

How Technology and Globalization are driving China in the 21st Century

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How Flat is the Chinese World?

- China is everywhere everyday (Harvard stock-broker, UK wood boards)

Goods and Services

- *China Price* - Walmart
- *Trade* = 75% GDP (v Japan, India, Brazil 25 – 30%)
- *GDP* (2006 prices) ~ 2027 = US, 2050 = 75% > US (India) (Goldman Sachs graph in *Economist* 30.06.07)
- *Retail sales* + yoy 8% (2002) ~ 20% (2007) (*Economist* 16.02.09)
- *Container port* ranking: Singapore, HK, Shanghai, Shenzhen, Pusan, Kaohsiung, Rotterdam, Hamburg, Dubai, Los Angeles
- GDP of *EM* = 48% World (BRIC + VISTA (Vietnam, Indonesia, South Africa, Turkey, Argentina); trade within EM > US
- China's *net export to US* = 8% GDP

People and Knowledge

- > 460M *mobile phone* subscribers, *on-line population* 94M (2004) – 210 M (2008) = 16% v US (69.7), Japan (68%), South Korea (66.5%)
- 6 million *college enrolments* p.a. (5 x 1999), US – 40% overseas post-doctorate students
- *West TV dramas + books* – from 13 years to 12 hrs (*Friends, Prison Break, The X-Files*); *Harry Potter & the Deadly Hallows* (HP7); *The World is Flat*
- *Cosmopolitanism*: ‘Halfpats’, 1 M Koreans in Qingdao, Beijing, Shanghai, Tianjin, Shenyang; 1/2M Taiwanese in Shanghai
- *Outbound tourism*: 37.5 M (2007) 17% > 2006, 100M 2020 (World Tourism Org)
- *Cross-Cultural Management* (Lenovo - Chinese Chairman, US CEO + COO, Chinese CFO)

China joins the Capitalist Club

- **3(4) of world's top 5(10) corporations** (market cap) - *PetroChina (US\$1T 2 x ExxonMobile), ICBC (World's largest bank), ChinaMobile, Sinopec*
- **Massive IPOs** - *BoC (US\$9.7 b), ICBC (US\$21.9b), Alibaba (US\$1.5 b, largest internet IPO since Google)*
- **Booming M & A - Mainland** - *US\$ 29.4b in first 3Q 2007* **Outbound** - *CNOOC for UNOCAL, Nanjing Motor Group for MG Rover, CIC 10% in Blackstone, CDB 3.1% in Barclays, CCB for B of A's HK & Macao operations, China Minsheng 9.9% of UCBH (US bank), ICBC 20% of South Africa's Standard Bank, ChemChina + Blackstone for Nufarm (Australian agro-business), CITIC 6% Bear Stearns, Chinalco in dawn raid acquired 9% of Rio Tinto for US\$14b; Ping An paid Euro 1.81b for 4.18% of Fortis (expandable to 4.99%) and Euro 2.15b for 50% of Fortis Investment to form Fortis Ping An Investment*
- **China to grow yuan private equity** – *Wu Xiaoling, Dep Gov, PBoC, 2007 China M & Annual Conference, Tianjin*
- **Imminent launch of stock index futures** – *hotbed for hedge funds already on Mainland by stealth e.g. trade settlements, property and Chinese stocks, betting on RMB, Asian hedge funds= US\$ 20-50b*
- **4 of Big 5 SCBs** (60% of all loans and deposits) embrace **foreign equity**: *HSBC 19.9% of BoCom (2004); BoA 10% of CCB, RBS 10% of BoC; Goldman Sachs 10% ICBC (2005)*
- **Local incorporation of foreign banks** – *Citibank, HSBC, SCB, BEA*
- **Controlled outflow** *Estimated US\$10b (Deutsche Bank), 23.4b (Morgan Stanley), 690 b (+80%)(Lehman Brothers), (US\$4,800 b household and corporate savings)*
 - *Liberalised QDII - banks allowed 50% overseas investment quota for approved equity funds*
 - *US\$6.6 b raised in Beijing in one day (Sept, 2007) for an overseas equity fund*
 - *Chinese citizens with a/c at the BoC Tianjin to invest in HK stock market*
- **China Investment Corporation (CIC)** *to manage initially US\$200b of FX (Sovereign Wealth Fund)*

India compared

- **IT sector** from 5% to grow to 7% GDP by 2020 (17% of growth), 800,000 IT professionals, 2 million university graduates p.a., 1/3 Silicon Valley engineers, inventor of Pentium chip (*Vinod Dham*) and Hotmail (*Sabeer Bhatia*), Nokia brain-chips, 48% world BPO, high tech designing and modelling, financial data analyses, bioinformatics and telemedicine
- **Employment:** IT only 2.3 m (direct) + 6.5m (indirect) jobs (Indian Railway 1.6 million workers) v 400m labour pool, world's largest young unemployed (*Team Lease, Indian employment consultancy*)
- **Strengths:** Rule of Law, English language, 555m under 25, Individualism (*The Argumentative Indian – Amartya Sen*), Capital market (Tata bought Jaguar and Landrover) ArcelorMittal, world's largest steel maker, Bombay Stock Ex 6,000 stocks v Shanghai 1,000
- **Weaknesses:** Infrastructure, Bureaucracy, Labour rigidity (SME), Politics, Lack of extensive manufacturing base (v China)

Technology challenges

- **R & D** = 1.23% GDP < target 1.5% GDP (v US 2.59% or 2.32% in China 1960)
- **Quantity** > quality; Duplication + **Variegation**
- **Applied** > Basic Research
- External technology reliance 50% (v 5% US & Japan), **US\$1 profit** DVD players, US\$3.70 value of a US\$ 224 iPod manufactured in China by Taiwanese Inventec; only 15% of IT export **value added** in China (~ 60% FIEs), only 3% enterprises possess **proprietary technologies**
- 2.26% **representation** (only one chairmanship) in the 158 **world-class** organisations; no home-grown Nobel Prize laureate
- **IPR** risks
- Long March for **global brands** (IT (Lenovo, Huawei), White Goods (Haier), TV (Changhong, Konka, TCL, Haier, Hisense, Skyworth))

Internal & External Dynamics

- **Internal:**

- **PEW 2006** – Satisfaction Index 48% (2002), 72% (2005), 81% (2006) v 29% (US), 35% (UK)
- **Unstable, Unbalanced, Uncoordinated, and Unsustainable** – 17TH Party Congress, Premier Wen, 15.03.07
- **Scientific** Outlook on Development, **People-based** governance, Intra-Party **Democracy**, **Balanced** Development, **Peaceful** Development, **Harmonious Society** – President Hu, 11th NPC, 2008
- GDP = 27% US, **GDP@** 1/16 of US, below 100, World Bank end-2007 found China (& India) GDP PPP **40% smaller**, even by 2050 = middle-income@ LDC, rising **inequalities** (900M rural dwellers average income only US\$380 p.a.) **regional** imbalance, **economic imbalance**, **environmental degradation**, rampant **corruption**, developing **rule of law**, **IPR** violations, inadequate village **social protection**, healthcare and pension provision, looming **ageing profile**, economic **overheating**, food and commodity price **inflation**, social **unrests**, **human rights**, **separatist movements** (Tibet, Xijiang, Taiwan)

- **External:**

- **Energy security**
- **Climate Change**
- **Protectionism**
- **Globalization and Its Disconnects** (Joseph Stiglitz) (Nigeria lost 350,000 manufacturing jobs)
- Global **economic imbalance** – Trade, export, consumption, FX reserve, RMB v US\$, SWF
- Geopolitical and cultural-biased **China-bashing**
- **Middle East** implacability (Israel-Palestine, Iran, Iraq, Sunni-Shiite rivalry, sectarianism, Islamism, nationalism, oil power)
- **Non-allied Multilateralism:** Relations with US, EU, Russia, Central Asia, India, Japan, ASEAN, ME, Latin America, Africa, Australia
- **Beijing Consensus** v Washington Consensus

10 Mega-trends (1)

- (a) **Explosive urbanization** (McKinsey Global Institute, March 2008) + 350m = 1b by 2025; 221 cities@1m (EU 35); 15 super-cities@25m; 11 hub-&-spoke conurbations@60m; 50,000 skyscrapers = 10 NYCs; GDP x 4 by 2020; concentrated urbanization mode = savings in 2.5% GDP in public expenditure + 35% emissions
- (b) **Largest and fastest-built national transport infrastructure** in human history – 2001-5 = West 50 yrs, 2nd only to US interstate **highway system** in 17yrs, biggest **railway expansion** since 19th C, 78,000 km (25% world traffic but 6% of total length) to 100,000 km by 2020, 6-lane 36km world's **longest sea-spanning bridge** to open in May 2008 (US\$ 1.64b over Hangzhou Bay linking Shanghai to Ningbo conurbation + Zhejiang, Jiangsu = total population 72.4m)
- (c) **Rise of the 'Middle Class' – Urban household income** US\$1,000 p.m.= PPP US\$3,200 p.m. 9.4% (2005), 21.2% (2015), 59.4% (2025) (*McKinsey Quarterly 2006 Special Edition*); 12% world **luxury sales** to grow to 1/3 by 2015; **private cars** 11@1000 v 500@1000 US, 500M cars by 2050 (*Goldman Sachs*); **The Young and Restless** – ladies in UK, gentlemen in US?, **Post-80s** Little Emperors, avant-garde **Me-Generation** + NEETs (Not in Education, Employment or Training), **young entrepreneurs**, 300,000 **USD millionaires** + 50,000 p.a.
- (d) **Green Revolution (11th FYP, @ CO2 emission 87% of world average but largest polluter**, 2.6 m sq km **desertification** affecting 400m people; 1978 **Green Great Wall** 4,480 km afforestation (recent snowstorm damaged 10%); world's largest ecological project ^ coverage to 18.21% absorbing total 5b tons of CO2, now 500m tons p.a.= 8% green-house gas emissions, to increase to 20% by 2010, **to reduce 1b tons CO2 p.a. by 2010**; energy efficiency - small coal power plants closed (< 10m kw completed 2007, target 50m kw); hydro, nuclear, coal-seam gas, biomass, wind, solar, terrestrial heat and wave energies; Dongtan **Eco-City**; Miles **Electric Vehicles** manufactured in Tianjin (NY Mayor Bloomberg visited) –Miles XS500 capable of 120 miles at 80 mph to launch in 2009 (*Zoom: The Global Race to Fuel the Car of the Future*)

10 Mega-trends (2)

- (e)(1) Drive for **Science and Technology**: 4 m *graduates* pa, 40% of overseas post-doctorates in US, 32M *scientists/technologists*, 5th largest no. of published *scientific papers* (*Science Watch 1996-2006*), *leading strengths* in biotech, genomics, stem cell, gene therapy research, world's largest *agricultural science program*, *Shenzhou VI* (2005), *Chang'e* (2007), *Shenzhou VII* (space-walk 2008), *11th FYP* 60% GDP, 2.5% on R&D by 2010
- (e)(2) Building a **Nation of Innovation**: biggest market for *IC*, 3 x India's 24 *PCs @1,000*, 750 *international R&D centres* (India 100) , world proportion in China (35%) = France v UK (47%) US (59%), home-grown *IGRS (Intelligent Grouping and Resource Sharing) Standards* approved June, 2005 & *3rd G 3G* network TD-SCDMA launched 29.03.08 for *3C* (Computers, Communications, Consumer Electronics) and *IPTV* (Internet Protocol TV); satellite launch on 14.04.07 for China *GPS* (v US's GPS, Russia's Glonass and EU's planned Galileo); *Technologies* in energy and water resources, environmental conservation, proprietary technologies, life sciences, aeronautics, ocean sciences; 11th FYP - *20 Fortune 500* by 2010
- (f) China joins the **Capitalist Club** (Slide 3)
- (g) **Outsourcing and In-sourcing** – from science and technology parks to *BPO* parks + universities (India), Chinese MNCs to outsource overseas compliance to host countries?
- (h) **Central and Western expansion**: *Balanced* development, New Socialist *Countryside*, Rising *mass consumers* in Tier 2-3 cities (Marketing to hinterland, Mckinsey Quarterly, 2006 Special Edition)
- (i) Inbound and Outbound **Tourism** (Top Tourism Destination before 2020, cf Slide 2)
- (j) **Emerging civil society** (public consultation and public *hearings mandated by law*, *local elections* of all village and county chiefs and urban neighbourhood committees, *online community forums*, *media* role in monitoring consumer rights and environment, *36m blogs* (60m bloggers), officials read public *internet feedback*, 250,000 *NGOs*, 80-100M *Christians* (*Jesus in Beijing, David Aikman, 2003*)

Thank you

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