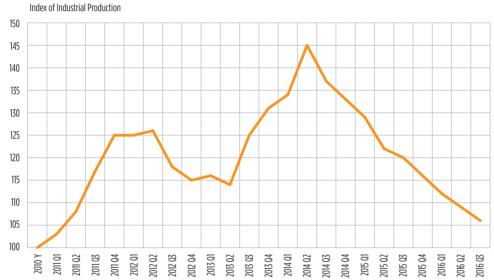




"Over 800 German companies employ 200,000 people locally in Africa and generate annual revenues of 31.6 billion euros. In the last five years alone, German-African export trade has increased by 35 percent."

— German-African Business Association CEO Christoph Kannengießer, in an interview leading up to the Africa Food Manufacturing exhibition in Cairo in April 2017

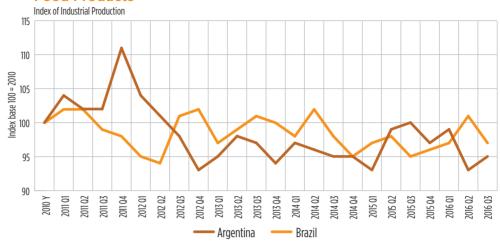
Food & Beverage in Egypt



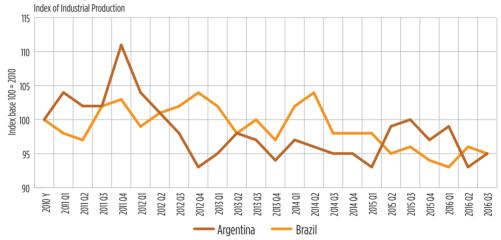
Top 5 Cities

- 1 Cairo, Egypt
- 2 Lagos, Nigeria
- 3 Dubai-Sharjah-Ajman, UAE
- 4 Riyadh, Saudi Arabia
- 5 Nairobi, Kenya

Company	Metro Area	Country	Inv. US \$Million	Jobs
Green Arava	Malindi	Kenya	\$4,500	
Shree Basaveshwar Sugars/Gammon Group	Dammam	Saudi Arabia	\$400	400
Al Ghurair Group	Cairo	Egypt	\$370	
Cadbury Nigeria	Lagos	Nigeria	\$300	
Golden Sugar Co.	Mokwa	Nigeria	\$226	3,500



Beverage Products



Top 5 Cities

- 1 São Paulo, Brazil
- 2 Rio de Janeiro, Brazil
- 3 Guayaquil, Ecuador
- 4 Bogotá, Colombia
- 5 Buenos Aires, Argentina

Company	Metro Area	Country	Inv. US \$Million	Jobs
Backaldrin Americas	Toluca	Mexico	\$2,156	
Constellation Brands	Mexicali	Mexico	\$1,500	
Grupo Bafar, S.A.B. De C.V.	La Piedad Cavadas	Mexico	\$650	5,000
Constellation Brands	Piedras Negras	Mexico	\$575	
Grupo Viz, S.A. De C.V.	Tlahualilo de Zaragoza	Mexico	\$572	6,000



hen it comes to a growth economy, the name of the game is IT, ICT or the IoT these days — even in an industrial plant in the countryside. But cities especially are identified with the high-tech economy and all its permutations: smart infrastructure, ubiquitous social media, a rich broadband environment, e-mobility and digital media, to name a few.

The broadband factor and the low latency that comes with it are important to a lot more than just data centers, but those facilities' location trends (operated by firms across many sectors) can be an indicator. Thus it's no surprise to see Washington, D.C.; Atlanta and Dallas-Fort Worth — three perennial hubs of data center activity — atop this report's North American rankings. Where is Silicon Valley? First, it's not one metro area, but many. And despite being the anchor location for so many of the world's leading tech firms, the region is not necessarily seeing a lot of locations and expansions by those firms (Apple's new "spaceship" HQ notwithstanding).

The connective infrastructure theme carries over to Berlin, London and Dublin atop Western Europe's rankings. The trend continues in the Asia Pacific, where Singapore tops the charts, followed by four Indian metropolises known for their IT prowess, led by Hyderabad.

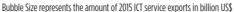
Many of those highly connected cities also happen to be country capitals, parlaying the infrastructure of national security into regional economic security. Thus we see Cairo, Lagos and Johannesburg the most competitive in the Middle East and Africa; Prague and Budapest in Eastern Europe; and Mexico City, Lima and Bogotá in Latin America (No. 1 São Paulo being the exception to the rule, due to Brazil's utopian purpose-built city of Brasilia fulfilling the role of capital since 1960).

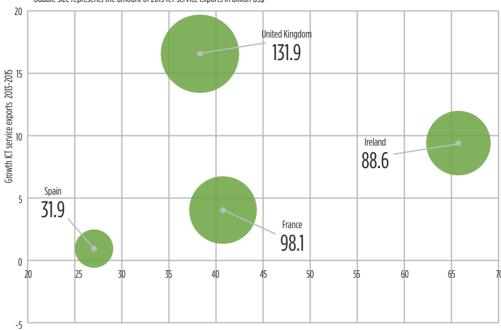
Whether they're seats of government or not, the IT capitals of tomorrow know that filling seats with young and capable talent is the true name of the game. Explore these cities and the others on your company's shortlist to see just how their human infrastructure aligns with their high-tech equivalent.

PHOTO COURTESY OF ADOBE STOC



ICT service exports





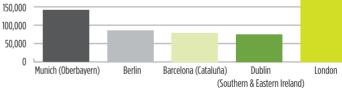
ICT service exports (% of service exports, BoP) 2015

Top 5 Cities

- 1 Berlin-Brandenburg, Germany
- 2 London, UK
- 3 Dublin, Ireland
- 4 Barcelona, Spain
- 5 Munich, Germany

Information & Communications Technologies Number of persons employed in 2014





Selected Corporate Facilities Investments, 2015-2017

400,000

350,000

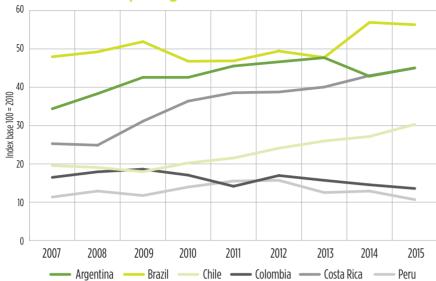
300,000

250,000 200,000

Company	Metro Area	Country	Inv. US \$Million	Jobs
Roche Holding Ag	Kaiseraugst	Swiss Confederation	n \$1,030	3,200
Apple	Galway	Ireland	\$955	
Apple	Copenhagen Metro Area	Denmark	\$945	
Google Inc.	Rotterdam The Hague Metro Area	Netherlands	\$773	150
Google	Hamina	Finland	\$607	



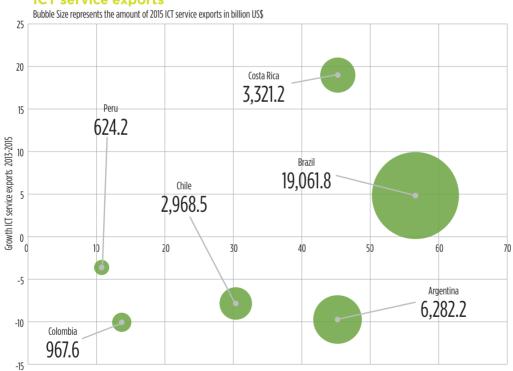
ICT service exports growth



Top 5 Cities

- 1 São Paulo, Brazil
- 2 Mexico City, Mexico
- 3 Lima, Peru
- 4 Bogotá, Colombia
- 5 San José-Heredia, Costa Rica

ICT service exports



ICT service exports (% of service exports, BoP) 2015

Company	Metro Area	Country	Inv. US \$Million	Jobs
Blackberry	Querétaro Metro Area	Mexico	\$500	
Marcatel Com, S.A. De C.V.	Monterrey Metro Area	Mexico	\$200	
Plantronics	Querétaro Metro Area	Mexico	\$100	500
Lenovo	Campinas Metro Area	Brazil	\$100	
Americatel	Lima Metro Area	Peru	\$90	



PHOTO COURTESY OF GETTY IMAGES

Dan Levine Oxford Economics

rague's economy has recently returned to growth following a long and deep Czech recession. Oxford Economics estimates that the city's GDP grew by an estimated 2.4 percent during 2016 — a growth rate that Prague is expected to maintain through 2017.

One key growth constraint, however, is the extremely tight labor market both in Prague and the Czech Republic. Specifically, Prague's unemployment rate of 2.3 percent is among the lowest of all major European cities. From an investor's perspective it is worth noting that much of this tightness is caused by an out-migration of well-educated and trained workers seeking higher wages in other Western economies. This creates an attractive opportunity for relatively well-paying foreign direct investment projects that can "intercept" Czech workers before they leave the country.

Traditionally, FDI projects have been in manufacturing, especially in the automotive sector since Czech suppliers are fully integrated

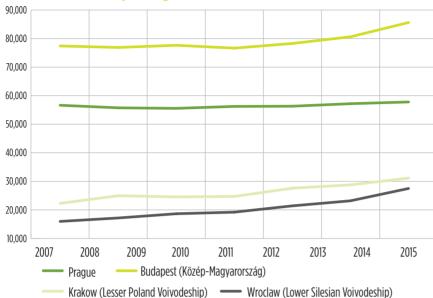
in the supply chain of German manufacturers. In recent years, however, CzechInvest reports that business support services projects have captured the top spot (from manufacturing) in its ranking of FDI projects. Recent office projects have come from such firms as Expedia, Microsoft, Johnson & Johnson and MSD Capital.

This is consistent with our data which shows that, over the past five years, job growth in Prague was largest in the business services sector (offsetting employment declines in both the public and industrial sectors). Strength in Prague's business services sector, as well as in the information and communications sector, will continue to drive the city's growth.

One key Prague attraction for business services projects, in addition to competitive wages and available talent, is the widespread availability of modern and reasonably priced office space in the city. For the near term at least, Prague will continue to offer a solid value proposition for business services projects seeking a European location.



ICT service exports growth



Top 5 Cities

- 1 Prague, Czech Republic
- 2 Budapest, Hungary
- 3 Krakow, Poland
- 4 Wroclaw, Poland
- 5 Moscow, Russia

ICT service exports

Bubble Size represents the amount of 2015 ICT service exports in billion US\$



ICT service exports (% of service exports, BoP) 2015

		, —		
Company	Metro Area	Country	Inv. US \$Million	Jobs
Foxconn Technology Co.	Prague	Czech Republic	\$101	
Flextronics	Budapest	Hungary	\$70	600
Samsung Electronics Hungary	Budapest	Hungary	\$41	100
Merck Sharp & Dohme	Prague	Czech Republic	\$41	
Alpine	Budapest	Hungary	\$39	500
IT Services Kft.	Budapest	Hungary	\$39	720



Katie Ballard EY

> **SECTOR** I FADER IN:

incinnati's low taxes, low cost of living, geographic connectivity, skilled workforce and businessfriendly environment have proved a successful formula for attracting investment from both Fortune 500 companies and small start-ups. Businesses announced more than \$18 billion of investment and over 70,000 announced new and retained jobs in the Cincinnati area from 2011 through 2016.

Since 2011, approximately of half of the more than 1,160 project announcements in the Cincinnati metro area involved some type of manufacturing (including combined facilities). The top five sectors — automotive, chemicals, metals, energy, and food & beverage - accounted for more than 80 percent of announced manufacturing investment.

Since 2011, automotive projects in Cincinnati have accounted for nearly 20 percent of all announced investment — totaling more than \$3 billion. The concentration of engine and other assemblers in Cincinnati is more than triple the national average (location quotient of 3.55),

reflecting the significant regional presence of Ford and other auto manufacturers.

Cincinnati is also known for its strong downstream chemical products (including personal care and cleaning products) cluster, headlined by Procter & Gamble (P&G), which employs approximately 10,000 people in the i area. Chemical manufacturing employment in Cincinnati is three times as concentrated as the national average. In 2015, P&G announced that it would invest \$300 million to build a "beauty innovation center" in Mason, Ohio, relocating and expanding its current beauty R&D operations from nearby Blue Ash. Mason officials cited the investment as an important step to developing a biotech and biohealth corridor in the Cincinnati metro area.

More than a quarter of announced manufacturing jobs from 2011 through 2016 were in food and beverage manufacturing. In 2015, the Cincinnati metro area had the fifthhighest number of food scientists in the US with average hourly wages that were 20 percent below the average for the other top cities.

Low cost of living makes Cincinnati a popular destination for shared services. Metro Cincinnati attracted more than 7,000 announced call center/shared service center jobs over the past five years.

Cincinnati's central location makes it a prime candidate for distribution and logistics investment too. From 2011 through 2016, one in five announced jobs were related to projects with some distribution component. The Cincinnati metro area employs approximately 60,000 workers in the transportation and distribution sector — a 24 percent higher concentration than the US overall (location quotient of 1.24).

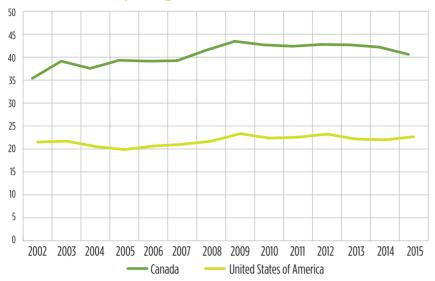
Cincinnati-based Kroger recently announced two distribution centers in the metro area, designed to meet a growing demand for home grocery delivery. In 2015, Kroger announced a \$46 million, 650-job office, call center, and distribution center facility in Hamilton County, Ohio, and has recently announced another \$60-million, 100-job distribution center on the other side of Cincinnati in Boone County, Kentucky. The robust Northern Kentucky area just welcomed Amazon's \$1.5-billion air hub, and continues to be a vital part of the Greater Cincinnati economic engine.



IT & COMMUNICATIONS



ICT service exports growth



Top 5 Cities

- 1 Washington-Arlington-Alexandria, DC-VA-MD-WV, USA
- 2 Atlanta-Sandy Springs-Roswell, GA, USA
- 3 Dallas-Fort Worth-Arlington, TX, USA
- 4 Raleigh, NC, USA
- 5 Austin-Round Rock, TX, USA

ICT service exports

Bubble Size represents the amount of 2015 ICT service exports in billion US\$

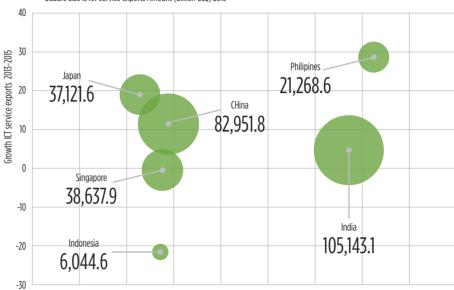


ICT service exports (% of service exports, BoP) 2015

Company	Metro Area	Country	Inv. US \$Million	Jobs
Switch	Grand Rapids-Wyoming, MI	United States	\$5,000	1,000
Apple	Phoenix-Mesa-Scottsdale, AZ	United States	\$2,000	
Microsoft	Des Moines-West Des Moines, IA	United States	\$1,100	84
Google	Omaha-Council Bluffs, NE-IA	United States	\$1,000	70

ICT service exports

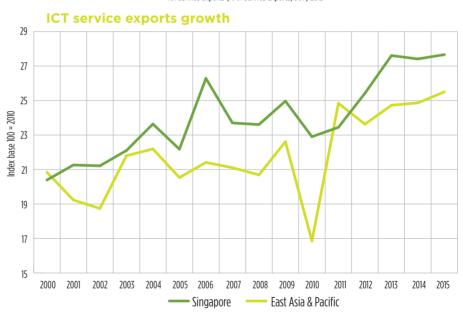
Bubble Size is ICT service exports Amount (billion US\$) 2015



ICT service exports (% of service exports, BoP) 2015



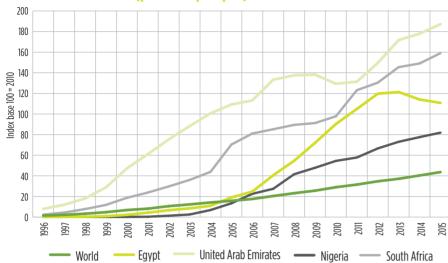
- 1 Singapore
- 2 Hyderabad, India
- 3 Bengaluru, India
- 4 Pune, India
- 5 Delhi National Capital Region, India



Company	Metro Area	Country	Inv. US \$Million	Jobs
Microsoft	Busan	South Korea	\$5,200	
Samsung	Hai Phong	Vietnam	\$2,000	5,000
China Railway Group	Kuala Lumpur/Klang Valley	Malaysia	\$2,000	
Samsung Electro-Mechanics	Hai Phong	Vietnam	\$1,200	
China Telecom Corp.	Wuxi	China	\$1,124	



Internet Users (per 100 people)

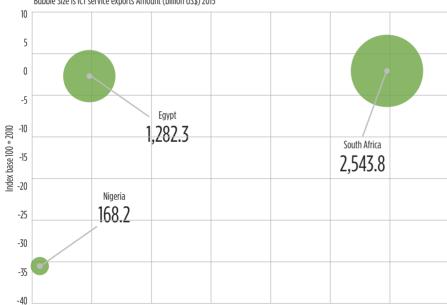


Top 5 Cities

- 1 Cairo, Egypt
- 2 Lagos, Nigeria
- 3 Johannesburg, South Africa
- 4 Abu Dhabi, UAE
- 5 Cape Town, South Africa

ICT service exports





ICT service exports (% of service exports, BoP) 2015

Company	Metro Area	Country	Inv. US \$Million	Jobs
IBM	Johannesburg	South Africa	\$60	
Kooba Kenya	Mombasa	Kenya	\$30	
Mainone	Lagos	Nigeria	\$24	
Samsung Electronics Co.	Durban	South Africa	\$20	
Poulina Group Holding	Tunis	Tunisia	\$14	



LIFE SCIENCES

s global pharmaceutical firms continue to see healthcare demand, price control policies and drug development costs rise (around \$1.5 billion from idea to commercialization, says Deloitte), they need the right locations and the most effective networks more than ever before.

The common thread among leaders in this sector? Clusters of superior universities graduating clusters of superior talent and also fostering collaborative partnerships with companies. As EY's Beyond Borders report found in 2016, either Cambridge is a solid bet for biotech investment. The same can be said of life sciences investment in general, as both Greater Boston (No. 1) and Cambridge, UK (No. 4), find themselves among the leaders in their respective world regions.

New York and traditional Research Triangle powers Raleigh and Durham-Chapel Hill follow Boston in North America, with Greater Philadelphia also in the mix. Western Europe is topped by Berlin, Dublin and Barcelona, with Cork, Ireland, finding fifth position. The Irish cities have seen recent investments from Grifols, Mallinckrodt and Takeda in Dublin, and by BioMarin in Cork. In Eastern Europe, Warsaw, Budapest and Skopje, Macedonia, top the rankings. Warsaw's recent roster of expansions has included investments from AstraZeneca,

Banner Service Corp. and Symmetry Medical. Cairo and Nairobi top our charts in Africa and the Middle East, while Campinas and São Paulo are No. 1 and No. 3, respectively, in Latin America, sandwiched around No. 2 Mexico City.

However, notes Dan Levine of Oxford Economics, getting life sciences firms to invest in emerging markets is a tall order. "In many emerging markets, poor patent regulation and intellectual property protection discourage investment that might otherwise migrate from developed economies," he writes. "This is particularly true in research and development functions where a combination of rising costs and drugs targeting smaller markets is discouraging investment.

Looking for the opposite dynamic? Then look to global life sciences beacon Singapore, which frankly tops most lists when it comes to prime life sciences locations. That's why Abbott Labs, DSM and GSK, among others, continue to invest and grow in the ultimate city-state, where pharma and biotech have grown by more than 30 percent since 2011. The government's EDB Singapore explains why: "Singapore's integrated research ecosystem enables companies to access multidisciplinary capabilities in a single location, which improves R&D decision-making and accelerates drug discovery and development."

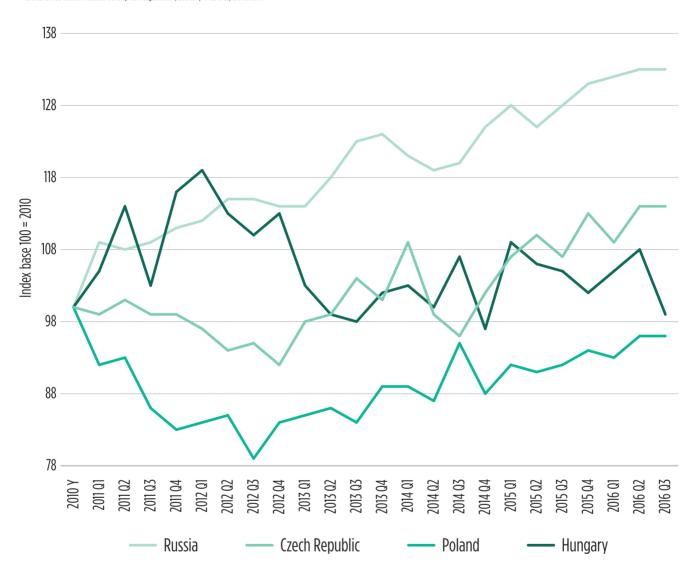
PHOTO COURTESY OF ADOBE STOCE







Source: United Nations Industrial Development Organization, Quarterly IIP 2016 Q3, ISIC Revision 4



Top 5 Cities

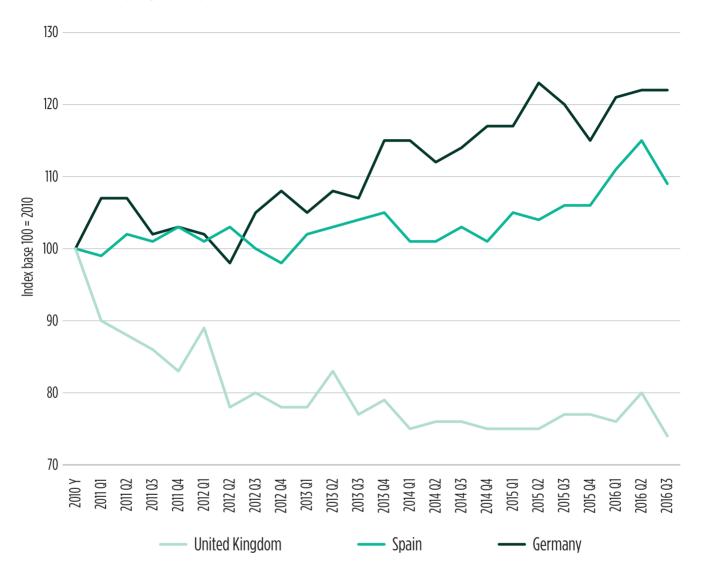
- 1 Warsaw, Poland
- 2 Budapest, Hungary
- 3 Skopje, Macedonia
- 4 Prague, Czech Republic
- 5 Saint Petersburg, Russia

•	,		
Metro Area	Country	Inv. US \$Million	Jobs
Athens	Greece	\$164	
Moscow	Russia	\$150	
Saint Petersburg	Russia	\$140	
Zagreb	Croatia	\$100	200
Krsko	Slovenia	\$93	61
	Metro Area Athens Moscow Saint Petersburg Zagreb	Athens Greece Moscow Russia Saint Petersburg Russia Zagreb Croatia	Metro AreaCountryInv. US \$MillionAthensGreece\$164MoscowRussia\$150Saint PetersburgRussia\$140ZagrebCroatia\$100

LIFE SCIENCES

Pharmaceuticals Index of Industrial Production

Source: United Nations Industrial Development Organization, Quarterly IIP 2016 Q3, ISIC Revision 4



Top 5 Cities

- 1 Berlin-Brandenburg, Germany
- 2 Dublin, Ireland
- 3 Barcelona, Spain
- 4 Cambridge, UK
- 5 Cork, Ireland

Company	Metro Area	Country	Inv. US \$Million	Jobs
IMEC	Heverlee	Belgium	\$1,072	
Biogen Idec	Zurich	Swiss Confederation	n \$1,000	400
Bristol Myers Squibb	Dublin	Ireland	\$900	350
Roche Diagnostics	Penzberg	Germany	\$621	170
Glaxosmithkline	Liverpool City Region	United Kingdom	\$562	250



"The research—based pharmaceutical industry can play a critical role in restoring Europe to growth and ensuring future competitiveness in an advancing global economy. In 2015 it invested an estimated €31.5 billion in R&D in Europe. It employs directly some 725,000 people and generates three to four times more employment indirectly – upstream and downstream – than it does directly."

— European Federation of Pharmaceutical Industries and Associations 2016 report



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Katie Ballard EY

> **SECTOR** LEADER IN:

n recent years, Houston has been one of the most attractive locations for new investment in the United States with more than 900 projects totaling more than \$10 billion in announced investment since 2011.

Houston has historically been the center of an energy industry cluster that brings together some of the largest energy production and services companies headquartered there. Since 2011, nearly one out of every five of Houston's announced projects were related to its iconic energy cluster — totaling more than 170 projects and \$4.6 billion of announced investment.

Houston's energy cluster is defined by both the number of people working in the sector as well as the relative concentration: Nearly 7 percent of US energy sector employees work in Houston, making the share of the city's employees working in the energy sector three times higher than the US average (location quotient = 3.3). Petroleum engineers are nearly 15 times more concentrated in Houston compared to the United States, with nearly onethird of all US petroleum engineers residing in Houston.



PHOTO COURTESY OF GREATER HOUSTON CONVENTION AND VISITORS BUREAU

The size and concentration of this sector generates significant benefits for local businesses, attracting investment from related industries and growing a strong local services supply chain. Houston's energy cluster also makes it an attractive location for new investment because it means that companies will be able to access a large pool of skilled workers. Between 2012 and 2015, the Houston area labor force grew by 10 percent in tandem with a 12-percent rise in general population (+709,000 people) from 2010 through 2015, making it the third-fastestgrowing city among metro areas with more than 1 million residents.

Looking beyond the energy sector, Houston also has a large number of skilled office workers including 48,000 general and operations managers, 37,000 accountants and 18,000 computer systems analysts. All of these professions are slightly more concentrated in Houston than the US as a whole. The concentration of a highly educated workforce in the energy industry in Houston is reflected by the 610 patents issued to the top five energy industry companies in Harris County between 2009 and 2013. That skills base also extends to the life sciences, centered around Texas Medical Center, which was one reason Johnson & Johnson recently located one of its JLABS incubators in the city.

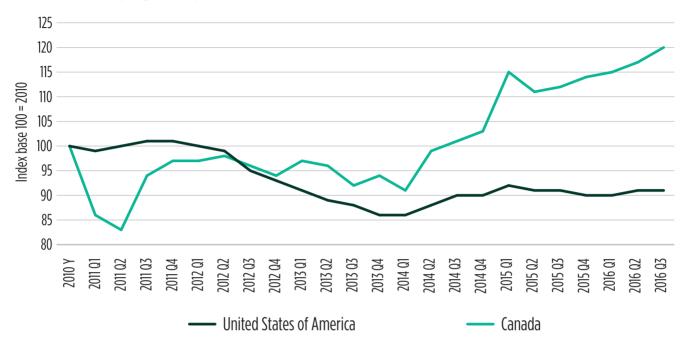
With one of the largest ports in the world, two commercial airports, and numerous highways and railroads, the transportation and logistics industry continues to grow in Houston to support the region's population and economic growth. Employment growth in the Houston transportation and logistics industry between 2012 and 2015 was driven by 17-percent growth in specialized freight trucking, which includes tankers.

Falling oil prices have impacted the Houston economy, with a 70-percent decrease in the amount of announced energy investment in Houston. This drop-off has taken some of the shine off Houston's position among the nation's strongest economies, including an unemployment rate above the US average for the first time since November 2006. Downturns in employment in the energy sector may represent an opportunity for investment in headquarters facilities in Houston by making available a larger pool of skilled office workers and managers.



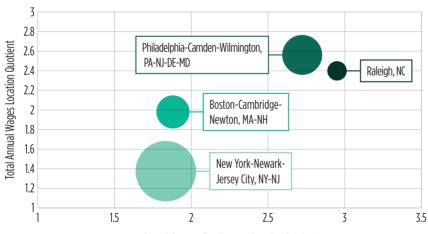


Source: United Nations Industrial Development Organization, Quarterly IIP 2016 Q3, ISIC Revision 4



Pharmaceutical & Medicine Manufacturing

Bubble size represents Annual Employment



Annual Average Employment Location Quotient

Top 5 Cities

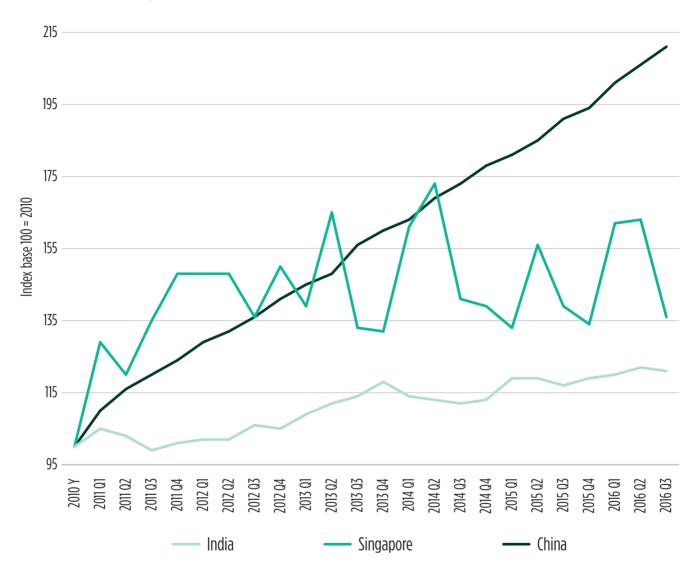
- Washington-Arlington-Alexandria, DC-VA-MD-WV, USA
- 2 Atlanta-Sandy Springs-Roswell, GA, USA
- 3 Dallas-Fort Worth-Arlington, TX, USA
- 4 Raleigh, NC, USA
- 5 Austin-Round Rock, TX, USA

Company	Metro Area	Country	Inv. US \$Million	Jobs
Athenex	Jamestown-Dunkirk-Fredonia, NY	United States	\$1,520	900
Novo-Nordisk of North America	Raleigh, NC	United States	\$1,200	691
Ciba Vision Corp.	Atlanta-Sandy Springs-Roswell, GA	United States	\$400	340
Grifols	Raleigh, NC	United States	\$370	200
UI Labs	Chicago-Naperville-Elgin, IL-IN-WI	United States	\$320	50





Source: United Nations Industrial Development Organization, Quarterly IIP 2016 Q3, ISIC Revision 4



Top 5 Cities

- 1 Singapore
- 2 Suzhou, China
- 3 Shanghai, China
- 4 Hyderabad, India
- 5 Tianjin, China

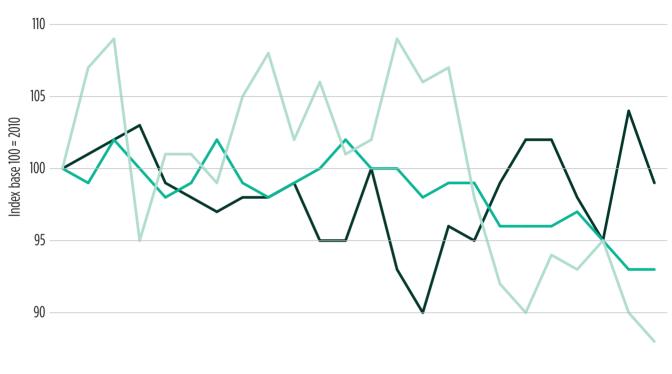
Company	Metro Area	Country	Inv. US \$Million	Jobs
Samsung Biologics	Seoul	South Korea	\$720	
Roche	Suzhou	China	\$465	600
Hospira	Vishakhapatnam	India	\$390	
Eli Lilly	Shanghai	China	\$350	
Eli Lilly	Suzhou	China	\$323	





Source: United Nations Industrial Development Organization, Quarterly IIP 2016 Q3, ISIC Revision 4







Top 5 Cities

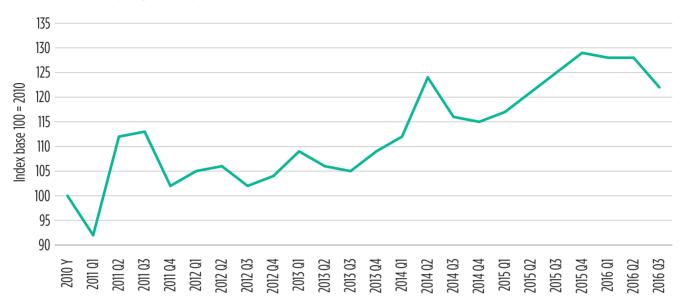
- 1 Campinas, Brazil
- 2 Mexico City, Mexico
- 3 São Paulo, Brazil
- 4 San Juan, Puerto Rico
- 5 Tijuana, Mexico

Company	Metro Area	Country	Inv. US \$Million	Jobs
Pharmachem Technologies	Freeport	Bahamas	\$120	
Landsteiner Scientific, S.A. De C.V.	Toluca	Mexico	\$117	
Mega Pharma	Canelones	Uruguay	\$110	350
Eli Lilly	San Juan	Puerto Rico	\$65	





Source: United Nations Industrial Development Organization, Quarterly IIP 2016 Q3, ISIC Revision 4

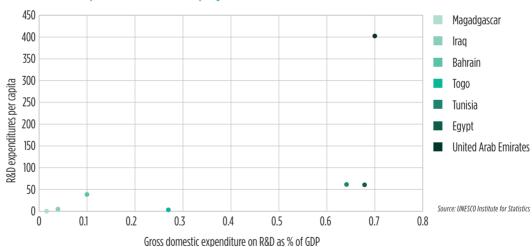


Top 5 Cities

- 1 Cairo, Egypt
- 2 Nairobi, Kenya
- 3 Abu Dhabi, UAE
- **4** Riyadh, Saudi Arabia
- 5 Pretoria-Tshwane, South Africa

Pharmaceutical & Medicine Manufacturing

Bubble size represents Annual Employment



		•		
Company	Metro Area	Country	Inv. US \$Million	Jobs
Teva Pharmaceutical Industries	Tel Aviv	Israel	\$308	
New Medical Center	Dammam	Saudi Arabia	\$267	
Neopharma	Jizan	Saudi Arabia	\$267	
Life Pharma	Dubai-Sharjah-Ajman	United Arab Emirate	s \$160	
Sudair Pharmaceutical	Dilam	Saudi Arabia	\$150	



MACHINERY & EQUIPMENT

n addition to tracking new facility locations and expansions, Conway Analytics has begun to track capacity expansions at existing sites, usually characterized by the investment in this precise category of product. All that high-priced machinery and equipment has to be made somewhere by other machinery and equipment.

The rule of three seems in order for this sector. Three of the top five cities in Eastern Europe for this sector — Brno, Pilsen and Prague — are in the Czech Republic. The same holds true for China in the Asia Pacific (Shanghai, Suzhou and Wuxi), though Dan Levine of Oxford Economics says, "China's slowing economy has been the main force behind global weakness in the machinery sector." The UK cities of Birmingham, London and Cookstown dominate the Western European top five, alongside No. 1 Berlin and No. 5 Zurich.

And in Latin America, three Mexican cities lead the way, starting with No. 1 Monterrey, and Guadalajara and Querétaro in fourth and fifth position, after No. 2 São Paulo and No. 3 Bogotá.

New investment in this sector will increasingly come from advanced manufacturers and their need to integrate technological advances with machinery and equipment, says Levine. "In the United States, low capacity utilization and exports challenged by a strong dollar are significantly limiting prospects for near-term investment in the machinery sector," he notes.

But as any economic developer knows, even in slow times, location choices are still being made, and even a consolidation move can yield expansion for those places among the chosen few.

Source: United Nations Industrial Development Organization, Quarterly IIP 2016 Q3, ISIC Revision 4

PHOTO COURTESY OF GETTY IMAGES



Machinery & Equipment



Top 5 Cities

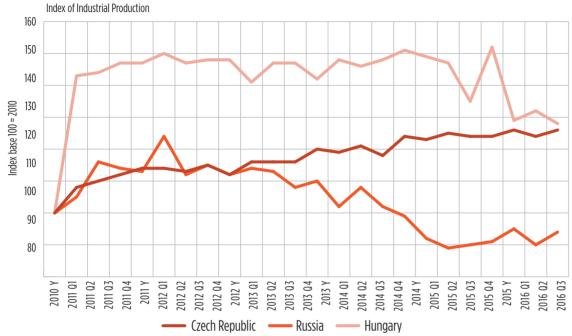
- 1 Berlin-Brandenburg, Germany
- 2 Birmingham-West Midlands, UK
- 3 London, UK
- 4 Cookstown, UK
- 5 Zurich, Switzerland

"With global machinery trade share of more than 16 percent, Germany's M&E industry sector remains the world's leading supplier of machinery — consolidating its position ahead of both China and the USA."

— Germany Trade & Invest, April 2017

Company	Metro Area	Country	Inv. US \$Million	Jobs
Ford	London	United Kingdom	\$602	250
Liebherr Machines Bulle	Zurich	Switzerland	\$225	
Vistakon Ireland	Limerick	Ireland	\$109	
Hilti Corp.	Schaan	Liechtenstein	\$98	
IHI Charging Systems International	Stuttgart Region	Germany	\$65	150





"The Czech machines/ engineering industry continues to benefit from the solid performance of the Czech economy, which grew 4.3 percent in 2015 and is expected to increase 2.4 percent in 2016 and 2.7 percent in 2017."

_ trade credit insurance firm Atradius, August 2016

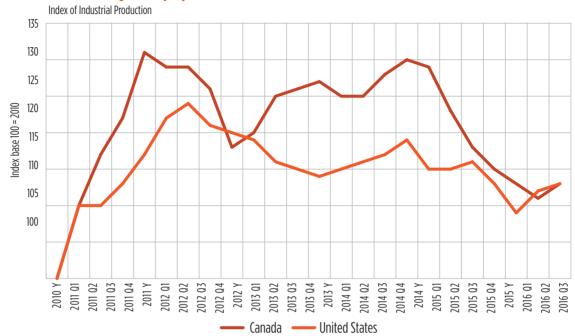
Top 5 Cities

- 1 Brno, Czech Republic
- 2 Budapest, Hungary
- 3 Pilsen, Czech Republic
- 4 Prague, Czech Republic
- 5 Lipetsk, Russia

Selected Golporate racinities investinents, 2010-2017			
Metro Area	Country	Inv. US \$Million	Jobs
Kurim	Czech Republic	\$6,387	
Sebes	Romania	\$341	1,000
Moscow	Russia	\$130	
Prague	Czech Republic	\$106	
Budapest	Hungary	\$104	230
	Metro Area Kurim Sebes Moscow Prague	Metro AreaCountryKurimCzech RepublicSebesRomaniaMoscowRussiaPragueCzech Republic	Metro AreaCountryInv. US \$MillionKurimCzech Republic\$6,387SebesRomania\$341MoscowRussia\$130PragueCzech Republic\$106



Machinery & Equipment



Top 5 Cities

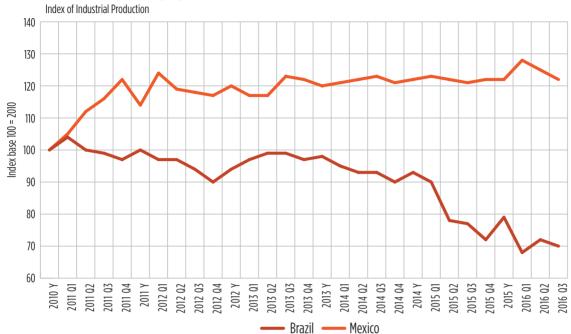
- 1 Houston-The Woodlands-Sugar Land, TX, USA
- 2 Detroit-Warren-Dearborn, MI, USA
- 3 Dallas-Fort Worth-Arlington, TX, USA
- 4 Chicago-Naperville-Elgin, IL-IN-WI, USA
- 5 Cincinnati, OH-KY-IN, USA

Texas machinery exports in 2014 were valued at \$29.8 billion. The sector's 1,705 firms employ more than 109,000 people at an average annual wage of \$78,988.

Company	Metro Area	Country	Inv. US \$Million	Jobs
Canon USA	New York-Newark-Jersey City, NY-NJ-PA	United States	\$466	750
Daikin Industries	Houston-The Woodlands-Sugar Land, TX	United States	\$410	
Williams Brothers Trucking	Wrens, GA	United States	\$350	15
Anderton Machining	Jackson, MI	United States	\$313	49
German Pellets	La Salle, LA	United States	\$300	500



Machinery & Equipment



Exports of tractor parts, engines and engine parts — for use by OEMs manufacturing in Mexico — led US equipment and ag equipment export growth of 8.6 percent from 2006-2015.

Top 5 Cities

- 1 Monterrey, Mexico
- 2 São Paulo, Brazil
- 3 Bogotá, Colombia
- 4 Guadalajara, Mexico
- 5 Querétaro, Mexico

Company	Metro Area	Country	Inv. US \$Million	Jobs
Sany Heavy Industry Co.	Sao Paulo	Brazil	\$227	
Xcmg Construction Machinery	Salvador	Brazil	\$200	1,500
Deere & Company	Rosario	Argentina	\$41	
Nordyne/Nortek Controls	Querétaro	Mexico	\$40	
Hirotec Tooling De Mexico	Querétaro	Mexico	\$40	70
Deere & Company	Porto Alegre	Brazil	\$40	
Manitowoc Foodservice	Monterrey	Mexico	\$40	110



PHOTO COURTESY OF GETTY IMAGES

Antonio Sequeros
Tractus Asia

ingapore ranks at the top of the world's business and economic development rankings, but near dead last in terms of size, 176th out of 195 countries and territories. An economic powerhouse with a population of only 5.6 million, Singapore has scored a lot of firsts in its short 50 years of statehood. It has the world's largest container port by throughput; has been ranked as the world's easiest place to do business by The World Bank, and is currently No. 2 on the World Economic Forum's World Competitiveness Index for 2016-2017 for *countries*.

With a GDP of US\$292.7 billion it would rank No. 2 on the Fortune 500. Its GDP per capita of around US\$53,053 in 2016, is the highest in Asia. It is consistently on the short-list of global companies as a destination for their Asian headquarters and, more recently, global centers of excellence such as GM's International Operations center, RioTinto's global purchasing center or Maersk's treasury center.

With a competitive pool of world-class talent, government policies supportive of business, and a comprehensive physical and digital infrastructure, Singapore is positioned as the leading destination for knowledge-intensive industries. It has emphasized a Smart City program that focuses on building a digital infrastructure encompassing ICT, networks and Big Data. A strong business-friendly environment is anchored by favorable policies including one of the lowest corporate income tax rates in the world at 17 percent, strong

intellectual property rights protection and an international reputation for transparency, absence of corruption and the rule of law.

Housing, traffic congestion, transportation, airport quality, safety and quality of life are a priority for the government. A good example: Over 80 percent of all Singapore residents live in some form of publicly developed housing. Another: the government's plans to invest \$21 billion to build infrastructure, including Changi Airport's new terminal. The Singapore government also has committed to funding \$9.2 billion for a Research, Innovation and Enterprise (RIE) strategy from 2016 to 2020, with large stakes devoted to biotech and advanced manufacturing.

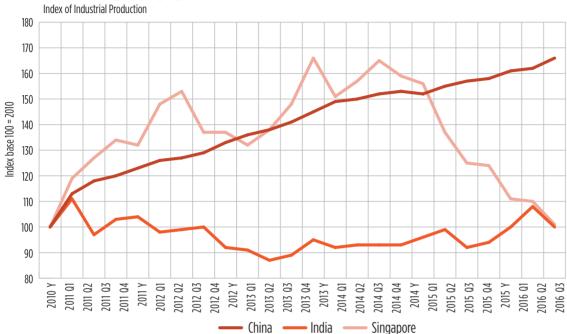
Singapore continues to be an attractive investment destination even as it has become one of the most expensive cities in the world, a testament to the government's ability to not get caught in the "middle income trap" that most countries encounter as they develop. According to the Singapore Department of Statistics, total FDI in Singapore grew at a CAGR of 10.2 percent to reach \$894.9 billion in 2015. Financial and insurance services have been the most attractive sectors. Another alluring sector is shared services centers, with Singapore hosting currently more than 100.

The future for Singapore is to embrace innovation and become a digital economy, while shifting to high-end knowledge activities including R&D, complex services and the application of cutting-edge technologies.





Machinery & Equipment



The Made in China 2025 plan aims to raise the domestic content of core components and materials to 40 percent by 2020 and 70 percent by 2025. Machinery figures to be a key sector in attaining that goal: The China Machinery Industry Federation reported the sector accounted for US\$388 billion in exports in 2015.

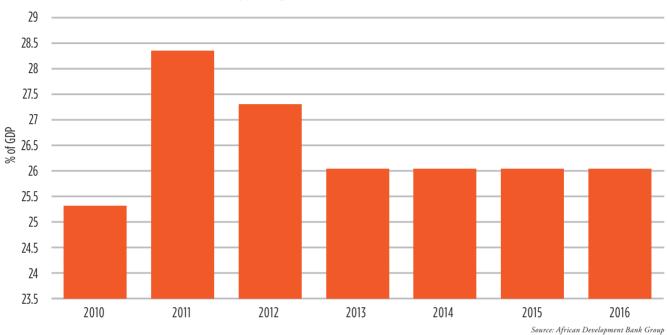
Top 5 Cities

- 1 Shanghai, China
- 2 Suzhou, China
- 3 Pune, India
- 4 Singapore
- 5 Wuxi, China

Company	Metro Area	Country	Inv. US \$Million	Jobs
Fanuc Corp.	Utsunomiya	Japan	\$844	
Tussor Machine Tools	Chennai	India	\$670	
Bhushan Steel	Dhenkanal	India	\$446	
Schindler Group	Shanghai	China	\$240	
Yamazaki Mazak Corp.	Inabe	Japan	\$237	



Value-Added Industry, Nigeria



Top 5 Cities

- 1 Lagos, Nigeria
- 2 Dubai-Sharjah-Ajman, UAE
- 3 Nairobi, Kenya
- 4 Dammam, Saudi Arabia
- 5 Abu Dhabi, UAE

The Nigerian government aims to generate an additional US\$20 billion to \$30 billion in manufacturing revenues over the next three to five years. Lagos and its surroundings are home to about 60 percent of Nigeria's industrial base.

Company	Metro Area	Country	Inv. US \$Million	Jobs
General Electric	Lagos	Nigeria	\$250	2,300
Bico-Liebherr	Nairobi	Kenya	\$218	
Knauf	Lagos	Nigeria	\$70	
Kenol Nigeria/Meksan Transformers	Lagos	Nigeria	\$50	



etals makers may be "old school" industry, but they can school plenty of upstart fields in why location choice is so important.

In some respects the building blocks for all industries, metals can seem as dependent on trade policies and battles as they are on ore and mineral resources. Of course, they're also dependent on pure demand. In many cases, the complexes that produce metals are finding it necessary to become as flexible, light and resilient as the materials themselves. And while smelters may not be synonymous with urban locations, the metals companies' office and R&D locations can be powerful forges of economic influence.

The Chinese cities of Suzhou and Shanghai lead our Asia Pacific rankings, just ahead of Pune, India in the metals cluster of Maharashtra; Ho Chi Minh City, Vietnam; and Yangon, Myanmar. In the Middle East, led by investments by such organizations as Emirates Global Aluminium, the UAE's Abu Dhabi and Dubai lead the way, followed by Nairobi, Kenya; Sohar, Oman; and Lagos, Nigeria. In Europe, Berlin, Birmingham and Porto top our charts for metals, followed by Barcelona and Düsseldorf, while Eastern Europe finds three Hungarian cities of Budapest, Szekesfehervar and Gyor at positions 1, 3 and 5, respectively, along with No. 2 Bruntal, Czech Republic, and No. 4 Sroda Slaska, Poland.

In Latin America, Mexico's Monterrey and

San Luis Potosi top the list of competitive locations, followed by Bogotá, Santiago and São Paulo. And the North American rankings are topped by energy and industrial powerhouses Houston, Detroit (where Gestamp is investing in R&D) and Chicago, just ahead of Charlotte and Dallas-Fort Worth.

"The global steel industry continues to suffer from excess capacity," says Dan Levine of Oxford Economics. Few producers are willing to cut production, he says, "although antidumping measures in the United States are putting pressure on China to close unprofitable steel mills. On the other hand, increased exports of fabricated products from China are putting pressure on aluminum smelter plants in the United States.

"In the automotive sector, aluminum and plastics continue to make inroads into motor vehicle design (especially light trucks) at the expense of the steel industry," he continues. "This substitution will continue to be felt by suppliers in the auto supply chain."

All in all, however, the sector continues to offer strength and investment. Just looking at primary metal production and fabricated metal products alone, the Conway Projects Database has tracked more than 1,260 projects worldwide since January 2015 (with fabricated metals projects numbering about twice as many as primary metals complexes).

PHOTO COURTESY OF DANOS GROUP



PHOTO COURTESY GETTY IMAGES

Dan Levine Oxford Economics

xford Economics estimates that Dublin's economy will grow by 3.8 percent this year, nearly double the average rate of growth for European cities. The information and communication sector is the biggest contributor to this growth; but technology more broadly defined has been flourishing in Dublin.

Among major facility investments in recent months are data center complexes from Microsoft, Amazon and Deutsche Bank; headquarters from Fitbit, Hubspot, Grant Thornton and Slack Technologies; and R&D or centers of excellence from Zalando and Accenture, which is creating 300 new jobs at The Dock, a high-tech hub in the city's "Silicon Docks" area.

The city hosts a great many United States banks and is a leader in financial technology companies. Moreover, Dublin is a perceived winner if Brexit worries should cause financial services firms to leave London.

No wonder we forecast that Dublin will continue to experience strong growth in its GDP right through to 2021 (with an annual average growth rate of 3.7 percent for the next five years).

Dublin's young, well-educated workforce, available at competitive wages, will continue to attract interest from (especially) US companies. In fact, since an estimated 70 percent of FDI projects to Ireland originate from North America, it is important to note that the changing political landscape in the United States might have some impact on future FDI in or around Dublin.

For example, US Treasury regulations on so-called tax inversion deals (think Pfizer), plus European Union actions with respect to Apple's Irish tax liabilities might give pause to some new investments (especially those motivated by tax planning strategies).

On the other hand, Dublin is a city where nearly half the workforce (46.6 percent) have attained tertiary education and where one in five workers is foreign-born (21.1 percent), and the door for foreign workers is expected to remain open.

Strong demographics will continue to make Dublin an extremely competitive location for companies seeking a tech-savvy, well-educated European workforce.











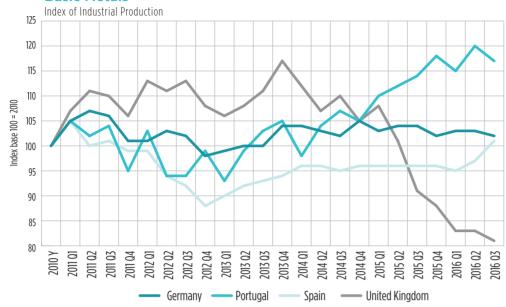








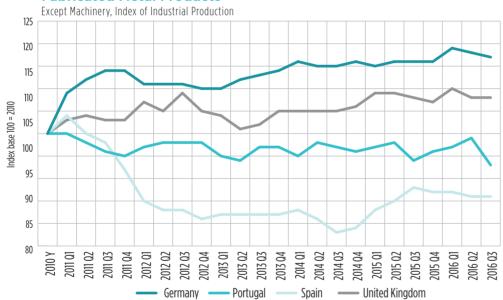
Basic Metals



Top 5 Cities

- 1 Berlin-Brandenburg, Germany
- 2 Birmingham-West Midlands, UK
- 3 Porto, Portugal
- 4 Barcelona, Spain
- 5 Düsseldorf, Germany

Fabricated Metal Products



Company	Metro Area	Country	Inv. US \$Million	Jobs
Norsk Hydro	Haugesund	Norway	\$515	
Siemens	East Riding of Yorkshire	United Kingdom	n \$220	1,000
Rexam	Zurich Metro Area	Switzerland	\$173	
Schaeffler Technologies Gmbh & Co. Kg	Frankfurt Rhine-Main Metro Area	Germany	\$165	250
Arcelormittal	Toulouse Metropole	France	\$121	



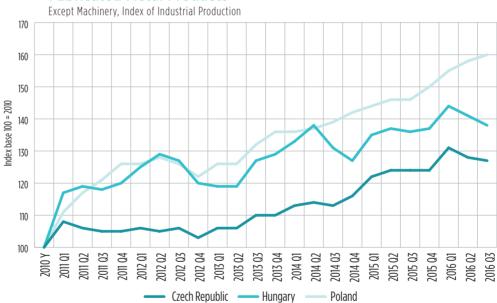




Top 5 Cities

- 1 Budapest, Hungary
- 2 Bruntal, Czech Republic
- 3 Szekesfehervar, Hungary
- 4 Sroda Slaska, Poland
- 5 Gyor, Hungary

Fabricated Metal Products



Company	Metro Area	Country	Inv. US \$Million	Jobs
Tosyali/Toyo Kohan	Istanbul	Turkey	\$500	
Prec-Cast	Budapest	Hungary	\$416	300
Tula Steel	Moscow	Russia	\$372	
Wuppermann	Gyor	Hungary	\$136	200
Al Invest Břidličná, A.S.	Prague	Czech Republic	\$120	49

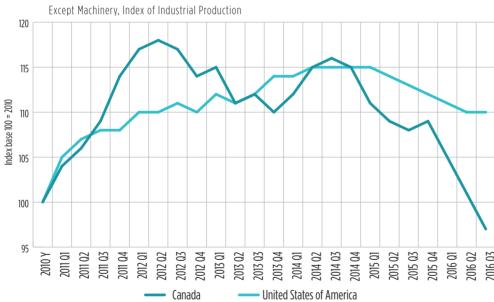




Basic Metals



Fabricated Metal Products



Top 5 Cities

- 1 Houston-The Woodlands-Sugar Land, TX, USA
- 2 Detroit-Warren-Dearborn, MI. USA
- 3 Chicago-Naperville-Elgin, IL-IN-WI, USA
- 4 Charlotte-Concord-Gastonia. NC-SC, USA
- 5 Dallas-Fort Worth-Arlington, TX, USA

Company	Metro Area	Country	Inv. US \$Million	Jobs
Vale Canada	Long Harbour, NL	Canada	\$4,250	
Rio Tinto Alcan	Kitimat, BC	Canada	\$3,300	1,000
Cameco Corp.	Cigar Lake, SK	Canada	\$2,600	
American Specialty Alloys	Alexandria, LA	United States	\$2,400	1,450
Essar Steel Minnesota	Duluth, MN-WI	United States	\$1,800	



PHOTO COURTESY OF GETTY IMAGES

Rui Jiang and Herminio Andres Tractus Asia

f China is considered the Factory of the World then Suzhou is its principal production line. With a population of only 5.7 million, it is small by Chinese standards, but it packs a tremendous amount of economic power. With a US\$213-billion GDP, it would be ranked No. 4 on the Fortune 500 between Apple and Berkshire Hathaway. The Brookings Institution ranks Suzhou No. 1 among its 22 Factory China cities.

While traditionally famous for its cultural heritage, Suzhou has transformed its economy over the last decade into one driven by manufacturing. Over 45 percent of its economic output is accounted for by making things. Key clusters of electronics, textiles, metallurgy, pharmaceuticals and fine chemicals, and precision equipment manufacturing differentiate it from the more consumer-products-driven manufacturing clusters in southern Guangdong province clustered around Shenzhen. Small but mighty, Suzhou's per-capita GDP of \$41,300 is 27 percent higher than that of neighboring megacity Shanghai.

Suzhou's industrial development has been centered on four key state-level economic development zones: Suzhou Industrial Park (SIP), Suzhou New District (SND) and Wuzhong and Wujiang Export Processing Zones. SIP, developed in the 1990s in conjunction with Singapore government-linked developers, is home to manufacturing facilities from 200 of the Fortune 500 companies. Across the city, SND has been modernizing its infrastructure,

including reorganizing the distribution of its streets to make it more competitive with SIP.

Suzhou is one of the few cities in China which has tried to preserve its historic urban landscape, making it a hot tourism destination. Suzhou is modernizing its urban infrastructure as well. Its five metro lines (two completed and three under construction) create an attractive living environment in close proximity to its industrial infrastructure. Meanwhile, the Suzhou-Nantong Railway is connecting two major industrial cities around Shanghai, and the Suzhou-Kunshan ring road has started to connect these two major Shanghai supra-urban cities with each other in the last year.

Suzhou continues to be ranked as one of the top locations for FDI in China, accounting for over 8 percent of all FDI and attracting an average of about \$8 billion each year over the last decade. Notable investments in 2016 included Roche Diagnostic's \$450-million manufacturing facility, Harman Industrial's Application R&D center and Eisai's oral pharmaceuticals solid-dose production facility.

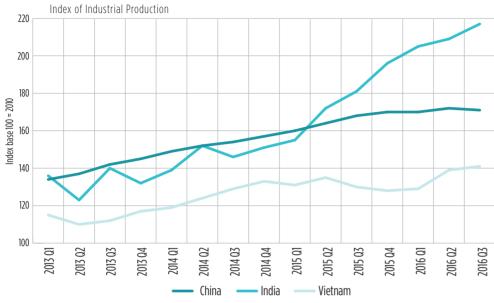
Suzhou is designated as a national hub in the Ministry of Commerce's development plan (2015-2020) focused on trade and logistics. The Beijing-Shanghai Express Railway links the city with other major Chinese cities. And Suzhou Port, the 10th largest port in China by container throughput in 2015, provides Suzhou with national and international linkages it needs to maintain its competitiveness.







Basic Metals

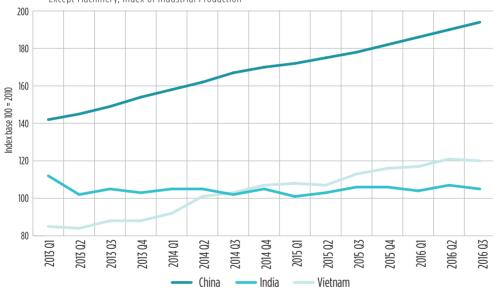


Top 5 Cities

- 1 Suzhou, China
- 2 Shanghai, China
- 3 Pune, India
- 4 Ho Chi Minh City, Vietnam
- 5 Yangon, Myanmar

Fabricated Metal Products





		,	
Company	Metro Area	Country	Inv. US \$Million Jobs
Steel Authority of India	Chennai	India	\$5,000
Shree Uttam Steel and Power	Satarda	India	\$3,000
POSCO/Steel Authority of India	Chennai	India	\$2,868
Yieh Phui Enterprise	Suzhou	China	\$2,800
National Mineral Development Corp.	Jagdalpur	India	\$2,488









Top 5 Cities

- 1 Monterrey, Mexico
- 2 São Paulo, Brazil
- 3 Bogotá, Colombia
- 4 Guadalajara, Mexico
- 5 Querétaro, Mexico

Fabricated Metal Products

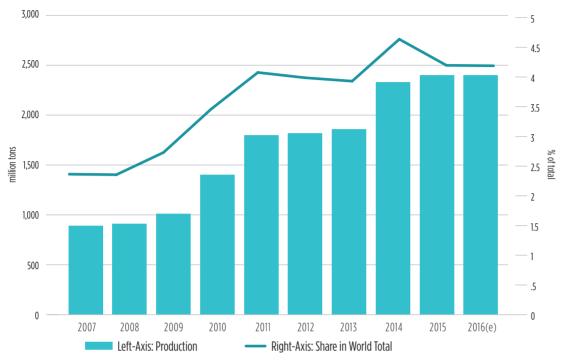


Company	Metro Area	Country	Inv. US \$Million	Jobs
Companhia Siderúrgica Do Pecém.	Matoes	Brazil	\$5,500	
Grupo Simec, S.A.B. De C.V.	Apizaco	Mexico	\$600	
Technip	Rio de Janeiro	Brazil	\$272	
Frisa Industrias, S.A. De C.V.	Monterrey	Mexico	\$200	250
Talleres Y Aceros, S.A. De C.V.	Ixtac Zoquitlan	Mexico	\$200	





Annual Smelter Production & Share in World's Total



Source: U.S. Department of the Interior, U.S. Geological Survey



The UAE is the world's largest producer of aluminum.

Top 5 Cities

- 1 Abu Dhabi, UAE
- 2 Dubai-Sharjah-Ajman, UAE
- 3 Nairobi, Kenya
- 4 Sohar, Oman
- 5 Lagos, Nigeria

Concorda Corporato Facili	olocios ociporato i dominio mirodimento, 2010-2012				
Company	Metro Area	Country	Inv. US \$Million	Jobs	
Aluminium Bahrain B.S.C	Askar	Bahrain	\$3,500		
Pars Kohan Diar Parsian Steel (Pkp)	Chabahar	Iran	\$1,600		
Industrial Park Cedar/ Qatar Steel	Oran Metro Area	Algeria	\$1,200		
Shadeed Iron & Steel Co Llc	Sohar	Oman	\$1,200		



TRANSPORTATION & LOGISTICS

t's not all about Amazon. Or is it?
In the US alone in 2015, Amazon sold
\$55.6 billion worth of retail goods and
operated 75 million sq. ft. of distribution
space employing 111,000 workers — 15 percent
more jobs than in 2014. And the company's
global network of facilities — including more
than 130 fulfillment centers, a couple dozen
sortation centers and now a \$1.5-billion air hub
at Cincinnati/Northern Kentucky International
Airport — grows nearly as fast as its packages
move.

Even as the supply of robots rises and the supply of truck drivers appears to be on the wane, the one constant supporting the worldwide flow of goods is facilities to keep things moving — preferably positioned near major logistics assets such as airports, ports and rail/intermodal hubs. According to NAIOP, the US alone saw 167 million sq. ft. of warehouse construction in 2016. The Conway Projects Database has tracked nearly 4,000 facility investments with a warehouse or distribution component since January 2015.

Many of those have been landing in Houston, Dallas and Chicago — our top three cities in North America — followed by Atlanta and Columbus, Ohio. Texas in 2016 saw an overall economic impact of warehouse construction activity of \$12.6 billion, supporting nearly 51,000 jobs — far and away the US leader. The

state as of early 2016 was slated to be home to no less than 10 Amazon fulfillment centers.

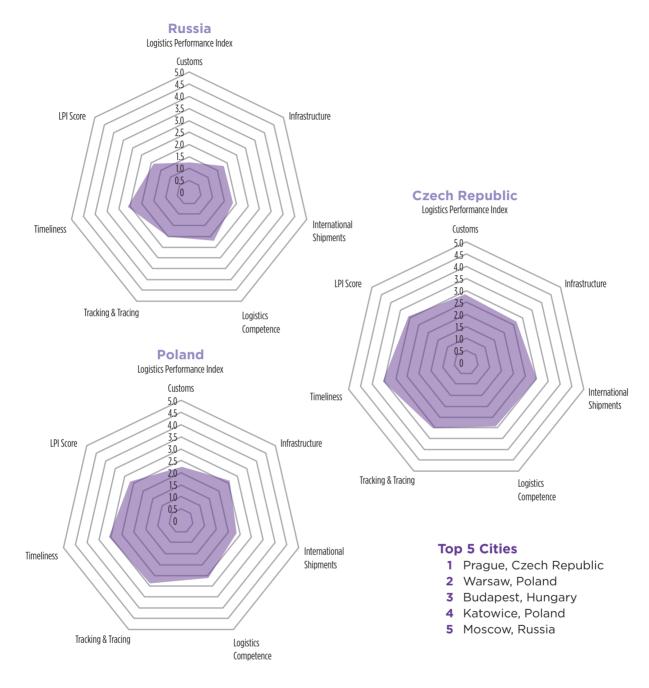
In Latin America, Mexico City reigns supreme in our measure of logistics location competitiveness, followed by Panama City and Campinas, Brazil. Across the pond, Barcelona, Birmingham and Leeds lead the way, followed by Hamburg and London. To the east, Prague, Warsaw and Budapest top the charts.

Led by such firms as DP World, Dubai is No. 1 in Africa and the Middle East, followed by bustling hubs in Nairobi, Johannesburg, Lagos and Cairo. And in Asia, it's no surprise that Shanghai's massive goods movement industry continues to show the way, followed by Singapore, Suzhou, Tokyo and Jakarta. China's "One Belt, One Road" global initiative figures to increase the logistics and transportation profile of not only Chinese cities (including high-priced Hong Kong), but cities in every region of the world.

As Yossi Sheffi, director of the MIT Center for Transportation & Logistics, wrote in Site Selection in 2016, the increasing frequency of disruptions (whether from weather, infrastructure failure or man-made calamity) means flexibility will continue to grow in importance in the global supply chain. This may bode well for increased distribution facility investment, as companies look to reinforce with redundancy in order to be as resilient as possible.

PHOTO COURTESY OF ISTOCI





Company	Metro Area	Country	Inv. US \$Million	Jobs
Lidl	Athens	Greece	\$177	250
MV-Cargo	Yuzhne	Ukraine	\$100	
Kaufland Hrvatska	Zagreb	Croatia	\$65	300
Ikea Components	Bratislava	Slovakia	\$56	300
Waberer's	Budapest	Hungary	\$55	650



PHOTO COURTESY OF GETTY IMAGES

Dan Levine Oxford Economics

ver the last five years, London's GDP growth rate has far outpaced that of most other EU cities, and much of that growth was attributable to financial and business services. Now, however, the outlook for London is more uncertain; especially until the terms of any final Brexit deal are reached.

In the short term, this uncertainty might cause a pause in new projects coming to the city. Any resulting slowdown in London's financial sector caused by Brexit uncertainty will likely have negative repercussions for other key sectors of the city's economy as well, especially professional, scientific and technical services.

Possible changes in migration controls and trade deals would impact the city in more fundamental ways. For example, post-Brexit curbs on migration would likely have downward consequences in the construction, information and communications, and healthcare sectors. Domestic migrants from other parts of the UK might help offset the loss of foreign workers, but likely many of these potential replacements will be discouraged by London's high housing costs.

Notwithstanding the uncertainties surrounding the Brexit issue, recent HQ or office investments from such firms as Wells Fargo, Apple, Google and Kraft Heinz show London's core economic strengths remain.

These include its location, time zone, legal system and position as one of the world's leading international business centers. The city also is one of the few truly global cities with a diverse economic base, highly skilled workforce, cultural diversity and world-class universities and research institutions.

Accordingly, Oxford Economics forecasts that, despite the Brexit uncertainties, London will average 2.3-percent growth per year over the next five years (2017-2021), well above the EU city average of 1.8 percent.

No wonder European Council President Donald Tusk, upon receiving the official letter kicking the formal Brexit process into gear in March 2017, remarked, "We miss you already."







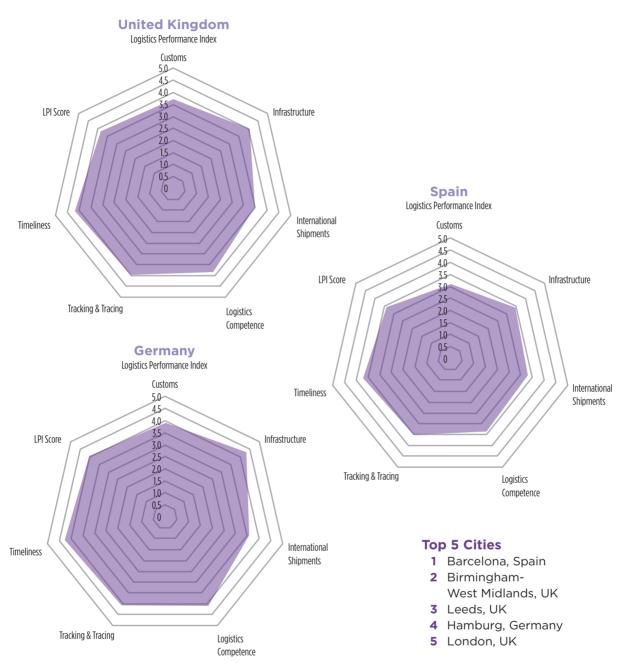






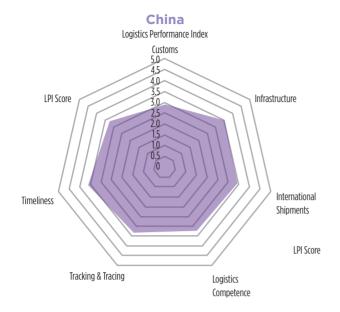


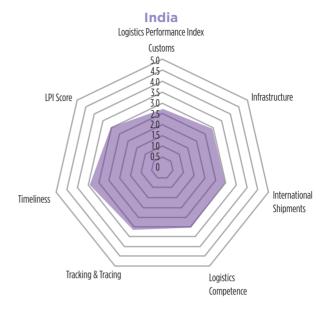


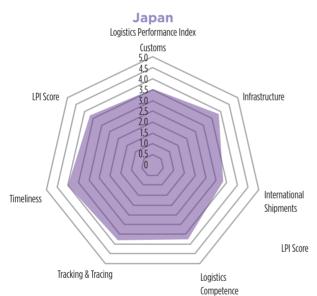


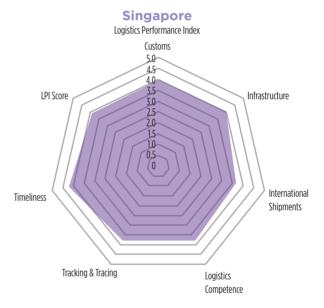
Company	Metro Area	Country	Inv. US \$Million	Jobs
BMW Group	Wallersdorf	Germany	\$219	2,000
Odfjell Terminals Maritiem B.V	Toulouse Metropole	France	\$204	
United Parcel Service	Stuttgart	Germany	\$200	200











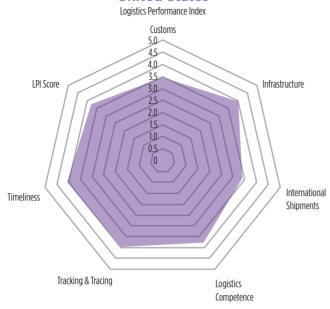
Top 5 Cities

- 1 Shanghai, China
- 2 Singapore
- 3 Suzhou, China
- 4 Tokyo-Kanto, Japan
- 5 Jakarta-Jabodetabek, Indonesia

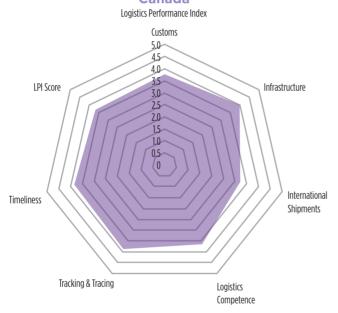
Company	Metro Area	Country	Inv. US \$Million	Jobs
Ting Hsin International Group	Wuxi	China	\$423	
Nsw Ports	Adelaide	Australia	\$300	200
Woolworths	Melbourne	Australia	\$272	190
Panhua Group	Manila	Philippines	\$205	
Bharat Petroleum Corp.	Haldia	India	\$184	



United States



Canada



Top 5 Cities

- 1 Houston-The Woodlands-Sugar Land, TX, USA
- 2 Dallas-Fort Worth-Arlington, TX, USA
- 3 Chicago-Naperville-Elgin, IL-IN-WI, USA
- 4 Atlanta-Sandy Springs-Roswell, GA, USA
- 5 Columbus, OH, USA

Company	Metro Area	Country	Inv. US \$Million	Jobs
Sheralven Enterprises	Greeneville, TN	United States	\$950	36
Oak Pin Holdings	New Orleans-Metairie, LA	United States	\$800	70
Canpotex Terminal	Prince Rupert, BC	Canada	\$775	
Trafigura	Corpus Christi, TX	United States	\$500	
Ericsson	Montréal, QC	Canada	\$456	60



Dan Levine **Oxford Economics**

xford Economics forecasts that Africa's cities will have the world's fastest-growing urban economies over the next 15 years. Moreover, these cities will typically experience faster growth rates than their respective national economies. The ongoing trend toward urbanization throughout Africa is the force propelling this growth, and Lagos is a certainly a case in point.

By our calculations, Nigeria is already Africa's largest economy. By 2030, we expect that Lagos will overtake Cairo as Africa's most populous city. Lagos' high ranking in this year's survey probably reflects its size and continued high rate of growth rather than any particular competitive advantage.

In our research reports, Oxford Economics describes this phenomenon as "a volume opportunity" for business. In fact, most of Nigeria's recent economic growth has been driven by non-oil sectors, including manufacturing, telecommunications, construction and merchandise trade.

Among the major investments landing in Greater Lagos was the 2015 decision by Ford to manufacture the Ford Ranger pickup truck at a complex in Ikeja, on the outskirts of Lagos. It is the first time Ford has invested in a manufacturing site in Africa outside of South Africa. GE in November 2016 launched the Lagos Garage, a hub for advanced manufacturing-based innovation, strategy development, idea generation and collaboration

that will offer a year-round series of skills training programs focused on building the next generation of Nigerian entrepreneurs.

Other major investment is coming from home, as the Dangote Group conglomerate continues to invest in energy, cement and other ventures in its home country. The Lagos-based corporation, by constructing cement plants throughout the nation, has almost singlehandedly helped Nigeria go from importing 60 percent of its cement to now producing enough to supply its own needs and to export.

There is a darker side to the fast pace of population growth in Lagos, and that takes the form of increasing employment and security problems. In addition, there is growing concern regarding societal instabilities caused by rising income inequalities. The high level of government corruption throughout Nigeria is an added concern. Outside of the oil industry, that creates a very challenging investment climate for Western companies. Consequently, much of Nigeria's foreign direct investment is Chinese in origin.

China's Huwei Technologies has opened an office in the city. Globe Motors/Higer Bus Company of China has invested \$120 million in a manufacturing plant. And the Chinese and Nigerian governments announced plans last year for a \$40-billion program of Chinese investment in Nigerian infrastructure and oil industries.









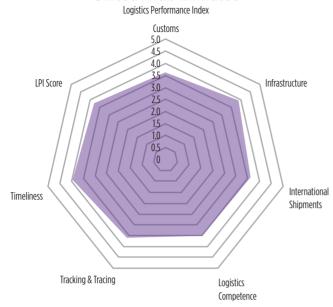






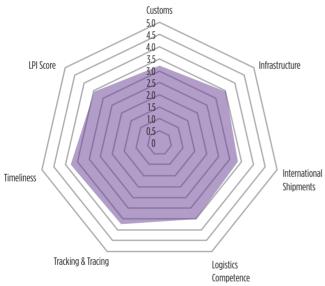


United Arab Emirates



South Africa

Logistics Performance Index

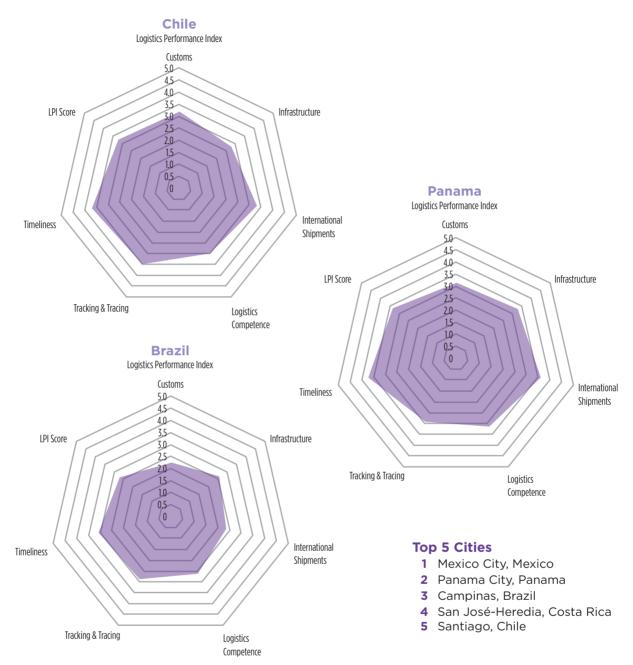


Top 5 Cities

- 1 Dubai-Sharjah-Ajman, UAE
- 2 Nairobi, Kenya
- 3 Johannesburg, South Africa
- 4 Lagos, Nigeria
- 5 Cairo, Egypt

Metro Area	Country	Inv. US \$Million	Jobs	
Jeddah	Saudi Arabia	\$933		
Tangiers	Morocco	\$854		
Dammam	Saudi Arabia	\$373		
Walvis Bay	Namibia	\$294		
Lagos	Nigeria	\$256	5,000	
	Metro Area Jeddah Tangiers Dammam Walvis Bay	Metro AreaCountryJeddahSaudi ArabiaTangiersMoroccoDammamSaudi ArabiaWalvis BayNamibia	Metro AreaCountryInv. US \$MillionJeddahSaudi Arabia\$933TangiersMorocco\$854DammamSaudi Arabia\$373Walvis BayNamibia\$294	





Company	Metro Area	Country	Inv. US \$Million	Jobs
APM Terminals Management B.V.	Lazaro Cardenas	Mexico	\$350	
China Harbour Engineering Co.	Mexico City	Mexico	\$221	
Fiat Chrysler Automobiles	Querétaro	Mexico	\$187	97
Maersk	Santiago	Chile	\$170	2,200
B. Braun	Rio de Janeiro	Brazil	\$137	

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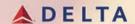
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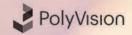
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Timothy Perman Global Strategy Director Coca-Cola



Dr. Stephen E. Cross **Executive Vice President** Research Georgia Tech



Todd Harris Co-Founder Hi-Rez Studio



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Places for Prosperity

he 19 leading cities represented by full-page profiles in the preceding pages are leading lights. But they're not the only areas shining with opportunity. By virtue of their placing in the top five in their world region at least once across the 12 sectors examined in this report, the metro areas featured on the following pages (in alphabetical order) offer compelling evidence for future growth. Each city's sectoral strengths are represented by icons drawn from the legend below. Alongside business intelligence from the area (including a chart of recent corporate projects), we also present relevant insights from the famous and not-so-famous alike.

SECTOR LEGEND



Aerospace



Food & Beverage



Automotive



IT & Communications



Business & Financial Services



Life Sciences



Chemicals & Plastics



Machinery, Equipment, & Construction



Electronics



Metals



Energy



Transportation & Logistics



■ USA

Mercedes-Benz USA broke ground in 2016 on a \$93-million new corporate headquarters in Sandy Springs, where the population doubles during the daytime from an influx of workers. UPS, Airwatch, Cox Communications and Newell Rubbermaid are among the global companies that call Sandy Springs their home.

- Hartsfield-Jackson International airport, located 10 (16 kilometers) south of Atlanta, promotes itself as the world's busiest airport, serving 68 million passengers per year and providing nonstop service to 186 cities in the United States.
- Atlanta was founded in 1837 as a railroad settlement, hence the city's original name, "Terminus." The city remains an important inland railroad junction for freight travelling to and from the Atlantic port of Savannah.

Company	Product	Inv. US \$Million	Jobs
Riskalyze	IT and Communications	\$500	40
Ciba Vision Corp.	Life Sciences	\$400	340
Toyo Tire & Rubber Co.	Chemicals and Plastics	\$371	650
Keurig Green Mountain	Food and Beverages	\$337	550
Google	IT and Communications	\$300	26

If Atlanta is still the hub of Southeastern commerce, then Sandy Springs is rapidly becoming the center of commerce in the metro region."

-Rusty Paul, Mayor, Sandy Springs













CST UTC-6 30°16′ N 97°45′ W elev. 489 ft.

USA

- Home of the University of Texas, Austin lays claim to one of the most educated talent pools in the US. Nearly 41 percent of adults have at least a bachelor's degree, compared to 28 percent nationally.
- Major corporations with national and regional headquarters in Austin include Apple, Dell, eBay, Facebook, Home Depot, Oracle, Visa and Whole Foods.
- SXSW, the annual conference of film, interactive media, music and commerce that began in Austin in 1987, had a \$325-million economic impact in 2016.
- The Milken Institute in 2016 named Austin the No. 2 Best-Performing City in the US in its annual assessment of where America's jobs are created and sustained.

Company	Product	Inv. US \$Million	Jobs
Charles Schwab	Business and Financial Services	\$210	823
Flextronics	Electronics	\$100	815
Capital Beverage	Transportation and Logistics	\$45	
Cortec Precision Sheetmetal	Metals	\$20	100
World First	Business and Financial Services	\$20	

I like it here in Austin. Anybody got a room?"

-Keith Richards, of the Rolling Stones





UTC+5:30 12°58′ N 77°34′ E elev. 3,018 ft.

India

• Also known by the its previous name, the anglicized "Bangalore," Bengaluru has the highest percentage of computer engineers in the world, with more than 1 million IT professionals living there.

- Greater Bengaluru has a population of more than 9 million people, making it India's fifth most populous metropolitan region.
- Google, Samsung, Amazon and Ernst and Young all have a presence in Bengaluru's Constellation Tech Park, located on the city's outskirts.
- The term "Bangalored," indicating jobs outsourced to India, has become so prevalent it has been officially added to the English language.

Company	Product	Inv. US \$Million	Jobs
Exxon Mobil Corp.	Energy	\$400	1,000
JSW Steel	Metals	\$384	
Mediatek	Energy	\$200	
Toyota Motor Corp.	Machinery	\$165	500
Intel Corp.	IT and Communications	\$162	

More than anywhere else in India. vou see the nation stampeding to modernity. It wants what the West has. and it wants it now."

-Stephen McClarence, The Telegraph, London







- Bogotá is the fourth largest city in South America. The city's GDP is an estimated \$73 billion, or \$9,322 per resident.
- Owing to a favorable business climate, over 1,600 multinational companies have staked a presence in Bogotá.
- Ecopetrol, a mining and oil production company headquartered in Bogotá, is the first Colombian business to be named to the global Fortune 500 list.
- Bogotá has a 240-mile (392-km.) network of bicycle corridors, used by as many as 450,000 people each day. Increased bicycle use in Bogotá has been accompanied by a reduction in greenhouse gas emissions.

Company	Product	Inv. US \$Million	Jobs
Coca-Cola	Food and Beverages	\$200	
Hero Motocorp	Automotive	\$70	
Yanbal	Chemicals and Plastics	\$70	
Avianca	Transportation and Logisti	cs \$50	
Belcorp Corp.	Transportation and Logisti	cs \$20	

A developed country is not a place where the poor have cars. It's where the rich use public transport."

-Enrique Penalosa, former mayor of Bogotá







CET 49°12′ N 16°37′ E elev. 788 ft.

Czech Republic

- Brno is the second largest city in the Czech Republic and the capital of the country's Moravia region.
- IBM, Siemens, ABB, Honeywell and Motorola all have significant presences in Brno.
- Brno produces more than 17,000 college graduates each year, the highest density of graduates per capita in the Czech Republic.
- About one-third of the world's electron microscopes are manufactured in Brno by companies including Tescan, FEI, and Delong.

Brno is the Central European center of science, development and innovation. It excels in the fields of computer security, software development and business services."

-Petr Vokřál, Mayor of Brno

Company	Product	Inv. US \$Million	Jobs
Metaldyne Oslavany, Spol. S.R.O.	Automotive	\$46	250
FEI	Electronics	\$38	600
Abb S.R.O.	Electronics	\$35	398
Penam, A.S.	Food and Beverages	\$26	100
Oncomed Manufacturing A.S.	Life Sciences	\$21	20





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workforce population: 4,732,161

- Boston's high-tech industry has grown by an average of 9 percent each year since 2010. There are over 30,000 high-tech jobs in the city.
- Since spring 2017, \$7 billion of construction investment was made in Boston, making this the third largest construction boom the city has ever experienced.
- There are more than 18,700 women-owned businesses in Boston, accounting for over \$4 billion in sales.
- Forty-six percent of Boston-Cambridge-Newton residents have at least a bachelor's degree.

Company	Product Ir	ıv. US \$Million	Jobs
Bristol-Myers	Life Sciences	\$250	350
Altisource Portfolio Solutions	Business and Financial Service	es \$150	100
Genzyme	Life Sciences	\$80	
Markley Group	IT and Communications	\$73	25
Logmein	IT and Communications	\$66	450

It's an opportunity to define a new era. as we build a new vision for our city. That vision is of a Boston that's thriving, healthy and innovative. It's thriving — an economic powerhouse and an equitable community. It's a city of opportunity, where businesses reach new heights — and everyone has access to the good jobs and safe homes that are the foundations of middle-class security."

EST

42°21′ N 71°03′ W elev. 141 ft.

-Martin J. Walsh, Mayor of Boston





- Greater Cairo, including Helwan to the south, is Egypt's main industrial center, producing iron, steel, textiles, refined petroleum products, electronics and trucks, automobiles and chemicals.
- Cairo startup Instabug, hatched in 2013 out of a local accelerator, announced a \$1.7-million seed round in 2016, one of the biggest venture capital funding rounds in Egypt and the Middle East.
- More than one-quarter of all Egyptians live in Cairo. With a population of over 12 million people, Greater Cairo is the most populous urban center in the Middle East.
- Egyptian writer Naguib Mahfouz, author of *The Cairo Trilogy*, was awarded the 1988 Nobel Prize for Literature

I NODEL I LIZE IOL L	attrature.			
Company		Product	Inv. US \$Million	Jobs
Sidi Kerir Petrochemica	ils Co.	Chemicals and Plastics	\$558	
Al Ghurair Group		Food and Beverages	\$370	
German Lebanese For I	ndustry Co.	Chemicals and Plastics	\$284	400
General Electric		Energy	\$200	
L'Oreal		Chemicals and Plastics	\$150	

30°03′ N 31°14′ E elev. 75 ft.

EET

As of 2014 Cairo enjoyed a 69 percent premium in labor productivity (GVA per employee) over other parts of Egypt."

> -Euromonitor International. Cairo City Review, February 2016













Brazil

- The Campinas metro region is sometimes referred to as "Brazil's Silicon Valley." Tech companies with a presence in the region include IBM, Lucent, Samsung, Motorola and Dell.
- The city's Viracopos International Airport is the largest cargo airport in Latin America, exporting goods to more than 180 countries.
- The University of Campinas, known as Unicamp, is considered one of the best research universities in Latin America, and has been referred to as "Brazil's answer to MIT."

Greater Campinas, with a population of just over 1 million, boasts the largest number of high-tech incubators in Brazil as well as eight tech-oriented industrial parks.

of ingli teen meabators in Brazil as we	ii as eight teem offented in	dastra paris.	
Company	Product	Inv. US \$Million	Jobs
Banco Santander	Business and Financial Servi	ices \$493	
Lenovo	IT and Communications	\$100	
Ascenty	IT and Communications	\$75	
Fmc Agricultural Solutions	Chemicals and Plastics	\$51	
Galderma Brasil Ltda.	Life Sciences	\$50	300

Investment has migrated to Campinas mainly for the quality of the local workforce, since the city has a high degree of development with targeted schools for IT and telecommunications."

> —Fernando Almeida Prado, Marketing Director, Aceco Ti









South Africa

- Cape Town was the only African city represented in a 2016 survey of Global Cities of the Future by Foreign Direct Investment Intelligence, a division of the Financial Times. The city ranked 21st, alongside Edinburgh, Hong Kong and Chicago.
- In 2014, Cape Town was named the best place in the world to visit by The New York Times and London's Daily Telegraph.
- According to city statistics, 37 percent of Cape Town's economic activity comes from finance, insurance, real estate and business services. Cape Town is South Africa's largest port city.
- Chevron's Cape Town Refinery celebrated its 50th anniversary in 2016. The refinery supports some 13,500 direct and indirect jobs in the Western Cape.

Company	Product	Inv. US \$Million	Jobs
Hisense	Electronics	\$34	1,200
Gestamp	Energy	\$25	200
GRI - Renewable Industries	Energy	\$25	200
Johnson And Johnson	Chemicals and Plastics	\$18	

There has been an explosion in startups over the past three years. People are moving down to Cape Town from Johannesburg, and we're seeing some quitting their iobs to become entreprepreneurs."

> —Justin Stanford, Founder, ESet Southern Africa











- Morocco
- Casablanca is Morocco's chief port and one of the largest financial centers in all of Africa. It is the economic and business center of the country.
- The Casablanca Finance City (CFC), launched in 2010 by King Mohammed VI, aims to make Casablanca the financial hub for Africa, offering incentives for firms who locate their regional headquarters in the finance and business center.
- The 19th Global Financial Centers Index, published in 2016, saw Casablanca dethrone Johannesburg as the fourth most competitive financial hub in Africa and the Middle East.

Casablanca's Hassan II Mosque, the largest in Morocco, took more than seven years to build and required the efforts of as many as 10,000 artisans.

Company	Product	Inv. US \$Million	Jobs
Aerolia	Aerospace	\$54	500
Sumitomo Electric Industries	Automotive	\$34	300
Sanofi	Transportation and Logistic	s \$26	
Hexcel Corp.	Chemicals and Plastics	\$22	
Winxo	Energy	\$16	

Of all the gin joints in all the towns in all the world, she walks into mine."

—Humphrey Bogart, "Casablanca"









India

- With a population of 9 million, Chennai is the capital of the Indian state of Tamil Nadu. The city lies on the Bay of Bengal in eastern India.
- The Chennai metropolitan area includes the city-proper and the nearby industrial zones of Sholinganallur, Siruseri, Oragadam and Sriperumbudur.
- ECA, which collects and analyzes data on international site locations, has ranked Chennai as India's third most livable city.
- Chennai has emerged as an electronics manufacturing hub. Dell, Motorola, Cisco, Samsung, Siemens and Sony-Ericcson all have manufacturing plants in the Chennai metro.

Company	Product	Inv. US \$Million	Jobs
Steel Authority of India Limited	Metals	\$5,000	
Sunedison/Adani Enterprises	Energy	\$4,000	4,500
Bharat Petroleum Corp.	Energy	\$3,687	
Posco/Steel Authority of India Limited	Metals	\$2,868	
Steel Authority of India Limited	Metals	\$1,925	

Chennai is one of the scariest crowds to face. Everyone looks so conservative, but once you crack the first joke, they are so appreciatively loud that they will hit you with a laugh that will scare you stiff. It's the coolest crowd to perform for."

-Vir Das, Indian comic







39°58′ N 83°00' W elev. 902 ft.

■ USA

- The population of the Columbus area grew by 1.2 percent in 2015, pushing the number of residents past 2 million.
- Major corporations that have headquarters in Columbus include JPMorgan Chase, L Brands, Cardinal Health, Abercrombie & Fitch and DHL Supply Chain.
- The Columbus Region is home to 59 colleges and universities with a total enrollment of more than 136,000 students and more than 22,000 annual graduates.
- SmartAsset ranks Columbus as the fifth best American city in which to pursue a career in advanced technology.

The Columbus region is responsible for the state's growth. It's a key indicator of how desirable the region is."

-Steve Schoeny, Economic Developer

Company	Product	Inv. US \$Million	Jobs
Amazon.Com	IT and Communications	\$300	25
Honda of America	Automotive	\$210	
L Brands, Inc	Transportation and Logistics	\$175	100
Alliance Data Systems	Business and Financial Servi	ces \$80	700
Honda of America	Automotive	\$70	100





GMT 51°54′ N 8°29′ W elev. 49 ft. Cork workforce population: 670.000

- Cork is the Republic of Ireland's second largest city and economic engine, after Dublin.
- Boston Scientific manufactures and exports more than 5.6 million healthcare devices per year at its facility in Cork, including products for cardiology, endoscopy, urology and women's health.
- A total of 137 multinational companies are based in Cork, employing over 22,000 people. Household names clustered around Cork's metropolitan area include Apple, EMC, Pfizer, Amazon, McAfee and Pepsico.

The community of entrepreneurs here is so strong and their willingness to support new startups is incredible."

-Siobhan Finn, Director of Cork Innovates

Company	Product	Inv. US \$Million	Jobs
Dairygold	Food and Beverages	\$88	
Merck	Life Sciences	\$62	70
Depuy Synthes	Life Sciences	\$59	
Depuy Synthes	Life Sciences	\$49	38
Glaxosmithkline	Life Sciences	\$40	20









- Saudi Arabia
- Dammam was one of the world's fastest-growing cities of the second half of the 20th century. From 1950 to 2000, the city's population grew from 22,000 to 759,000.
- The Siemens Dammam Energy Hub (SDEH) is the first manufacturing facility for gas turbines in Saudi Arabia and the largest in the Middle East.
- GE's Manufacturing Technology Center in Dammam provides electric power, oil and gas and water needs for the Saudi kingdom.
- By 2020, 3M plans to manufacture products related to air quality, healthcare, infrastructure and identity management at a 538,000-sq.-ft. (50,000-sq.-m.) plant under construction in Dammam.

Company	Product	Inv. US \$Million	Jobs
Maaden/Mosaid/Sabic	Chemicals and Plastics	\$7,000	
Saudi Butanol Co.	Chemicals and Plastics	\$533	
Shree Basaveshwar Sugars/Gammon Group	Food and Beverages	\$400	400
Saudi Aramco	Transportation and Logistic	s \$373	
New Medical Center	Life Sciences	\$267	

In Dammam, we have a comprehensive and multipurpose center with a wide range of technical capabilities."

-Doug Craig, Dresser-Rand, Saudi Arabia















- Greater Detroit, including Warren and Dearborn, comprises six counties and has a population of more than 4 million people.
- Detroit is home to more than 300,000 businesses, including 11 Fortune 500 companies.
- In addition to being the original home of iconic Motown Records, Detroit has produced musical superstars MC5, Iggy and the Stooges, Alice Cooper, Eminem, Madonna and The White Stripes.
- Among the top 50 US metropolitan areas by population, the Detroit area had the 19th-highest growth rate in real GDP, 12.2 percent, from 2010 to 2015.

Company	Product Inv. US	\$Million	Jobs
General Motors	Automotive	\$1,000	2,600
Ford Motor Co.	Automotive	\$555	1,400
General Motors	Automotive	\$384	
General Motors	IT and Communications	\$258	
Detroit Diesel Corp.	Machinery, Equipment & Construction	n \$208	245

We hope for better things: it shall rise from the ashes."

> —Detroit's motto. penned by Father Gabriel Richard in 1805











CST 20°40′ N 103°21′ W elev. 5.108 ft.

Mexico

- Guadalajara is Mexico's main provider of electronics and digital components, earning it the "Silicon Valley of Mexico" nickname.
- The Technology Park Guadalajara Software Center, which opened in 2006, is home to 34 IT companies that generate more than 850 jobs. The city also has a Software and Integrated IT Services Park.
- Guadalajara is an important education center: It is home to the Universidad de Guadalajara, Universidad Panamericana, the Western Institute of Technology and Higher Education (ITESO), Monterrey Institute of Technology and Higher Education, and the Universidad Autónoma de Guadalajara, among others.

Company	Product	Inv. US \$Million	Jobs
Oracle Corp.	IT and Communications	\$86	150
Plexus Corp.	Electronics	\$40	740
Flextronics	Electronics	\$30	
ZF Sachs Suspension	Automotive	\$30	200

Although support for technology education programs has been traditionally low in Latin American countries. Guadalaiara's high-tech cluster has been able to avoid this trend by having the highest percentage of state GDP assigned to science and technology in Mexico."

> —The American Chamber of Commerce of Mexico







Delaval GMBH

Still Gesellschaft Mit Beschränkter Haftung

- More than 35,000 people work in the civil aerospace industry in the Hamburg Metropolitan Region; the sector is home to more than 300 small and medium-sized businesses in the region.
- Hamburg has long been a global center of shipbuilding expertise, with particular emphasis currently on cruise ships and green shipping.
- Hamburg is Germany's second-largest center for startup activity, after Berlin, according to KfW Start-up Monitor 2016, a publication of KfW Group's Economics Department.

Inv. US \$Million Company Product Jobs Merck Life Sciences \$54 40

Transportation and Logistics

Transportation and Logistics

\$33 \$32

Hamburg is one of the most dynamic logistics sites in northern Europe, and from a logistics and property point of view, Germany's most attractive location. HUB + Neuland's new logistics site will help ease the tense market for logistics sites in the city-state of Hamburg."

CET

53°33′ N 10°00' E elev. 72 ft.

—Frank Horch, Hamburg Economy and Transport Senator









- Vietnam
- With a metropolitan population estimated at 20 million inhabitants, Ho Chi Minh City is the second largest city in Vietnam and the country's center of commercial and economic development, contributing almost a quarter of Vietnam's gross domestic product.
- Vietcombank Tower, completed in 2015 and rising 35 stories from Me Linh Square, won the "Highest Quality Building Prize" from the State Ministry of Construction.
- Ho Chi Minh City is embarking on an effort to build a new \$16-billion Long Thanh International Airport, to compete with sprawling airline hubs in Bangkok and Singapore. The airport's first of several stages is slated for completion in 2025.

Company	Product	Inv. US \$Million	Jobs
Samsung Electronics	Electronics	\$1,000	
Samsung Electronics	Electronics	\$600	
Jabil Circuit	Electronics	\$500	
Saigon Industry Corp.	Energy	\$306	
Kenda Rubber Ind. Co.	Chemicals and Plastics	\$300	



-Paul Stoll. Celadon International Hotel Management





- Hyderabad is capital of the Indian state of Telangana and is the sixth most populous metro region in India.
- Hyderabad, which hosts operations from Microsoft, Apple, Amazon and Google, among others, accounts for nearly 11 percent of India's Internet technology exports.
- The emergence of pharmaceutical and biotechnology industries in the 1990s led to Hyderabad's branding as India's "Genome Valley." With an annual output of \$74 billion, Hyderabad is the fifth-largest contributor to India's overall GDP.
- In 2016, a partnership between Boeing and Tata Advanced Systems laid the foundation for a new facility in Hyderabad to co-produce Boeing AH-64 Apache helicopter fuselages and other aerostructures

rusciages and other acrostructures) .		
Company	Product	Inv. US \$Million	Jobs
Isuzu Motors	Automotive	\$475	
Procter & Gamble	Chemicals and Plastics	\$146	
Ferring International Center	Life Sciences	\$100	
Samsung Electronics Co.	Energy	\$100	
Shantha Biotechnics/Sanofi	Life Sciences	\$75	

The entrepreneurs are from Hyderabad. People from Hyderabad have always been great at entrepreneurship and setting up businesses."

> —Sateesh Andra. Managing Director, Endiya Partners







Turkev

- The Izmir region is home to 13 Organized Industrial Zones, four Technology Development Zones and two Free Zones.
- More than 2,235 foreign companies have established manufacturing or office locations in Izmir since 2000.
- Izmir is home to the first aerospace cluster in Turkey. About 250 aerospace and defense companies are located in the Izmir region; four vocational aviation schools support the cluster.

Izmir offers the best talent in Turkey with its nine universities that give graduates the skills and attitudes to meet today's business demands."

—Invest in Izmir

Company	Product	Inv. US \$Million	Jobs
Cargill	Food and Beverages	\$2	











Indonesia

- Jakarta is the largest city in Southeast Asia its metro area is so large it has its own name, Jabodetabek, for the initials of Jakarta, Bogor, Depok, Tangerang and Bekasi. The metropolitan area includes more than 30 million people, with a total land area of 1,693 square miles (4,384 square km.).
- Tanjung Priok, Jakarta's main port, ranks in the world's Top 30 seaports by volume. The port handles roughly two-thirds of Indonesia's total international trade.
- General Motors and Chinese partner SAIC have teamed up to build a minivan manufacturing plant in Jakarta to target Indonesia's growing demand for new vehicles.
- Jakarta's new mass transit push, aimed at eliminating choking traffic jams, is to yield the metropolitan region's first metro line in 2018

the metropolitan regions mist men			
Company	Product	Inv. US \$Million	Jobs
General Motors/SAIC/Wuling	Automotive	\$700	
Mitsubishi Motors Corp.	Automotive	\$650	
Suzuki Motor Corp.	Automotive	\$611	
Michelin/PT Chandra Asri Petrochemical	Chemicals and Plastics	\$435	
PT Krakatau Steel	Metals	\$390	

Jakarta embodies one of my favorite qualities of the rest of Indonesia: it has an amazing spirit."

-Ryan Ver Berkmoes, Writer











South Africa

- South Africa's biggest city and capital of Gauteng province, Johannesburg began as a 19th-century gold-mining settlement. Its sprawling Soweto township was once home to Nelson Mandela and Desmond Tutu.
- Johannesburg is one of the world's leading financial centers. It is the economic and financial hub of South Africa, producing 16 percent of South Africa's GDP.
- O.R. Tambo Airport is the biggest and busiest airport in all of Africa, processing some 28 million passengers through its terminals each year.

• More than half of the cargo that moves through the ports of Durban and Cape Town eventually arrive at Johannesburg's City Deep dry container terminal. Johannesburg is the world's largest city not built on a coastline, lake or river.

Company	Product	Inv. US \$Million	Jobs
Gibela/Passenger Rail Agency of SA	Automotive	\$200	
Sumitomo Rubber South Africa	Chemicals and Plastics	\$101	
Gibela Rail Transport Consortium	Automotive	\$80	1,500
Gayatri Gzi Beverage Cans	Metals	\$71	
IBM	IT and Communications	\$60	

I am begging [businesses], saying 'Guys, come into our city and make as much money as you like, and you'll employ more people and pay your taxes and I am not going to steal them."

> —Herman Mashaba, Mayor of Johannesburg





- Poland
- The Katowice urban area, also known as the Upper Silesian urban area, has an estimated population of more than 2.5 million people.
- The Katowice Special Economic Zone has attracted investments from some 250 companies, including General Motors, Isuzu Motors, Delphi Automotive Systems and Fiat-GM Powertrain.
- Katowice is home to a vibrant underground music scene, which helped lead to its 2015 designation as a UNESCO Creative City. The city's music sector includes such projects as the Rawa Blues Festival, the Off Festival and the Polish National Radio Symphony Orchestra.

Company	Product	Inv. US \$Million	Jobs
Fiat Auto Poloni	Automotive	\$768	420
General Motors	Automotive	\$342	
NGK Ceramics Polska Sp Z O O	Automotive	\$136	
Synthos Dwory 7	Chemicals and Plastics	\$83	
Synthos Dwory 7	Chemicals and Plastics	\$55	

Katowice is the most important economic, academic and cultural center in the central part of southern Poland."

-Marcin Krupa, Mayor of Katowice





- Poland
- Kraków, already an important European IT center, is emerging as a center of cybersecurity expertise.
- Japanese company Mabuchi is building a new factory in the Bocheńska Economic Zone outside of Kraków. It will produce automotive components beginning in 2019 and employ 400 people.
- Kraków is the location of the first Center of Excellence for Uber in Central Europe, which is forecast to create 140 jobs by the end of 2017.

Company	Product	Inv. US \$Million	Jobs
Somfy	Electronics	\$39	200
Brembo Spa	Automotive	\$37	25
Wawel S A	Food and Beverages	\$23	20
Dan Cake	Food and Beverages	\$10	30

There are lots of skilled and talented people in Poland, so it was an easy decision to open our new Center of Excellence in Kraków. Poland is known for welcoming innovative technology businesses, and it is an important strategic market for Uber."

-Jambu Palaniappan, General Manager, Eastern Europe, Middle East and Africa, Über





Kuala Lumpur workforce population: 7.047.000

Malaysia

- As Newmark Grubb Knight Frank's Global Cities report documents, the first line of the Klang Valley Mass Rapid Transit (MRT) project, MRT Sungai Buloh-Kajang Line, is slated for completion by July 2017. The final piece is the Kuala Lumpur-Singapore High Speed Rail (HSR). When complete after 2020, it is projected to travel the 205 miles between the two cities in 90 minutes.
- According to the Port Klang Authority, Malaysia's busiest port saw 10.8-percent growth in container traffic in 2016, handling 13.2 million 20-foot equivalent units (TEUs). A new port city may be in the offing.
- According to the World Bank, life expectancy at birth in Malaysia rose from less than 60 years in 1960 to nearly 75 years in 2014.

Company	Product	Inv. US \$Million	Jobs
Perodua (Perusahaan Otomobil Kedua Sdn Bhd)	Automotive	\$258	1200
Ramly Food Processing	Food and Beverages	\$239	
Nestle	Food and Beverages	\$50	160
DHL	Transportation and Logistic	s \$32	500
Ccm Duopharma Biotech Berhad	Life Sciences	\$26	

UTC+8 3°09′ N 101°42′ E elev. 217 ft.

Foreign investments have played a major role in our economic development and we will continue to welcome high quality investments. especially in the catalytic subsectors, namely chemicals, electrical & electronics (E&E), and machinery & equipment (M&E), as well as other high-potential growth areas including aerospace, medical devices and digital economy."

> —YB Dato' Sri Mustapa Mohamed, Minister of International Trade and Industry





₩ UK

- The Leeds City Region produces more STEM graduates annually (more than 8,400) than any other UK city region outside London.
- Perform Group, the world's leading digital sports content and media company, with 40 offices across the world including Japan and New Zealand, announced in December 2016 its expansion in Leeds, creating over 100 new jobs.
- According to the Leeds City Council, Leeds is the largest center outside London for financial and business services, digital, creative, publishing and broadcasting. It has the second highest concentration of knowledge intensive jobs and is the third largest manufacturing center by local authority area.

Company	Product	Inv. US \$Million	Jobs
Nestle	Food and Beverages	\$306	
Haribo	Food and Beverages	\$148	286
TK Maxx	Transportation and Logistics	\$90	
Poundworld Retail	Transportation and Logistics	\$59	
Yorkshire Building Society	Business and Financial Servi	ces \$17	

Our well-established clusters of high quality financial and professional services firms make our City Region an exciting location for businesses in this sector and showcases how our City Region is a world class destination for investment, from both the UK and overseas. with many international brands seriously considering this location to establish extensive operations."









- Poland
- Located 75 miles (118 kilometers) southwest of Warsaw, Łódź is the third largest city in Poland, with a metropolitan population of 1.4 million people.
- The city is a major center of Poland's textile industry, producing a large portion of the nation's cotton goods, wool, silk and artificial fibers.
- Łódź is revitalizing its urban core through the New Center of Łódź project. The city's center is being transformed through investments by the municipal government, railway companies and private investors.
- A 2016 survey by the Dutch company TomTom ranked Łódź as the fifth most congested city in the world and the single most congested city in Europe. To combat congestion, Łódź has launched a bicycle program offering 1,000 rental bikes at 100 stations across the city.
- The Polish word "łódź" (pronounced "woodge") translates to "boat" in English.

Company	Product	Inv. US \$Million	Jobs
Pini Polonia	Food and Beverages	\$55	800
Sandoz Polska Sp Z O O	Life Sciences	\$46	90

We are less an industrial city now, and more characterized by more innovation. It is more of a knowledge-based society."

—Hanna Zdanowska, Mayor of Łódź









CST 19°25′ N 99°08' W elev. 7.382 ft.

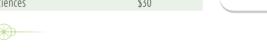
Mexico

- Known at its founding as Tenochtilán, Mexico City was capital of the Aztec Empire until it was captured by the Spanish in 1521. It is the oldest capital city in the Americas.
- With a population of 21.2 million people, Greater Mexico City is the largest metropolitan area in the western hemisphere and the largest Spanish-speaking city in the world.
- Iron and steel production, textiles, plastics, furniture and cement are among Mexico City's primary industries, along with tourism. The city produces just over 20 percent of Mexico's GDP.
- Mexico City played host to the 1968 Summer Olympics, the first and only time the games have been staged in Latin America.

Company	Product	Inv. US \$Million	Jobs
Petróleos Mexicanos	Energy	\$274	
China Harbour Engineering Co.	Transportation and Logistic	s \$221	
Pepsico	Food and Beverages	\$58	
Neolpharma, S.A. De C.V.	Life Sciences	\$40	
Baxter	Life Sciences	\$30	

The city in its circular fever repeats and repeats."

-Octavio Paz, Mexican poet





Mexico

- Two hours south of the Texas border, Monterrey is Mexico's industrial hub and leads the country with a per capita GDP of \$31,051. The Mexican Institute of Competitiveness ranks Monterrey as the most competitive city in Mexico.
- Monterrey has established research and development clusters for aerospace, software and IT, automotives, home appliances and nanotechnology.
- Cemex, a local company begun in Monterrey, has grown into one of the top cement companies in the world.
- Monterrey's Fundidora Park, at the site of a converted blast furnace and smelting plant, features business facilities, meeting rooms, cultural events, pedestrian paths and green spaces.

green spaces.			
Company	Product	Inv. US \$Million	Jobs
Kia Motors	Automotive	\$1,000	
Hyundai Mobis	Automotive	\$417	
Mondelez International	Food and Beverages	\$350	600
Marcatel Com, S.A. De C.V.	IT and Communications	\$200	
Frisa Industrias, S.A. De C.V.	Metals	\$200	250

Monterrey can give you what any major city in the southern US can, other than the setting in a different country and the cost proposition being lower."

> —Felix Teiada, Director General, the Alles Group Monterrey



Russia

- Moscow ranks among the world's top five cities for billionaires. Leonid Mikhelson, Moscow's richest individual with an estimated fortune of \$14 billion, began his career as a foreman for a gas construction company.
- Moscow is the world's northernmost megacity, with a metropolitan population of 17 million people and a GDP of \$520 billion, ranking it ninth in the world.
- Moscow's vast transit network includes four international airports, nine railway terminals, a monorail system and one of the world's deepest underground metro systems.
- St. Basil's Cathedral in Moscow's Red Square was built in the mid-1500s by Ivan the Terrible. The belfry, still operational, has a single bell surviving from the 16th century.

Company	Product	Inv. US \$Million	Jobs
Mitsubishi Heavy Industries/Phosagro/Sojitz	Chemicals and Plastics	\$785	
Ojsc Perm Engine Co.	Aerospace	\$665	
Great Wall Motor Co.	Automotive	\$520	
Bridgestone	Chemicals and Plastics	\$375	800
Tula Steel	Metals	\$372	

I absolutely fell in love with Moscow. It's one of those places where you can't help but trip over history at every turn."

-Daniel Silva, novelist



EST 40°43′ N 74°01′ W elev. 33 ft.

New York City, NY USA

• New York City's tech ecosystem is booming: It has grown 18 percent over the past decade while total jobs have grown 12 percent in the city, according to recent research. It generates \$125 billion in total spending and over \$5.6 billion in annual tax revenues.

workforce population: 20.092.883

- The New York metropolitan area has the largest bioscience workforce in the country, according to a Battelle study. With \$1.4 billion in NIH awards, New York City is ranked No. 2 in the nation in life sciences research.
- As part of LifeSci NYC, a-\$500 million, 10-point initiative for establishing New York City as a global leader in life sciences research and innovation, the city will invest \$10 million to build a network of incubators mainly near existing research centers for life sciences startup facilities.

Company	Product	Inv. US \$Million	Jobs
Bloomberg	IT and Communications	\$750	80
Canon USA	Machinery, Equipment and Construction	\$466	750
Sensaras	Electronics	\$450	31
LG Electronics	IT and Communications	\$300	
Bnym	Business and Financial Services	\$198	

Foreign-Trade Zones help a variety of New York City industries remain globally competitive while boosting the city's economy. From manufacturing to food production to green technology to luxury goods — I encourage all eligible companies to take advantage of the economic benefits associated with FTZ designation in order to scale their business and spur job creation."

-Maria Torres-Springer, President,







■ France

- Along with Dublin, Paris is one of the most oft-cited recipients of job shifts following the Brexit vote. HSBC and UBS each are moving 1,000 jobs there from London, and estimates of overall job moves begin at 10,000.
- In a recent study of 10 "smart manufacturing cities" around the world by PwC, Paris-Ile de France tied for No. 2 with Seoul behind No. 1 Stuttgart.
- Mike Karim, CFO, ServiceMax for GE Digital, told Site Selection magazine, "Paris is one of the most global cities in the world, with a very rich engineering culture."

• A 2016 study by the Cologne Institute for Economic Research of European found that the only European country more economically dependent on its capital than France (which would see a 15-percent drop in GDP without Paris) was Greece.

	F		
Company	Product	Inv. US \$Million	Jobs
Safran	Aerospace	\$68	300
Aeroports De Paris/Sodexi	Transportation and Logistic	s \$25	
Otsuka Pharmaceuticals	Life Sciences	\$24	40
Fiabila	Chemicals and Plastics	\$12	
Sensient Technologies	Food and Beverages	\$8	

Paris isn't for changing planes. It's for changing your outlook."

—Audrey Hepburn, Sabrina, 1954





- Since oil was first discovered in 1929, over 230 raw hydrocarbon fields have been established in the Perm Territory.
- Three pulp and paper plants in the region produce around 20 percent of Russia's paper volume.
- There are about 96,000 sq. meters (1 million sq. ft.) of floor space in the city's more than 50 office buildings and business centers. Vacancies in the city's business centers range from 10 to 20 percent.

Today, our region is a symbol of industrial might, rich subsoil reserves, a great cultural heritage and exceptional human potential."

-Viktor F. Basargin, Governor of the Perm Territory

Company	Product	Inv. US \$Million	Jobs
Solenis Evraziya, Ooo	Chemicals and Plastics	\$5	





MST 33°27′ N 112°04′ W elev. 1,086 ft.

USA

- More than 83,000 students are enrolled at Arizona State University in Tempe (the most innovative school in the US, according to US News and World Report); 70 percent of graduates remain in Arizona.
- The Metro Phoenix Global Investment Plan, released in February, finds the region well suited to capitalize on the Internet of Things revolution and growth in sensor application industries.
- ADP is opening a new, 200,000-sq.-ft. office in Tempe that will create up to 1,500 new jobs; the company is investing more than \$33.75 million.

Company	Product I	nv. US \$Million	Jobs
Apple	IT and Communications	\$2,000	
Apple/Gt Advanced Technologies	IT and Communications	\$1,500	700
State Farm Insurance	Business and Financial Servic	es \$600	5,000
Northern Trust	Business and Financial Servic	es \$95	1,000
Aligned Data Center	IT and Communications	\$75	30

The emerging consumer and industry trends driving our growth are significant, and this new facility [in Tolleson] will help us to continue with our steady growth. The logistics infrastructure and access to available labor made the decision relatively easy for our management team to invest in the area."

—Steve Sposari, Group President and CEO, SK Food Group





CET

49°45′ N 13°23′ E elev. 1,017 ft.





Czech Republic

- The electrical engineering and automotive industries are the region's most active along with food and beverage, thanks to its historic ties to the brewing industry.
- Modern Pilsner beer, a pale lager, was first produced in Pilsen in 1842 by brewer Josef Groll. The city is home to Pilsner Urquell, the first blond lager.
- CzechInvest, the national investment promotion agency, reports 10 new projects in 2016 worth more than \$177 million, creating 1,100 jobs.

Pilsen is a good location for investors in shared service centers, which cover fields such as finance and accounting, IT support, supplies, HR management and more."

-Pilsen Region Business News, February 2016

Company	Product	Inv. US \$Million	Jobs
Md Elektronik Chotesov	Automotive	\$28	









- Portugal
- Porto is a European hotbed of innovation and entrepreneurship. More than 300 startups are active in the northern Portuguese city. Forty percent of Portuguese scale-ups are in Porto.
- A ScaleUp Porto Manifesto, launched in 2015, fosters local economic development in the broader European context, supports local companies in the process of scaling up and helps individuals take advantage of the region's innocation assets.
- Porto is home to nearly 70 R&D centers and eight technology and knowledge transfer centers.

Company	Product	Inv. US \$Million	Jobs
Atlantikfuror Unipessoal Lda.	Energy	\$276	
Sociedade Portuguesa Do Ar Líquido, Lda	Chemicals and Plastics	\$48	7
Casfil - Indústria De Plásticos, Sa	Chemicals and Plastics	\$41	
Bosch Car Multimedia Portugal, S.A.	IT and Communications	\$38	
Mitsubishi Fuso Truck Europe	Automotive	\$36	353

Porto is a polycentric region, with a modern R&D infrastructure and is becoming a catalyst in the creation of innovative companies facing internationalization challenges."

-Luis Miguel Sampaio, Founder & CEO, MOG Technologies, as quoted in the Porto Start & Scale Guide, an initiative of the City of Porto







- Pretoria is the seat of the executive branch of South Africa's national government. The city is also a center of higher education and research.
- Pretoria is linked to Johannesburg by Gautrain, Africa's fastest rail line. The half-hour train trip shaves 90 minutes off rush-hour car rides between the two cities.
- Pretoria is a center of heavy industry, including iron and steel casting, automotive, railroads and heavy machinery. The Greater Pretoria metropolitan area produces up to 9 percent of South Africa's GDP.
- Notable travel destinations in Pretoria include the Pretoria Botanical Gardens, South Africa's National Zoological Gardens, the Union Buildings, Melrose House and the Voortrekker Monument.

Company	Product	Inv. US \$Million	Jobs
Ford Motor Co.	Automotive	\$170	1,200
Iveco/Larimar Group	Automotive	\$70	1,000
Toyota South Africa	Automotive	\$39	
Sanofi	Life Sciences	\$5	
I-Cat Environmental Solutions	Transportation and Logistic	\$ \$2	

The new government has stopped the spending of exorbitant amounts on food and parties for politicians. We must serve the people, not party with public funds."

-Solly Msimanga, Mayor of Pretoria







India

Pune is known as the "Oxford of the East," due to the presence of well-known educational institutions, including the University of Pune, India's second-largest university.

• Major research institutes in Pune include the Center for Development of Advanced Computing, Defense Institute of Advanced Technology, National Center for Cell Science and the Electronics Test and Development Center.

Home to the Automotive Research Association of India, Pune has secured investments from Mercedes-Benz, General Motors, Volkswagen and Tata Motors.

• In 2015, General Electric established its 680-acre (275-hectare) Multi-Modal Manufacturing Facility in Pune. It is considered one of the company's most advanced worldwide facilities with advanced automation, industrial Internet and 3D printing.

Company	Product	Inv. US \$Million	Jobs
Fiat Chrysler Automobiles	Automotive	\$472	
Bridgestone	Chemicals and Plastics	\$417	
Great Wall Motor	Automotive	\$288	
General Electric	Machinery, Equipment and Construction	\$200	
Cummins	Machinery, Equipment and Construction	s \$151	

Pune's strength in research and development ... and abundant availability of skilled manpower has consistently helped attract investments from domestic and foreign engineering companies."

-Rajiv Kirloskar, Director, KSH Infra













20°35′ N 100°24′ W elev. 6,100 ft.

Mexico

- By some estimates, Querétaro is the fastest-growing city in Mexico, with a per-capita GDP of \$20,000, second only in the country to Monterrey.
- Multinational companies located in Querétaro include Bombardier Aerospace, Kellogg's, Colgate-Palmolive, Michelin, Siemens, Procter & Gamble and Nestlé.
- In 1996, Querétaro's historic city center was declared a World Heritage Site by UNESCO, which noted "the old colonial town is unusual in having retained the geometric street plan of the Spanish conquerors side-by-side with the twisting alleys of the Otomi quarters."

OQM, a local private water utility, has built Mexico's first sewage recycling system in Querétaro, with the aim of demonstrating the technology as a national-scale resource

Queretaro, with the ann of demonstrating the technology as a natio			a Hational-scale re	source.
	Company	Product	Inv. US \$Million	Jobs
	Nissan/Daimler	Automotive	\$1,360	
	Chrysler Group	Automotive	\$1,085	1,100
	Blackberry	IT and Communications	\$500	
	Heineken	Food and Beverages	\$474	500
	Nestle	Food and Beverages	\$400	350

I saw a sunset in Querétaro that seemed to reflect the color of a rose in Bengal."

—Jorge Luis Borges









USA

- Forbes ranks Raleigh the No. 2 most educated city in the US; Wake County is home to 12 universities, including three tier-one research universities and North Carolina's largest community college — Wake Technical Community College.
- The Milken Institute's Best Performing Cities Index ranks Raleigh sixth in the US.
- IBM, Cisco, Red Hat and Citrix are just a few of Raleigh's IT luminaries. The area also is home to more than 500 startups employing more than 2,500.

Company	Product	Inv. US \$Million	Jobs
Novo Nordisk	Life Sciences	\$1,200	691
Grifols	Life Sciences	\$370	200
Novo Nordisk	Life Sciences	\$102	110
Xellia Pharmaceuticals	Life Sciences	\$100	50
Branch Banking & Trust	IT and Communications	\$89	20

The talent base we've been able to attract in our **Raleigh and Wilmington offices** and across the state in recent vears has been phenomenal. We look forward to continued strong growth here and across the globe and couldn't think of a more suitable location to accommodate our growing employee base."

> —Alistair Macdonald. CEO, INC Research





22°58′ S 43°11′ E elev. 52 ft.







- Excluding major events like the World Cup or the Olympic Games, more than 1.6 million tourists arrive through five harbors and three airports in a normal year.
- Rio de Janeiro produces the most oil in Brazil.
- A 27-year-old TV researcher traveled around the globe and found that Brazil has the bluest sky.

Few things are more beautiful than the instants that precede momentous things, the second before a passionate kiss, before a marathon runner crosses the finish line, before a rainstorm hits Rio de Janeiro."

-Tatiana Salem Levy, author of "Blazing Sun"

Company	Product	Inv. US \$Million	Jobs
Man	Automotive	\$461	
Technip	Metals	\$272	
Bunge	Food and Beverages	\$227	
B. Braun Melsungen Ag	Transportation and Logistic	s \$137	
Embotelladora Andina S.A.	Food and Beverages	\$120	







AST 24°38′ N 46°43′ E elev. 2.008 ft.

Saudi Arabia

- In 2018, Riyadh expects to open a new 110-mile urban mass-transit system, with six metro lines connected to 85 metro stations. It will be the biggest system to be built from scratch.
- There are three industrial cities in Riyadh, operated by the Saudi Industrial Property Authority (MODON). The newest, Riyadh Third Industrial City, is a partnership between MODON and the General Directorate of Prisons and has more than 90 factories.
- Operated by Saudi Consolidated Electricity Company, Riyadh-9 (PP9) along with the expansion of PP8, is the largest crude oil-fired power plant in the world.

Arrivadh has become a favorite destination for both regional and international investors seeking promising and rewarding opportunities in a secure urban environment that offers sophisticated infrastructure and a quality lifestyle ideal for achieving aspirations."

> —Ibrahim bin Mohammed Al-Sultan, President of Arrivadh Development Authority







Food and Beverages Ornua Limited

workforce population: 1.183.000



Inv. US \$Million

\$22

San José Costa Rica

Company

- The San José greater metropolitan area, including Heredia, has a population of 2.2 million inhabitants, representing nearly half of Costa Rica's population in just four percent of the country's land area.
- Greater San José is home to more than 275 high-tech and multinational companies, including Intel, Amazon, HP Enterprise, P&G and Boston Scientific.
- In 2016, 3M established a new Global Service Center at the El Cafetal Corporate Center in San José, with expected employment to reach over 1,000 workers.
- San José's Plaza Artigas is graced by a statue of John Lennon, designed by Cuban sculptor José Ramón Villa.

Company	Product	Inv. US \$Million	Jobs
Abbott Vascular	Life Sciences	\$40	60
Bekaert/Arcelormittal Long Carbon Americas	Metals	\$20	
Arthrocare Costa Rica	Life Sciences	\$16	76
Smith & Nephew	Life Sciences	\$15	44
Zollner Electronics	Electronics	\$10	200

It's been said a million times that a city without a culture doesn't have a soul."

-Johnny Araya, Mayor of San José











Mexico

- Known locally as San Luis, the city's metropolitan population, formed with its neighbor Soledad de Graciano, makes it Mexico's 11th largest metropolitan region.
- Situated halfway between Mexico City and the United States border, as well as in the middle of the Mexico City-Guadalajara-Monterrey triangle, San Luis has become one of Mexico's primary logistics hubs.
- BMW has started work on a \$775-million assembly plant in San Luis that will produce the BMW 3 Series Sedan and employ some 1,500 workers.
- San Luis is home to three dance companies, the Ballet Provincial de San Luis Potosí, Danza Folklórica and Danza Contemporánea.

Company	Product	Inv. US \$Million	Jobs
BMW	Automotive	\$1,000	1,500
Goodyear Tire & Rubber Co.	Chemicals and Plastics	\$500	
General Motors	Automotive	\$131	
Ronal Group	Metals	\$125	700

My favorite part of a trip is seeing all the old buildings. So it came as no surprise that I fell in love with the Old City of San Luis Potosí."

-Julia Dent, travel blogger









Chile

- Santiago houses more than 90 percent of the corporate headquarters in Chile.
- Santiago's subway system will become the first in the world to be powered by mostly solar and wind energy by the end of 2017, thanks to a partnership between energy producers Total and SunPower Corp.
- Start-Up Chile, a Santiago-based, nonprofit startup accelerator started by the government in 2010, has worked with more than 1,300 small businesses and has been replicated in over 50 other countries.

Company	Product	Inv. US \$Million	Jobs
Maersk	Transportation and Logistics	\$170	2,200
Grupo Bimbo, S.A.B. De C.V./Ideal	Food and Beverages	\$22	
Pfizer	Life Sciences	\$21	
Marine Harvest	Food and Beverages	\$20	300
Dole Food Co.	Food and Beverages	\$3	

Santiago boasts an increasingly well-educated workforce, major universities, and a stable of large global companies and budding startups. These strengths position it to lead Chile toward a more productive, technologyintensive economy that competes in global markets based on knowledge rather than raw materials."

-Joseph Parilla, senior research associate, Brookings Institution Metropolitan Policy Program









USA

- There are more than 40 companies focused on virtual and augmented reality technology based in the Seattle area. Approximately 420 companies are focused on "interactive entertainment."
- The highest concentration of software developers per capita is in the Greater Seattle area. Amazon employs more than 25,000 people making it the largest private employer in Seattle. Twenty percent of Amazon's employees walk to work.
- Belying the city's reputation for overcast, more sunglasses are purchased per capita each year in Seattle than anywhere else in the nation.

To some extent, Seattle
remains a frontier metropolis, a
place where people can experiment
with their lives, and change and
grow and make things happen."

-Tom Robbins, novelist

Company	Product	Inv. US \$Million	Jobs
Targa Sound Terminals	Energy	\$80	
Toray Composites	Chemicals and Plastics	\$80	160
Niagara Bottling	Food and Beverages	\$50	36
Zymogenetics	Life Sciences	\$25	25
Greencore Group	Food and Beverages	\$20	50

1st



Macedonia

- The largest trading partners in 2015 were Germany (25.7 percent of total trade), Serbia (6.4 percent), Great Britain (6.1 percent), Greece (6.1 percent), and Bulgaria (5.6 percent).
- Macedonia has a young, educated workforce with 41.5 percent of workers under the age of 30.
- Five Free Trade Agreements (three multilaterals (SAA, EFTA, CEFTA) and two bilateral (Turkey and Ukraine)) provide access to a market of over 650 million customers.
- Mother Theresa was born in Skopje in 1910.

Company	Product	Inv. US \$Million	Jobs
Istem Medical	Life Sciences	\$26	
Haj-Tek Korporacija D.O.O.	Electronics	\$22	300
Energy Limited	Chemicals and Plastics	\$22	150
Teknohose	Automotive	\$20	150
Matek Medical	Life Sciences	\$19	100
Total	Life Sciences	\$19	

People ask me, 'Why invest in Macedonia?' Well, this is one of the centers of growth in the world. It has a history of connecting different worlds, the East and the West and now, Europe and USA. I am convinced that this investment will be successful."

-Filip van Hool, Executive Director of Van Hool







30°18′ N 31°45′ E elev. 305 ft.

Eavpt

- 10th of Ramadan is Egypt's largest industrial zone and is located 55 km. (34 miles) from the capital.
- There are more than 2,000 factories in the city, and more than 350,000 employees.
- In 2015, L'Oréal opened Egypt's first LEED certified factory of any industry in the city.

With the rising demand of consumers across the region for innovative and high quality beauty products, it was crucial for L'Oréal to have a production facility close to its key markets and able to adapt the product offer to local specificities. The Cairo plant reflects confidence in the continuous expansion of the MENA market and a strong commitment to Egypt as a strategic production hub."

—**Geoff Skingsley,** L'Oréal's Executive Vice President, Africa Middle East Zone



	Jobs
Electrolux Electronics	400





Mexico

- Tijuana's manufacturing ecosystem boasts more than 565 companies from more than 20 countries around the globe. Industries represented include medical devices, aerospace, electronics and automotives.
- Tijuana is the most populous city of Baja California, and with a growth rate of 5.2 percent a year, it is the state's fastest growing city.
- Tijuana is home to more than 75 million sq. ft. (6,967,728 sq. m.) of industrial real estate and 51 industrial parks.
- Tijuana's Opera in the Street Festival attracts thousands of people when it is held every July.

I want to make my town the best in Mexico. I need people to work with me. It's not just money, it's a matter of getting the feeling and saying, 'Let's do it.' "

-Juan Manuel Gastelum, Mayor of Tijuana

Company	Product	Inv. US \$Million	Jobs
Greatbatch Medical, S. De R. L. De C.V.	Life Sciences	\$35	500
Samsung Electronics Co.	Electronics	\$17	









- Japan
- Research collaborations have been established with the University of Tokyo over the past few years by global pharmaceutical giants MSD (Merck US), Sanofi and Pfizer.
- The 2020 Summer Olympic Games in Tokyo were projected in March 2017 by the city government to have a \$285-billion impact.
- The Economist's Worldwide Cost of Living Survey 2017 found Tokyo the fourth most expensive city in the world. Yet ManpowerGroup Employment Outlook Survey finds Japan to be second only to Taiwan in the outlook for hiring new employees.

The most recent national census found that 8.85 million of metro Tokyo's 13.16 million people were of working age, though the city is headed toward status as a "super-aged society" due to its large number of people over age 65.

Company	Product	Inv. US \$Million	Jobs
Bridgestone Corp.	Chemicals and Plastics	\$244	
Nidec Corp.	Electronics	\$196	
Ezaki Glico Co.	Food and Beverages	\$150	
Nec Corp.	IT and Communications	\$94	
Kitasato Daiichi Sankyo Vaccine Co.	Life Sciences	\$83	

The economic scale and GDP of the Tokyo area alone is equal to that of the United Kingdom."

—**Hiroyuki Ishige,** Chairman and CEO, Japan External Trade Organization (JETRO)





- Poland
- Campus Warsaw, housed in a former vodka factory, is one of six Google-owned entrepreneur hubs worldwide.
- In 2015, Warsaw claimed a spot among the Top 15 European startup hubs, as recognized by EUstartups.com.
- Warsaw-based startup Deskdoo, founded in 2015, creates a virtual operating system for users and allows them to work and collaborate in real time.
- Zlota 44, completed in 2016, is 52-story Warsaw skyscraper designed by Polish-American architect Daniel Libeskind. The building's 287 apartments feature a home management system that controls temperature and illumination.

Company	Product	Inv. US \$Million	Jobs
Volkswagen	Automotive	\$1,120	2,300
Michelin	Chemicals and Plastics	\$137	50
Stefano Toselli/Ter Beke	Food and Beverages	\$100	
Solvay	Chemicals and Plastics	\$95	
Nestle Purina Petcare	Food and Beverages	\$95	200

Warsaw is a hidden investment hotspot for Brits and other investors looking for value in Europe, post-Brexit."

-Jeff Stonger, Amstar











38°54′ N 77°02′ W elev. 205 ft.

USA

- Arlington has the fastest growing Millennial populations in the country.
- There are 198 industrial properties and 705 office buildings in Alexandria, Virginia.
- Washington D.C., is the top city for public transportation based on availability, quality and efficiency. It is also one of the top 10 most walkable and bike-friendly cities in the US.

Company	Product	Inv. US \$Million	Jobs
Dominion Resources	Energy	\$3,400	
Iron Mountain	IT and Communications	\$350	25
Corporate office Properties Trust	IT and Communications	\$300	45
Brace Pharmaceuticals	Life Sciences	\$200	
Astrazeneca	Life Sciences	\$200	300

It's great to be in Arlington for a whole host of reasons. One is we're surrounded by great universities that we can hire from. Another is the fact that Arlington attracts people from around the globe. Of course, having great schools to send your kids to and great restaurants and cafés to relax in is good too."

-Alex Laskey, Opower







31°34′ N 120°18′ E elev. 36 ft.

- There have been more than 1,170 IoT companies in Wuxi, employing more than 150,000 people and generating about 168.8 billion yaun (approximately \$24.5 million), as of 2015.
- There are nearly 800 companies in Wuxi that focus on software, manufacturing or systems integration.
- The largest aquarium in East China will be constructed in Hongshan's Internet of Things town in Wuxi. The 185,000-sq.-m. (2-million-sq.-ft.), \$435-million park will be fully integrated with IoT technology and is expected to be completed by 2019.

Company	Product	Inv. US \$Million	Jobs
Sinopec	Energy	\$6,640	
Volkswagen	Automotive	\$2,500	
Xianda Seawater Resources Development Co.	Chemicals and Plastics	\$2,500	
Hon Hai Precision Industry	Electronics	\$2,000	4,000
Volkswagen	Automotive	\$1,620	

During the 13th Five-Year Plan (2016-2020), Wuxi, a famous industrial city, will be in investors' good graces."

-Shen Yunfu. China Suburbs Economy Seminar Association











LOOK UP AND LOOK OUT

by ADAM BRUNS



ny statistician or analyst will tell you: You can make the data say whatever you want, depending on which numbers you pick, and

through which lens you view them. The math gets even more slippery when you make rankings out of those numbers, and when you introduce geography into the equation — jurisdictional boundaries can shift, merge and disappear like mercury.

So can location choice criteria for growing companies. One minute a company's need for a university partner is paramount. The next, it's redundant power, English-Mandarin bilingualism, or proximity to a cargo hub. How the matrix of location factors is sorted profoundly alters one's view. A place such as Hong Kong can be No. 1 in the world in economic freedom, and also be home to the world's most expensive office space and least affordable middle-income housing. (The 13th Annual Demographia International Housing Affordability Survey, released in January 2017, found several cities featured in our report — Dallas-Fort Worth, Detroit and Cincinnati among the leaders in this category.)

In forecasting population growth through 2020 in a set of 34 chosen cities, Newmark Grubb Knight Frank's 2017 Global Cities report drew attention to perhaps the most salient indicator of looming competitiveness: the demographics that indicate both a market and a talent base. Beijing and Shanghai are among the leaders at 18.7 and 14.3 percent, respectively. Dubai is just behind Beijing at 18.5 percent, followed by Bengaluru, Austin and Kuala Lumpur. And Delhi, Bogotá and Bangkok all

figure to grow by more than 9 percent.

The message is clear from that report and others: Asia as a whole continues to ascend in population, sophistication, industry diversification and infrastructure. (And yes indeed, so does Texas.) South Asia and Africa in particular are poised to make the greatest leaps forward. And a handful of venerable megacities with aging populations may start to see stiff competition from second- and even third-tier cities skewing younger.

Beginning with project locations, and fortified by the knowledge and perspective of our contributing partners at EY and Oxford Economics, we have displayed in these pages one view into economic development competitiveness, a view clarified with data from a world where around 500 cities now have at least 1 million residents. This is an ongoing exercise. Every organization hungers for more data. And we already anticipate ways the next edition of this report will offer its own clear and refreshed perspective.

In the meantime, we have a suggestion, as you pore over your latest queue of spreadsheets, task lists, performance reports and research data. Look up from your screen ... do it right now ... and gaze out of the nearest actual window. It might be in a 56th floor office, or a university lab, or an airport train during your third straight week of business travel. This is the city you're in. What do you know about it? Who do you know in it? Where in its boundaries have you never been?

We challenge you to use this guide as one tool in your ongoing investigation of the cities around you — including the one you call home. In a sense, they're all seeking the same goals you are: prosperity, connectedness, vibrancy and an overall high quality of life. The journey continues.





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