China and India: threat or opportunity

Reports:
• Scenarios for India & China 2015: Implications for the City of London
• China – 2020: Key policy outcomes form the 17th Party Congress and their impacts”

Books:
• When China Rules the World
• The Dragon and the Elephant: China, India and the New World Order
• Billions of Entrepreneurs: How China and India are reshaping their futures and yours
• India’s Century
• Writing on the Wall: China and the West in the 21st Century

Periodicals:
• McKinsey Quarterly, The Director, Business Week, Fortune Magazine,
  The Financial Times & The Times
• The Web, including China Daily and Times of India
• CIA World Fact Book
China and India: threat or opportunity

What’s the big attraction?
Huge land masses, large populations, with high and growing GDP

PPP GDP: US, China, Japan, India, Germany, UK/Russia, France, Brazil

Per capita GDP – IMF 2008: China 104, ($3k); India 142 ($1k);
Lux 1 ($113k); Irl 6; US 15, Fr 16, Germany 19, UK 20, Italy 21, Japan 23.

China

<table>
<thead>
<tr>
<th>History</th>
<th>4 to 5,000 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land mass</td>
<td>9.3m sq km</td>
</tr>
<tr>
<td>Extent</td>
<td>Tropical to sub-arctic, &amp; deserts</td>
</tr>
<tr>
<td>Arable land</td>
<td>15%</td>
</tr>
<tr>
<td>Population</td>
<td>&gt;50% along coastal region &amp; three major rivers.</td>
</tr>
<tr>
<td></td>
<td>Very sparse interior &amp; west</td>
</tr>
</tbody>
</table>

India

<table>
<thead>
<tr>
<th>History</th>
<th>4 to 5,000 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land mass</td>
<td>8.5m sq km</td>
</tr>
<tr>
<td>Extent</td>
<td>Tropical with Himalayas, &amp; deserts</td>
</tr>
<tr>
<td>Arable land</td>
<td>51%</td>
</tr>
<tr>
<td>Population</td>
<td>Relatively evenly spread though a larger in Indo-Gangetic plain &amp; coast</td>
</tr>
</tbody>
</table>
At night, one can see by the lights where the people live.

India is very fertile. The population is spread across most of India, including the Deccan plateau and the foothills of the Himalayas. At least 50% of the land surface is defined as arable. Only the Thar Desert is sparsely populated.

China, by contrast, is very fertile on either side of the three great river systems, going West to East:

- The Yellow River, not far from Beijing
- The Yangtze, at Shanghai
- The Pearl River, at Guangzhou

And along the coastal plains. Only 15% of the land surface is defined as arable.

But inland, there are hostile regions such as deserts like the Gobi and Taklamakan, high inhospitable plateaus like Tibet and Qinghai. And mountainous regions like Yunnan. and Szechuan
China is said to produce 40% of the world’s consumer goods ...

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Exports</th>
<th>2008 est, unless otherwise noted</th>
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<tr>
<td></td>
<td>World</td>
<td>$16,280,000,000,000</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>China</td>
<td>$1,952,000,000,000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>$1,530,000,000,000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>United States</td>
<td>$1,465,000,000,000</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Japan</td>
<td>$1,377,000,000,000</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Germany</td>
<td>$776,800,000,000</td>
<td>$200,000 exported to US in 2005</td>
</tr>
<tr>
<td>6</td>
<td>France</td>
<td>$761,000,000,000</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>China</td>
<td>$566,100,000,000</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Australia</td>
<td>$377,500,000,000</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>United Kingdom</td>
<td>$468,700,000,000</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>China</td>
<td>$566,100,000,000</td>
<td></td>
</tr>
</tbody>
</table>

KITA: China no.1 market share of 953 products in 2006

This slide is a ‘snapshot’ with data derived from both accepted sources such as IMF/ World Bank and ad hoc sources.

China is said to produce 40% of the world’s consumer goods; the world’s second largest trading nation.

Est 2008 Christmas, 70lb toys shipped to UK for every child, heavier than average 9 year old boy!
What is actually happening?

Is China & is India threat or an opportunity? And what are the implications for public sector?

Rest of talk in five sections:

1. Political factors
2. Economic factors
3. Social & cultural factors
4. Technological & industrial factors

And final slide summarising possible implications for public sector in the UK
China and India: threat or opportunity

1. Political factors: New eras started soon after World War 2

India - largest Democracy, but feels like a but more like hereditary dynasty with continuity from Nehru, Indira Gandhi and Sonia Gandhi of the National Congress Party – which won conclusively recently; plus intense bureaucracy.

China - largest so-called Communist state: but more market-oriented capitalistic than many western nations; also 40 – 60m Christians (in same range as registered members of the Communist Party - 75m.

BUT, both are in unstable equilibrium:

• India continues to experience periodic sectarian violence: Hindu vs Muslim, Hindu vs Christian, upper vs lower castes

• China has tensions between Han majority and Tibetan and Muslim minorities; and feels like it could be on brink of popular revolt, fed by lack of trust; Tien An Men Sq mk2?

Neither are aggressive nor have any history of ACTING colonial.

Both have been invaded numerous times. But the only wars with neighbours and (almost all) about national boundaries.
Both are full of contradictions:

- **China & Taiwan**

- **India and Pakistan:** Wagah border post in the Punjab (between Amritsar in India and Lahore in Pakistan)

- **150m Indian Muslims to Pakistan’s 160m**
China is led by engineers; India by lawyers and economists

8 of 9 Standing Cmte of Politburo of CPC Central Cmte are engineers:

- President Hu Jintao – hydraulic engg
- PM Wen Jiabao – geological engg
- Wu Bangguo - electron tube engineering
- Jia Qinglin – engineer by profession
- Li Changchun - electrical engineering
- Xi Jinping - Chemical Engineering
- Li Keqiang - LLB, and later a PhD in Economics
- He Guoqiang - Inorganic Chemical Engineering
- Zhou Yongkang - geophysical survey and exploration

Nicholas Sarkozy law
Vladiano Putin & Medvedev law
Romano Prodi economics
Angela Merkel physics
Gordon Brown history, PhD
Cameron economics, law & economics
George W Bush history, Yale; MBA – HBS
Obama political science
McCain US Naval Academy
2. Economic factors: Both benefited from end of Cold War and globalisation

Reforms started in ...

Deng – cat - red or not;
4 modernisations: agriculture, industry, national defence and sc & tech

India: after 6 years in wilderness (for second time after independence)
National Congress won again. Sonia Gandhi stepped aside for Dr Singh; recent elections gave Congress a comfortable working majority – opportunity for more reforms.
Singh – after Punjab U, Camb U, Oxford U - PhD
China and India: threat or opportunity

With step change in ...


China – FDI very high; Private sector 60% of GDP c. UK

India has lower economy but growing at 7.5%. India is ‘China 15 years ago’

Both still growing, with continuing demand for raw materials and quality products and services. But cost of commodities, wages & inflation are rising ;. Property boom at risk. And fuel is increasing cost of transport

Both are increasing trade with Africa to gain commodities and political goodwill.
Is amongst world’s top consumer of cement and steel, and has invested hugely in infrastructure:

New coal power stations use advanced supercritical clean coal technologies.

**BTW: Three-Gorges Dam:**
- 14 GW (eventually 22.5 GW). BTW: England World Cup 2006 TV Pickup 3GW
- Reservoir 600KM long = *London to Aberdeen*

The major renewable energy source in China is hydroelectricity with the most hydro-electric capacity in the world,

BTW – infrastructure investment not unusual = c150 years ago in West
... and more infrastructure

Highest point: 3.7km; Ben Nevis: 1.3km, Mont Blanc: 4.8 km

**Longest rails:** Trans Siberian 5,800 km, Canadian 3,000 km

**Beijing-Lhasa Link**
- 4,000 km
- 47 hours 28 mins
- £200 first class return

**Channel Tunnel Rail**
- 200 km
- 2 hours 15 mins
- £100 cheapest return

**Last link Beijing-Lhasa Link**
- $ 2bn
- 5 years
- 1,100km

GE-Bombardier coaches
Pax - health cert
Oxygen masks

July 3, 2006: “After crossing 4,000 km, the first train to travel from Beijing to Tibet pulled into Lhasa today, inaugurating the world’s highest railway. The last link took five years and around $4 billion.”

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China and India: threat or opportunity

Indian pharma: today $5b, 2010 projected $25b
- Steel
- Cars
- Beer

‘CISCO: Sold on India, Business Week Nov 25, 2005: The networking giant sees an edge there, even with most competitors resolutely set on growth in China’

Partly because of earlier major investment in China and partly because of concern of local firms ‘copying’ Cisco technology. Eg law suit against Huawei was settled out of court.

In fact IBM India is now largest entity outside of US, 53,000 employees. No 4 after TCS, Infosys and WIPRO. And TCS largest employment in US, not India.

Now India-China bilateral trade $17bn rising to $40 bn by 2010.
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**China:** is taking climate change and environment very seriously

9/10 most polluted cities and 16/20 most polluted rivers are in China; 70% of rivers polluted to some degree.

China world leading renewable energy producer, installed capacity of 152 GW. In 2007, total renewable energy investment $12 billion, second to Germany, and expected to be No 1 by 2009.

China world largest consumer of solar energy and the largest producer of solar water heaters, accounting for 60 percent of the world’s capacity. Total installed heaters c30 million households. Wind no 5 after Germany US Spain and India.

New Scientist; BTW: May 2007 “World Stripped Bare”
http://www.newscientist.com/article/mg19426051.200-earths‐natural‐wealth‐an‐audit.html

**Carbon emission 2008:** 1/2 US, 2/1 China, 4 Japan, 5 India, 7 UK
**Per capita emission:** 1 US, 23 Japan, 25 UK, 80 China, 113 India
China and India: threat or opportunity

3. Social and cultural factors

Both are both hierarchical and deferential:
• Both are strongly family and clan oriented
• Both work best through connections/relationships (quan xi)
• Both have high levels of corruption

China is more homogenous:
• Ethnic groups and language – 92% Han, single written language
• Religions – mostly atheist, with Tao-Buddhist cultural background

India is more diverse:
• Ethnic groups – 72% Indo-Aryan
• Languages - Hindi 41%, Bengali 8.1%, Telugu 7.2%, Marathi 7% ...
• Religions - Hindu 80.5%, Muslim 13.4%, Christian 2.3%, Sikh 1.9%

<table>
<thead>
<tr>
<th>Indian</th>
<th>Chinese</th>
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</thead>
<tbody>
<tr>
<td>Spiritual</td>
<td>Materialistic</td>
</tr>
<tr>
<td>Intellectual</td>
<td>Pragmatic (can do)</td>
</tr>
<tr>
<td>Transcendent</td>
<td>Down to earth</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1.3b – no 1</td>
<td>1.1b – no 2</td>
</tr>
<tr>
<td>Growth</td>
<td>- 0.6% and slowing</td>
<td>- 2.1% dropping</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>- 92% Han Chinese</td>
<td>- Aryan – 50%, Dravidian – 30%, Mogul – 10%</td>
</tr>
<tr>
<td>Ultra poor (&lt;$1 pd)</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Languages</td>
<td>- 92% same script</td>
<td>- 33 languages, 1,650 dialects</td>
</tr>
<tr>
<td>Literacy</td>
<td>- 91% (87% women)</td>
<td>- 60% (45% women)</td>
</tr>
</tbody>
</table>

“No peasant left behind”

Corruption perception index 2008 (low is bad) – China - 72, India - 85 (of 180)
according to Transparency International: http://www.transparency.org/
Top 10, Nordic, ANZ, Canada, Swiss, Neth & Singapore
UK - 16, US, Japan – 18
Bottom: Afghan, Iraq, Haiti, Burma & Somalia (last).
China is more closed and ‘face’ is very important

- Larger population: 1.3b; but slowing down with one-child policy
- Has 70 cities > 1m, 45% live in towns
- Believes in education and primary school is compulsory
- Higher literacy, especially amongst women
- Middle class of 120m growing to 200m by 2010, saving $150b per year but also spending!
- Home ‘ownership’ from 0 to 70% in 20 years
- Over 300,000 $millionaires with conspicuous consumption

Cheap labour - but increasing – retail inflation c8%; with over 750,000 new science & engineering graduates each year

120 million are middle class projected to grow to 200 million by 2010; 310,000 $ millionaires; >100 $ b’naires; 6m private cars.

Combined – 400 million middle class.

Currently China – 30% savings, but … price of pork, rice etc rising at 8%!

Outside of US and Germany, China is no 3 for Rolls Royce, Mercedes and BMW.

DaimlerChrysler invested €1b in China in 2004 building Mercedes S-Class and BMW 7-Series in ShenYang;

But now also in India – Series 5 & 7, near Chennai.
India – more ‘western’ with 250 years of colonial legacy

- Conducts secondary education in English for ‘upper class’
- Is more fluent in English generally
- Is more open and very warm
- Dwells as large ‘joint’ families
- Has more ‘ultra’ poor
- Has rigid caste system, but significant positive discrimination

India’s lowest caste, Dalits or ‘untouchables’ = 150m (16% pop)

Including other lower castes and ethnic minority tribes form nearly 50% of India’s population!

But affirmative action very strong for education and govt; nearly 40% of places are reserved and often creates resentment in higher castes.

First VP DR B R AMBEDKAR developed constitution was a Dalit; and now Mayawati a Dalit is contending to lead country on key issues
China (and India): Demand for products and services of ‘affluence’ keep increasing

Retail financial Services:
**Generali** is no 1 in life & pensions through alliance with China National Petro Corp; **AIG** (founded in Shanghai in 1919) was no 1 is now no 2, UK’s **Prudential** has set up; **HSBC** was originally HK and Shanghai Banking Corp has reset up in Shanghai, **RBS** there too. BTW over $200bn personal savings (and growing) to be managed!

Retailing: **IKEA, Wal-Mart** there as also **B&Q** – helping with complete fittings for new apartments of c$8,000 for 2 bedroom flat. 70% of new residences are empty shells. 60% profit, 10 x UK

Other consumer goods:
Cigarettes: Gallaher, the maker of Benson & Hedges and Silk Cut cigarettes, is about to start its long-awaited push into the tobacco market of China as its locally produced cigarettes go on sale there for the first time.

Food & drink: The first joint-venture company, **NESTLÉ Shuangcheng** Ltd., was established (Heilongjiang Province) in 1987.

Health & beauty: **L’Oreal** is BIG in China; also bought local firm who distributes cosmetics through 250,000 outlets! 2006/7, O’real set up hairdressing training schools and saloons in **India**.

Communications: Martin Sorrell (**WPP**) says Advertising in China set to out-grow US in few years. Telecoms – no comment!
4. Technology & industry factors: As producers …

- **China** for hardware, but moving into software and **India** for software & services, but moving into hardware
  - Both have other technology industries; pharma, biotech …
  - Both turn out huge number of science and engineering graduates
- Both are following path proven by Japan in 60s & 70s and South Korea in 80s & 90s:
  - Cheap adequate ‘copies’
  - Low-cost good-quality substitutes
  - High-quality originals through indigenous innovation - eg SunTech Power, one of top 3 solar voltaic cell firms

<table>
<thead>
<tr>
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<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science &amp; graduates</td>
<td>1.6m pa</td>
<td>800k pa?</td>
</tr>
<tr>
<td><em>(Duke University)</em></td>
<td>600k pa</td>
<td>400k pa</td>
</tr>
<tr>
<td>McKinsey</td>
<td>160k to int’l std</td>
<td></td>
</tr>
</tbody>
</table>

China – low tech: Barbie doll $10 retail, Chinese factory gets 35c.

But China already reducing low end:
- 1,000 of 5,000 cheap shoe factories closed in last 12 months;
- 500 out of 600 cigarette lighter factories closed in 18 months.
China and India: threat or opportunity

... as users

China has more users
India:
- Rural poor have limited telecoms access
- Joint families also mean one PC or port per household
- Indian farmers sell their produce through a shared intranet service provided by ITC, major agri-business firm ($3bn)
- Bureaucracy slowly being beaten by Internet offices run by graduates for free
- Street letter-writers being replace by mobile phones

These figures are not up-to-date (c2007) and come from different sources:

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>150m</td>
<td>25m</td>
</tr>
<tr>
<td>Mobile</td>
<td>750m</td>
<td>300m</td>
</tr>
<tr>
<td>Internet - residential</td>
<td>250m</td>
<td>25m</td>
</tr>
<tr>
<td>Broadband</td>
<td>100m</td>
<td>1m</td>
</tr>
</tbody>
</table>

Spoken web: Voicesites and VoiGen -

China and India: threat or opportunity

Implications for the Public Sector?

- Price stability: low inflation, lower cost of imports
- Negotiation of local jobs and services
- Import/export facilitation: do you organise study tours to China or India or run ‘Trading with China-India’ awareness seminars?
- Education: are you developing your Knowledge Economy?
- Opening institutions in China or India?
- Offering special facilities for Chinese-Indian students?
- Tourism: do you have Mandarin-speaking tourist guides; do you encourage low-cost flights to/from China-India?
- Twin towns with India or China?
- Consultancy: Do you offer advice on best practice – such as for e-government, pollution or traffic management, etc?

50- 75k Chinese students in the UK

There are c150 Sino-foreign joint schools now operating in Shanghai, over 50,000 Chinese students. The foreign partners come from 18 countries incl US, Britain and Japan.

Dulwich College: 2003 Shanghai, 2005 Beijing, 2007 Suzhou, *Detur Gloria Soli Deo* ("Let glory be given to God alone") > “*Detur Pons Mundo* – Building Bridges to the World"

Notts U, Ningbo – main tower 1 m taller
China & India: threat or opportunity?
And the answer is:

threat *and* opportunity!
China and India: threat or opportunity

BTW: Thank goodness there is no Chindia!

World Economic Forum: competitiveness ranking 2008:

- US – 1
- UK – 12
- China – 30
- India - 50