OXFORD ECONOMICS

Global Cities Outlook

Chinese cities lead recovery but Indian cities look stronger to 2035

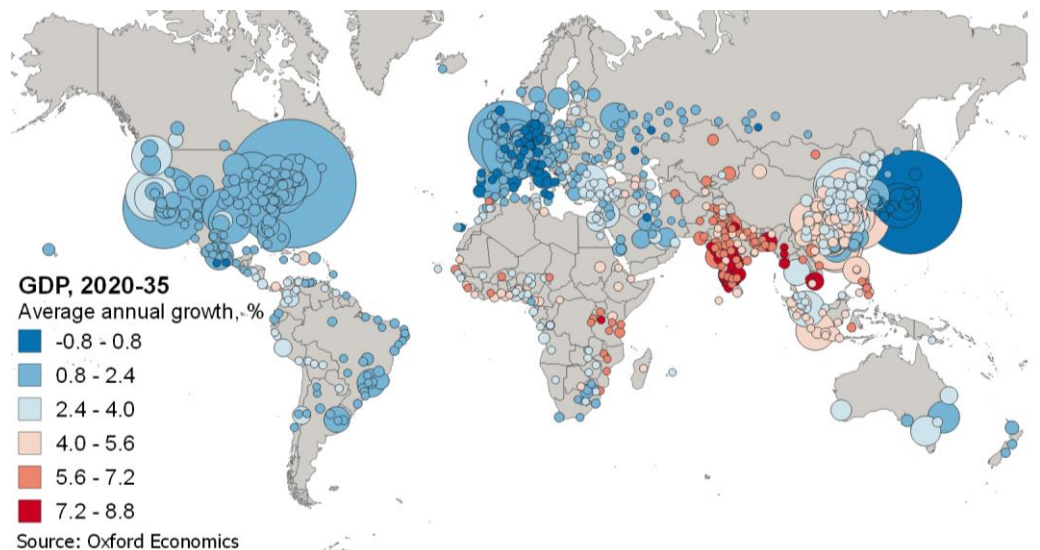**Economist**

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■ **We expect GDP to fall in four out of every five of the world's 900 top cities in 2020, compared with 2019, as a result of the coronavirus pandemic—even after taking account of rebounds in the second half of this year. These rebounds will continue into 2021, and produce generally very strong growth rates next year.**

■ While the majority of cities that do see growth this year are Chinese, their rises are very small and subject to huge margins of uncertainty, as are all forecasts at present. Among the cities that will see particularly strong 2021 performances are many in India—not least the tech-led cities of Bangalore and Hyderabad.

■ A fundamental difference between Indian cities and those in China is that, while both will experience strong productivity gains over the 2020-35 period, the former are also likely to see strong population and employment growth. As a result, Indian city GDP growth is forecast to average more than 7% a year over the next decade-and-a-half, while Chinese city GDP growth averages 4%.

■ Cities in Africa will see even stronger population growth to 2035, especially among people under the age of 30. Yet unlike Indian cities, those in Africa will mostly achieve only modest growth in productivity—meaning that their 4% average annual rise in total GDP will not be matched by equivalent increases in personal incomes per head. Indeed, by that metric, the gap with advanced economies will widen.

■ The tech sector is an important driver for many cities around the world, but Europe has no one city in which the sector is particularly concentrated—no equivalent of Silicon Valley, Shenzhen, Bangalore or Hyderabad. As a consequence, major European cities see similar growth rates going forward—and this includes London, despite how distinctive it has been historically. It is not now as special as it once was.

Global cities GDP growth, 2020-2035. Size of city in 2035 shown by size of circle.

Map 1

India leads growth rankings to 2035 but the largest cities will still be in the advanced economy nations plus China.

GDP, 2020-35
Average annual growth, %

- -0.8 - 0.8
- 0.8 - 2.4
- 2.4 - 4.0
- 4.0 - 5.6
- 5.6 - 7.2
- 7.2 - 8.8

Source: Oxford Economics

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Chart 1

A few cities, particularly in China, recover early enough to produce GDP rises in 2020.

A few cities may recover soon enough to avoid a full-year GDP decline

We estimate that four out of every five of the world's 900 top cities (726 in all) will experience lower GDP in 2020 than in 2019. The reason is all too familiar: the global coronavirus pandemic.

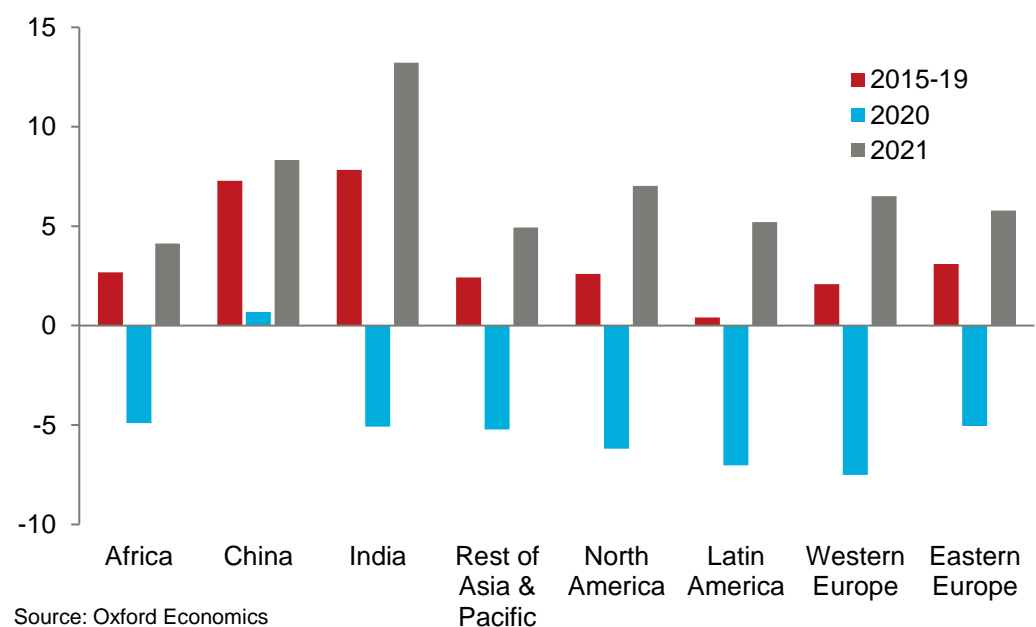**900 Global Cities Real GDP, 2015-21, annual average growth, %y/y**

Source: Oxford Economics

The large majority of the 174 cities we think will experience some increase in GDP this year are in China—for two main reasons. First, they entered the crisis with relatively high growth rates, so that even with large cuts to their GDP **levels**, they still show some **growth** this year. Second, China's coronavirus experience has been atypical, entering the crisis earlier than most nations, then undergoing a tighter lockdown than most.

We are now seeing the consequences: official data indicate that China is already on a recovery path, with rising output in Q2 following the sharp plunge in Q1. Recent policy easing, faster credit growth, and recoveries in both fixed investment and consumer spending are all factors. Its major constraint comes from weak or still-declining export demand. As the rest of the world recovers in H2, however, a virtuous circle of different countries helping each other out of recession should set in. By 2021, the global recovery should be well in place, with cities everywhere benefitting.

But the uncertainties are huge, of course, and almost entirely on the downside. Nothing illustrates this more clearly than the fact that restrictions recently had to be re-imposed in some parts of **Beijing**, while many other cities, globally, face the prospect of a "second wave" of infections—meaning that at least some of the lifted restrictions would return in many of these cities too. While some of this is already allowed for in our projections, the possibility that the short-term outlook might be much worse than we assume clearly has to be considered.

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Furthermore, even our baseline forecast for the 150 Chinese cities in our global dataset shows a combined GDP rise of less than 1% this year. By way of comparison, the average growth for the five years 2015-19 for Chinese cities was 7.3% a year.

The other cities we expect to have a higher average GDP in 2020 than in 2019 are almost all located elsewhere in Asia or in Africa—two parts of the world that are, of course, hugely diverse. Among the instances of (small) GDP rises in 2020 are **Dhaka** and **Ho Chi Minh City**. In both cases, central governments began lifting restrictions quite early, and there is clear evidence of output rising nationally, which (if correct) implies that GDP must also be increasing in the countries' major cities.

2021's rebound and subsequent growth may be led by cities in India

A particular contrast exists between major cities in China and India. In 2020, we estimate the real GDP declines among Indian cities will, on average, be pretty similar to those located in the rest of Asia (excluding China) and across Africa, at about 5%. This means Indian cities perform very weakly this year compared with their Chinese peers. However, we then expect them to experience particularly strong recoveries in 2021, with all but a handful of the 72 Indian cities in our Global Cities database achieving double-digit growth rates next year. This is despite some anxieties at the macroeconomic level—not least around India's very parsimonious fiscal policy relaxation, which currently amounts to only about 1% of GDP (although tax revenues foregone will, in time, add to this).

Together, India's cities are forecast to experience average GDP rises in 2021 of about 13%, whereas Chinese cities manage 'only' about 8%. Amongst the cities which lead the way in India are the two IT hubs of **Bangalore** and **Hyderabad**: the former is easily the larger of the two, but tends to be dominated by home-grown companies providing out-sourcing services and equipment, whereas Hyderabad is the favoured location for Silicon Valley companies wanting an Indian base. In both cases, the pandemic-induced rise in global demand for digital services, and for the necessary delivery technologies, is providing a degree of resilience not enjoyed by many other sectors—and hence, cities.

The same phenomenon is less apparent in China's equivalent city, **Shenzhen**. One of the country's 'big four' cities, its economy is forecast to grow by about 9% in 2021, after growing by 1% or thereabouts this year. This is broadly the same as for the other three major Chinese cities (**Shanghai**, **Beijing**, and **Guangzhou**), and is consistent with the government in China having exercised closer control on events than India's government, thereby imposing greater uniformity. In addition, Shenzhen's IT sector involves a great deal of manufacturing with strong pan-Asian supply chain linkages, which makes the city very dependent on conditions elsewhere.

As far as Silicon Valley is concerned, we project that **San Jose** and its surrounding metro area will have one of the fastest growth rates in the US in 2021—alongside its close digital economy rivals **Seattle** and **Austin**, Texas. Other strong US performers in 2021 include the resort cities of **Las Vegas** and **Orlando**, both of which should experience significant post-lockdown booms. We project that major North American cities (we include 98 in our global dataset) will grow by about 7% in 2021, on average, broadly offsetting the 6%-or-so decline which we currently factor in for 2020 as a whole.

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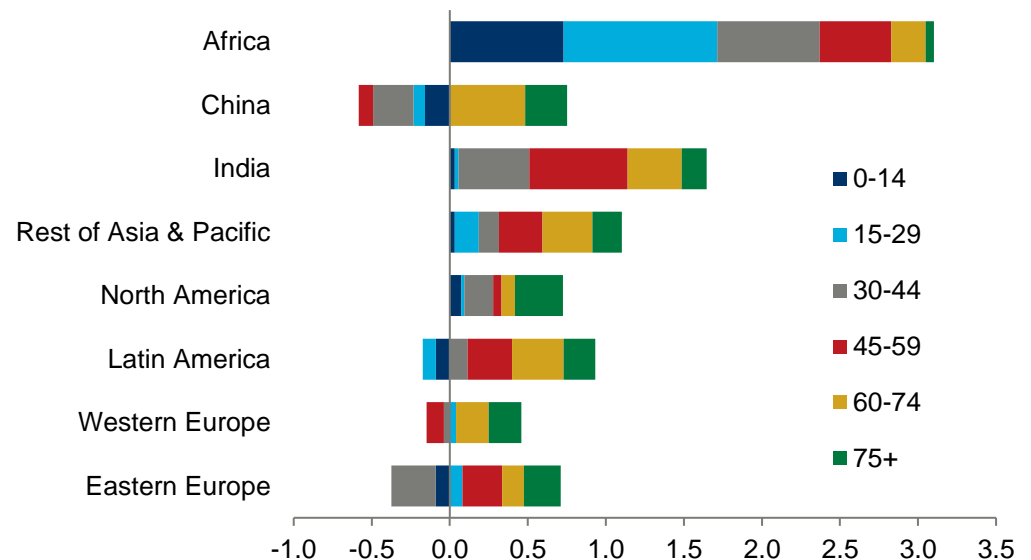## Chinese cities lead recovery but Indian cities look stronger to 2035

That is a better performance than seems likely for Western European cities, for which we think a 2020 decline of about 7½% will be only partially offset by a 6½% recovery in 2021. Part of the reason is that some of Europe's faster-growing cities are in the east, of course, making comparisons with North America slightly unfair. Looking at Europe's two dominant cities, **London** and **Paris**, their outlooks are essentially the same as for their North American equivalents, **New York**, **Los Angeles**, and **Chicago**: in all cases, our GDP growth forecast for 2021 is more-or-less identical to that which prevailed in 2019.

While the outcome will not be so neat in reality, of course, the key point is that there is currently no reason to think any of these cities will have a better or worse pandemic than the rest. They do possess differences in their sectoral structures, demographic profiles, governance arrangements, and so on, but the variations are small compared with those that separate Indian from Chinese cities, for example. A neutral view of their relative short-term prospects is therefore appropriate, at least for the time being.

Longer-term drivers: the role of demographic change

Over the long term, however, rather larger differences between cities open up—influenced by some marked variations in their underlying structural factors, which are largely unaffected by the pandemic. Among the most important are conflicting long-term demographic trends, as captured in Chart 2.

900 global cities' contributions to population change by age cohort, 2020-35, ppt

Chart 2

Africa's urban population will grow fast over our forecast period, and get much younger. China's cities will see little population growth, and significant ageing.

Source: Oxford Economics

The most striking demographic trend is for African cities. A combination of rural-urban migration and 'natural' population growth means they exhibit both a much faster rate of population growth than cities elsewhere, and a very different composition of this growth. Africa is unique in that over half of its urban population growth from 2020 to 2035 is accounted for by people aged 29 or younger. Within that, the growth in the number of young adults takes the lion's share. That means not just more people available for work, but hopefully people many of whom will be better educated than earlier generations, and

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hence a signifiicant increase in the underlying potential growth rate for African cities, so long as employment demand rises in line with supply.

In stark contrast, China's city population is forecast to grow slowly, and is more than accounted for by people aged 60 and over, while all of the country's younger age groups decline over the coming decade and a half. India is in an intermediate position, with marginal growth in the number of people aged 29-and-under living in its cities, but with useful growth in the number of more mature people of working age. Over the 2020-35 period, the changes in the demographic profile of India's cities shows broad similarities to the changes that are likely elsewhere in Asia and the Pacific, in both North and Latin America, and also in Western Europe.

Productivity and income trends compound global differences

Indian cities do, however, resemble Chinese cities in a different way. We project that over the 2020-35 period, cities in both countries will achieve significant productivity growth, with Indian cities averaging a 4.0% a year increase in output per person in work, against 3.3% a year for Chinese cities. This means cities in both countries are able to achieve strong growth in incomes per head of population, and in the case of India (thanks to its growing city population), strong growth in total household incomes.
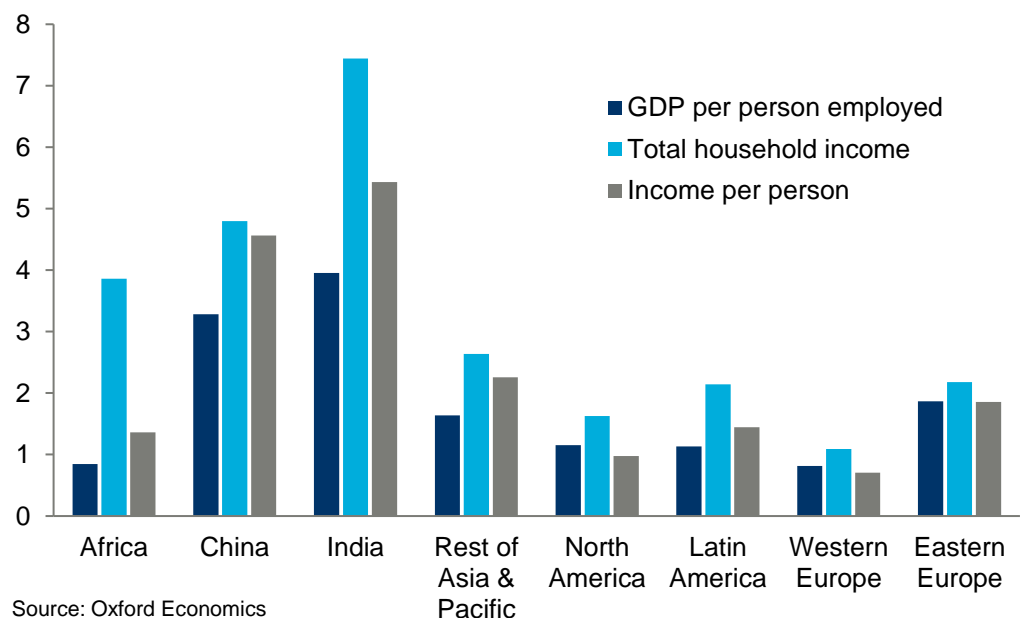
Chart 3

Chinese and Indian cities both see strong productivity growth to 2035, but not African cities. That affects personal income growth, per head.

900 global cities' GDP per head and household incomes, 2020-35, change, % y/y

Legend:
- GDP per person employed
- Total household income
- Income per person

Source: Oxford Economics

For Africa, the story is rather different. The rapid growth of its young urban population is a boost to **overall** personal income growth, but we forecast that it achieves only modest productivity growth over the period to 2035: less than 1% a year. As a result, **incomes per head** in African cities rise by only a little more than that: just 1.4% annually. While this is faster than in North American or Western European cities, the income levels in those places are so much higher to start with that, in absolute terms, the gap in income

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per head between people in their cities and those who live (or will live) in African cities looks set to widen, not narrow.

The headline figures are captured in Chart 4: GDP rises by much the same rate in African and Chinese cities over the 2020-35 period (3.8% and 4.1% a year respectively), but in Indian cities the increase is 7.2%. In North America and Western Europe, the increases are 1.8% and 1.1% respectively. Africa sees strong employment and population growth, as (to a lesser extent) does India; elsewhere in the world, these two variables grow quite slowly.

Chart 4

Chinese and African cities exhibit similar GDP growth from 2020 to 2035, but Indian cities easily outpace them both.

900 global cities' GDP, employment and population, 2020-35, change, % y/y
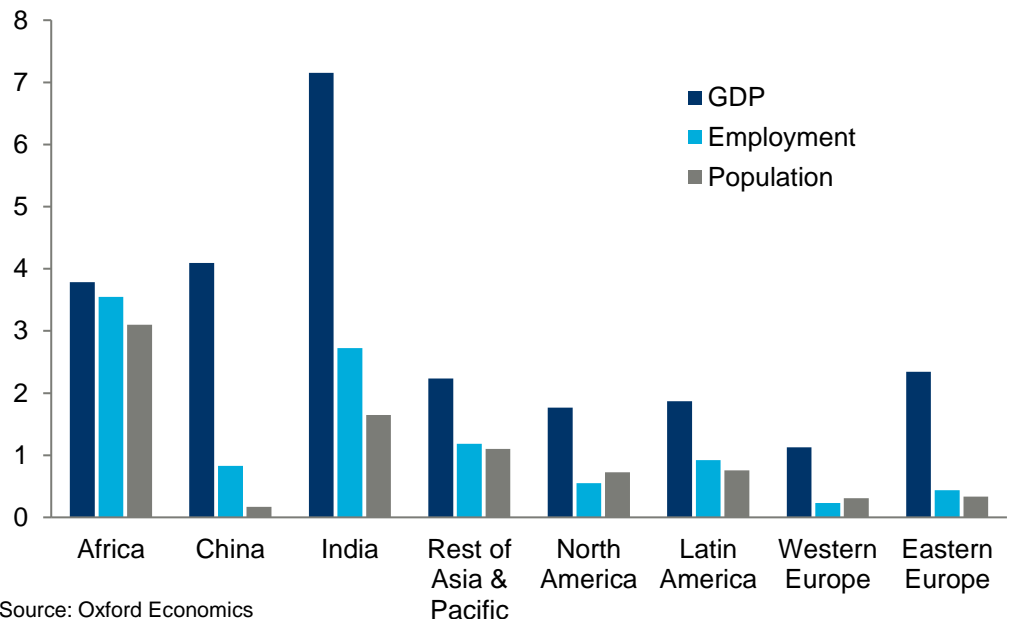
Source: Oxford Economics

Indian cities' strong productivity growth: the role of the tech sector

Indian cities' economies are forecast to grow by an average of just over 7% a year to 2035—a remarkable performance for such a long period of time, though comparable to what they have achieved in the past. In terms of drivers, this partly reflects a virtuous circle of faster GDP growth generating rising incomes, including growth in middle-income households, which generates rising demand for consumer goods and services, and hence rising GDP growth. We forecast that the number of households in India with an income greater than US$30,000 will more than double over the next decade.

However, for this to be possible, it is important that these rising wages do not undermine competitiveness. So an essential part of the story is improving **productivity**. Factors that are helpful in this regard include improving infrastructure—something that has long been problematic in India, and especially in its major cities, but which is getting better thanks to the government's thrust to raise future tax revenues (not least to fund infrastructure spending). However, this is not a uniquely Indian phenomenon, and does not fully explain India's strong productivity growth.

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Chart 5

Indian cities' growth is driven by financial & business services, and particularly the tech sector.

A factor that *is* distinctive of Indian cities, and which helps to explain their strong productivity growth, is the significant contribution to overall output growth of the *finance and business services sector.* The reason is that this sector includes software development and the provision of IT services, ranging from simple call centre activities to highly sophisticated product and systems development—and these are a distinctive success story for Indian cities in general, and two previously mentioned cities in particular: **Hyderabad** and **Bangalore**. Indeed, they are among the fastest-growing of all cities in our global database, in the period to 2035.

900 global cities' GDP growth by sector, 2020-35, ppt
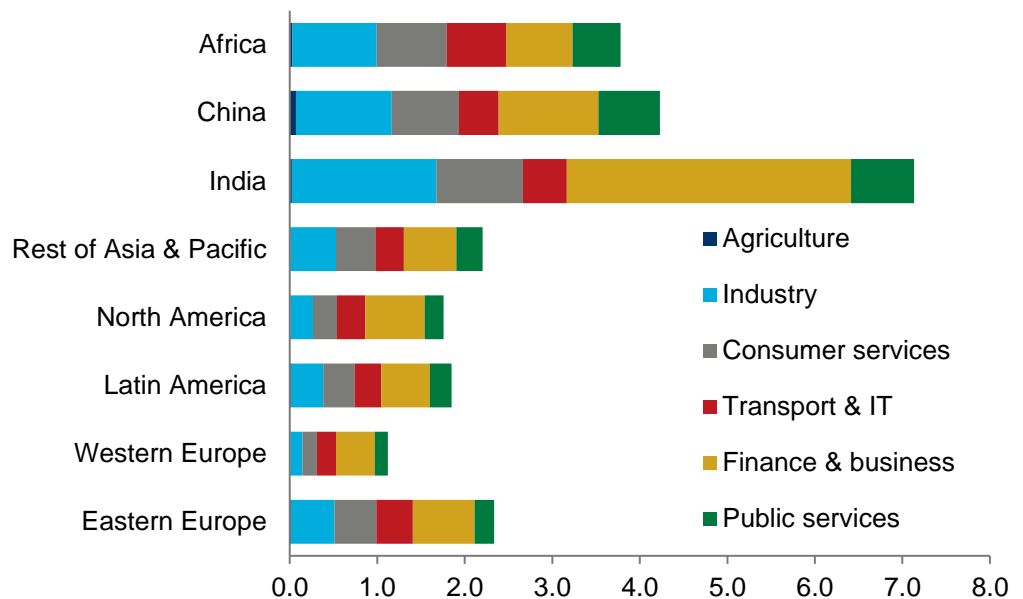
Source: Oxford Economics

As noted earlier, Hyderabad is particularly associated with Silicon Valley companies locating development facilities there, whereas Bangalore owes its success rather more to home-grown companies. Going forward, a lot will depend on the extent to which global tech companies seek to deepen their investment in Indian cities such as Hyderabad, or whether they primarily use such facilities as 'nurseries' for talent, which they then move to their main facilities in California or elsewhere. The current US government's imigration policies are tending to push companies towards the first of these two strategies and away from the second—so, while there a great many other factors involved, it seems possible that if they persist, US government policies will work to the benefit of cities such as Hyderabad, meaning they will come to play increasingly important roles in the global digital economy.

The tech sector elsewhere in the world: the story in Europe is different

The equivalent cities in China and North America, **Shenzhen** and **Silicon Valley**, both currently dwarf Bangalore and Hyderabad in GDP terms. We estimate that in 2019, Shenzhen's GDP was $391bn at 2015 prices, and that of the **San Jose** metro (a close proxy for Silicon Valley) was $345bn. In comparison, Bangalore's figure was much less at

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$81bn, and Hyderabad's was just $54bn. By 2035, however, we expect the GDP gap between the two Indian cities and Silicon Valley will have narrowed significantly, whereas the gap in total GDP between San Jose and Shenzhen will have widened. In our projections, San Jose and Shenzhen grow by 3.3% and 4.7% a year respectively over the 2020-35 period, while Hyderabad achieves 8.4% a year growth, and Bangalore 8.7% a year.

This process of 'catch-up' is quite normal in economic development. It is also important to note that high-tech activity is spreading within the US as well as around the globe: well-known beneficiaries include smaller cities such as **Austin**, which offer better blends of affordability and quality-of-life, and also **New York**, which offers an unrivalled customer base. This too is a very typical adjustment.

Another point worth noting is that Europe has no city that dominates the tech sector in the way in which just one or two cities do in each of the US, China, and India. Part of the reason is that European cities tend not to specialise to the same extent as US, Chinese and, to a lesser extent, Indian cities.

The European city that in absolute terms boasts the largest tech sector is **London**. As a share of the overall economy, however, tech is not large in London, and so does not drive it forward in the way it does the economies of San Jose and Shenzhen, Bangalore and Hyderabad.

Chart 6

London has a large tech sector, but it is a small part of the city's total economy compared with other tech cities, so cannot drive overall growth to the same extent.

Five cities with large tech sectors: relative GDP performance, 2005-2035

2005 =100
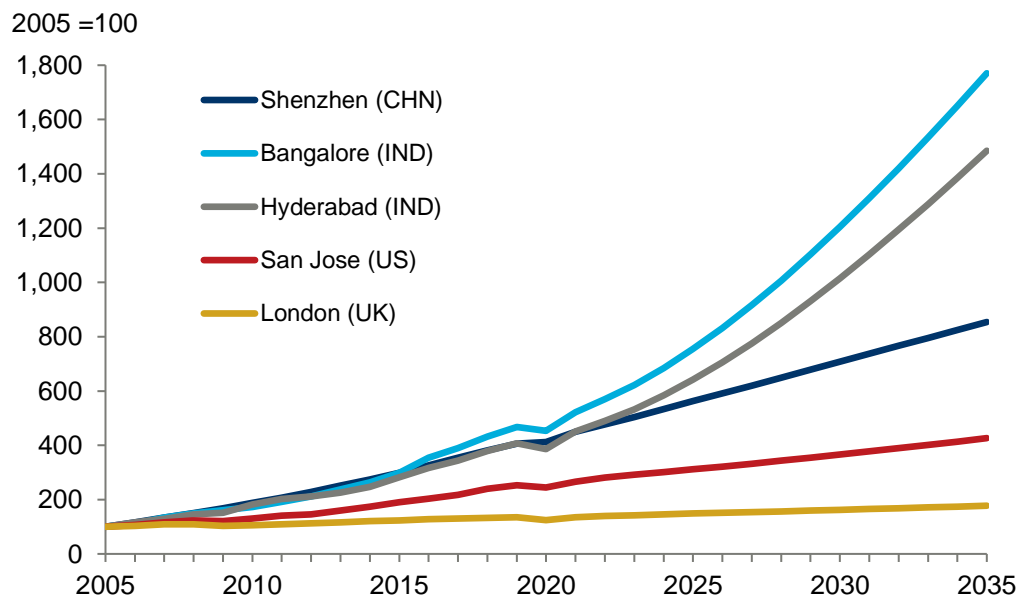
Source: Oxford Economics

From the point of view of the tech sector, cities such as Amsterdam, Berlin, London and Paris (and several more besides) can be seen as close substitutes for one another from a location perspective. Most are in close proximity to one another, are of similar scale, and share common membership of the Single Market (very important in terms of the recruitment of highly skilled individuals). Furthermore, they increasingly share a common

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business language (English) as well as cultural values, possess similar governance arrangements, and so on.

An implication is that no city in Europe now has the capacity to disengage itself from the slow-growing European macro-economy, in order to surf the global economy in the way London once did, when it expanded as an international financial centre in the 1960s, and again in the 1980s. At that time, agglomeration economies in the financial sector were very powerful, just as they were in the digital sector in its early days—but they are now becoming less important.

This is one of the reasons why, going forward, we see considerable similarity in European city GDP growth rates to 2035. So, 1.7% a year for London in the decade-and-a-half to 2035, compared with 1.3% for Berlin, 1.2% for Paris, 1.1% for Madrid, and so on. This means that while London's economy will continue to grow faster than the others, the sense of it being 'special' is likely to gradually weaken, compared with how London was perceived just a few years ago. This may in turn have implications for the extent to which London can command price premia over one another, in terms of both wages and real estate valuations. How this interacts with the changes that may be produced by the coronavirus crisis—such as attitudes towards overcrowding on public transport, and trust in both national and civic governments—is therefore likely to be a focus for increased attention, going forward.

This June 2020 forecast compared to our October 2019 forecast

The tables on the following two pages compare our June 2020 Global Cities forecast with that of October 2019. For example, our June estimate for the combined GDP of Western European cities in 2020 is nearly 9% lower than that of October 2019, while for North American cities the figure is approximately 8% lower. India's revision is larger: China's rather less.

However, it should be remembered that in the closing months of 2019 and at the beginning of 2020 the world economy was already facing a number of disruptions, with many forecasts being revised downwards. So, the differences shown in the tables should not be interpreted purely as the impact of the COVID-10 pandemic: there are more forces at work.

Our tables also contain another important message: that for the majority of cities, most but not all of the lost output has been recovered by 2035, and in some cases much of it by 2025. In rare cases our projections are marginally higher than they were. 2020 on its own is a poor guide to the future.

Definitions can be downloaded from our website:

https://www.oxfordeconomics.com/my-oxford/by-region

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Forecast comparisons: June 2020 versus October 2019
GDP levels for major regions and cities

US$, 2015 prices Billions	June				October				Difference			
	2019	2020	2025	2035	2019	2020	2025	2035	2019	2020	2025	2035
African cities (102)	1037	986	1241	1878	1039	1077	1344	2087	-2	-91	-103	-208
Chinese cities (150)	12507	12592	16626	23768	12387	13089	16870	24791	120	-497	-244	-1023
Indian cities (72)	767	728	1114	2315	776	840	1247	2400	-9	-112	-133	-85
Rest of Asia & Pacific cities (142)	9324	8837	10569	13279	9330	9507	10750	13505	-6	-670	-181	-225
North American cities (98)	15496	14538	17140	20501	15821	16091	17707	21432	-325	-1553	-567	-932
Latin American cities (104)	2733	2541	2989	3674	2754	2790	3158	3871	-22	-249	-169	-197
Western European cities (138)	9447	8737	10116	11300	9417	9534	10278	11519	30	-797	-162	-218
Eastern European cities (94)	1968	1868	2265	2850	1959	2013	2294	2885	8	-145	-29	-35
New York	1715	1603	1853	2167	1777	1808	1985	2392	-63	-205	-132	-225
Tokyo	1564	1474	1644	1715	1573	1579	1654	1731	-9	-105	-10	-16
Los Angeles	1011	950	1119	1330	1082	1104	1225	1494	-72	-155	-106	-164
London	915	844	1005	1200	897	912	1020	1232	18	-69	-16	-32
Paris	800	713	859	970	796	807	870	975	4	-95	-11	-5
Chicago	663	617	715	826	690	699	755	885	-28	-82	-40	-58
Osaka	651	606	666	666	654	653	671	673	-3	-47	-4	-7
San Francisco	545	520	634	803	549	562	634	798	-4	-41	0	5
Shanghai	527	532	712	1017	516	547	721	1087	11	-14	-9	-70
Washington DC	522	503	575	676	542	551	604	727	-20	-48	-29	-51
Dallas	509	481	578	717	543	554	617	763	-34	-74	-39	-47
Beijing	486	491	656	915	473	502	661	985	13	-11	-5	-70
Houston	465	434	516	627	489	498	549	665	-24	-64	-32	-37
Boston	453	430	505	609	458	466	515	631	-5	-35	-10	-22
Philadelphia	432	410	477	562	461	469	516	623	-29	-59	-39	-60
Seattle	393	372	459	586	397	408	464	592	-4	-36	-5	-6
Nagoya	393	364	416	440	395	397	420	446	-2	-33	-4	-6
Shenzhen	391	396	540	820	374	398	531	831	16	-2	10	-10
Atlanta	389	368	436	527	404	412	457	558	-15	-44	-21	-31
Guangzhou	382	387	528	801	383	407	541	845	-1	-20	-13	-44
Seoul	363	361	401	436	361	368	407	465	2	-7	-6	-28
Toronto	347	311	388	469	308	312	343	415	39	-1	45	54
Singapore	346	325	396	510	341	346	393	483	5	-21	3	27
San Jose	345	334	425	582	315	325	380	509	31	9	45	74
Miami	344	323	381	457	357	364	401	489	-13	-41	-20	-32
Chongqing	343	346	469	688	342	362	473	704	1	-16	-3	-16
Hong Kong	333	313	362	425	338	340	376	448	-5	-27	-14	-23
Tianjin	328	325	444	643	327	346	452	676	1	-21	-8	-33
Sydney	314	292	345	436	311	317	359	460	3	-25	-14	-25
São Paulo	308	280	329	367	308	312	344	387	0	-32	-16	-20

Source: Oxford Economics

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GDP growth rates for major regions and cities

US$, 2015 prices Average annual growth, %y/y	June			October			Difference		
	2020	2020-25	2020-35	2020	2020-25	2020-35	2020	2020-25	2020-35
African cities (102)	-4.9	3.0	3.8	3.7	4.4	4.5	-8.6	-1.3	-0.7
Chinese cities (150)	0.7	4.9	4.1	5.7	5.3	4.4	-5.0	-0.4	-0.3
Indian cities (72)	-5.1	6.4	7.2	8.3	8.2	7.3	-13.4	-1.8	-0.2
Rest of Asia & Pacific cities (142)	-5.2	2.1	2.2	1.9	2.4	2.3	-7.1	-0.3	-0.1
North American cities (98)	-6.2	1.7	1.8	1.7	1.9	1.9	-7.9	-0.2	-0.2
Latin American cities (104)	-7.0	1.5	1.9	1.3	2.3	2.1	-8.3	-0.8	-0.3
Western European cities (138)	-7.5	1.1	1.1	1.2	1.5	1.3	-8.8	-0.3	-0.1
Eastern European cities (94)	-5.0	2.4	2.3	2.7	2.7	2.4	-7.8	-0.3	-0.1
New York	-6.5	1.3	1.5	1.7	1.9	1.9	-8.2	-0.6	-0.4
Tokyo	-5.7	0.8	0.6	0.4	0.8	0.6	-6.1	0.0	0.0
Los Angeles	-6.0	1.7	1.7	2.0	2.1	2.0	-8.0	-0.4	-0.3
London	-7.8	1.6	1.7	1.7	2.2	2.0	-9.5	-0.6	-0.3
Paris	-10.9	1.2	1.2	1.5	1.5	1.3	-12.4	-0.3	-0.1
Chicago	-6.9	1.3	1.4	1.2	1.5	1.6	-8.1	-0.2	-0.2
Osaka	-6.9	0.4	0.1	-0.1	0.4	0.2	-6.8	0.0	0.0
San Francisco	-4.5	2.6	2.5	2.4	2.4	2.4	-6.8	0.1	0.1
Shanghai	0.9	5.1	4.2	5.9	5.7	4.8	-5.0	-0.6	-0.6
Washington DC	-3.7	1.6	1.6	1.7	1.8	1.9	-5.4	-0.2	-0.2
Dallas	-5.5	2.2	2.2	2.1	2.2	2.2	-7.7	0.0	0.0
Beijing	1.0	5.1	4.0	6.1	5.7	4.7	-5.1	-0.6	-0.7
Houston	-6.7	1.7	1.9	1.8	1.9	1.9	-8.5	-0.2	0.0
Boston	-4.9	1.8	1.9	1.8	2.0	2.0	-6.7	-0.2	-0.2
Philadelphia	-5.1	1.7	1.7	1.7	1.9	1.9	-6.8	-0.2	-0.2
Seattle	-5.2	2.6	2.5	2.8	2.7	2.5	-8.0	0.0	0.0
Nagoya	-7.3	0.9	0.7	0.4	1.0	0.8	-7.8	-0.1	0.0
Shenzhen	1.5	5.6	4.7	6.3	6.0	5.1	-4.8	-0.4	-0.4
Atlanta	-5.3	1.9	1.9	2.0	2.1	2.0	-7.3	-0.1	-0.1
Guangzhou	1.3	5.5	4.7	6.1	5.9	5.1	-4.9	-0.4	-0.3
Seoul	-0.4	1.7	1.2	2.0	2.0	1.6	-2.4	-0.3	-0.4
Toronto	-10.5	1.8	1.9	1.2	1.8	1.9	-11.7	0.0	0.0
Singapore	-6.0	2.3	2.5	1.5	2.4	2.2	-7.4	-0.1	0.3
San Jose	-3.3	3.5	3.3	3.2	3.2	3.0	-6.5	0.3	0.3
Miami	-6.2	1.7	1.8	1.8	2.0	2.0	-8.0	-0.2	-0.2
Chongqing	1.1	5.4	4.5	6.1	5.6	4.6	-5.0	-0.2	-0.2
Hong Kong	-6.0	1.4	1.5	0.6	1.8	1.8	-6.6	-0.4	-0.2
Tianjin	-0.9	5.2	4.3	6.0	5.6	4.7	-6.9	-0.4	-0.4
Sydney	-7.1	1.6	2.1	1.9	2.4	2.5	-8.9	-0.8	-0.4
São Paulo	-9.1	1.1	1.1	1.2	1.9	1.4	-10.3	-0.8	-0.3

Source: Oxford Economics

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