How China can avoid the Middle Income Trap

Andrew K P Leung, SBS, FRSA

A presentation to the Zhou Enlai School of Government
Nankai University, Tianjin, China

Monday 15 July, 2013
The 1.3 billion paradox

Box 1 Figure  Few countries escape the middle-income trap

GDP per capita, PPP (2005 constant prices)

- Argentina
- Iran
- Jordan
- Malaysia
- Syrian Arab Republic
- Brazil
- Japan
- Korea, Rep.
- Peru
- Thailand

(1) $88,797  (94) $8,400 (PPP)
(2) $88,314  (86) $6,076 (n)
(3) $77,079
(4) $60,688
(5) $60,392
China’s looming demographic trap

- Developing economies stagnate within an income range $3,000 to $8,000, e.g. Malaysia, Indonesia, Thailand, Argentina, Brazil etc. Only a few, notably Japan, Korea, Singapore, Hong Kong and Taiwan, have been able to rise above the Middle Income Trap.

- Zhongwei Zhao and Fei Guo, in Transition and Challenge: China’s Population at the Beginning of the 21st Century, China’s Working age population (15-64) starts to dwindle from 2015 from one billion to 966 million in 2030 and 845 million in 2050.

- Lewis turning point - a shrinking low wage workforce results in increased wages all round, making outsourced manufacturing to China increasingly less competitive.

- In 2000, six workers for every over-60. By 2030, barely two. The 4-2-1 family structure - 150 million single-child offspring faces burden of elderly support. Costs of pension at current levels to skyrocket from 3% GDP to 10% by 2030, and 15% by 2050.

- US National Institute on Ageing, elderly aged 65 and above in China will grow from 110 million in 2011 to 330 million by 2050. Mid-century, 100 million over the age of 80. Bad news for innovation

- UN – China’s population to stabilize at 1.45 b by 2030 (to be overtaken by India)
Lewis curve turning point

China Is Still Working

China’s growth slows...
...but labor markets remain tight...
Year-to-year change in gross domestic product
Ratio of job vacancies to job seekers

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<tr>
<th>Year-to-year change in gross domestic product</th>
<th>Ratio of job vacancies to job seekers</th>
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<tbody>
<tr>
<td>12%</td>
<td>1.0</td>
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<tr>
<td>9</td>
<td>0.9</td>
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<tr>
<td>6</td>
<td>0.8</td>
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<tr>
<td>3</td>
<td>0.7</td>
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<tr>
<td>1</td>
<td>0.6</td>
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A ratio higher than 1 indicates excess demand for workers

Sources: CEIC; National Bureau of Statistics; Ministry of Human Resources and Social Security; United Nations

Population aged 15-19, in millions, estimates

Note: Calculated by authors based on the CCAP village surveys. The real wages are constant in 2006 price, deflated by provincial consumer price index.
• Ernst and Young, *China’s Productivity Imperative*, 2012 – TFP decreased from 4.7% p.a. (2001-07) to 2.8% (2008-10)
• China’s energy efficiency @GDP very low: 146% less efficient than Japan, 73% less efficient than the US, and even 47% less efficient than India (Primary Energy Intensity, World Map by Country (2009) - Trends in Global Energy Efficiency 2011: An Analysis of Industry and Utilities, Enerdata and the Economist Intelligence Unit, sponsored by The ABB Group, Switzerland)
• 82% of the PRC’s high-tech exports were produced by foreign invested firms (ADB, 2012), relying on foreign proprietary technologies or brands. With a handful of exceptions, hardly any global Chinese brands.
• China accounts for less than 10% of value added in an Apple i-phone. Foxconn, its contractor, employs some 1.2 million workers in China, with the bulk of profits going to the brand owner.
Inefficient use of capital

- **Capital investment 53% of China’s GDP. Declining marginal return to capital.** Withdrawal of transnational funds from China (China Daily, 24, October, 2012)

- (Xiao Geng, et al) 2007, of top 500 enterprises – **69.8% SOEs**, 94% of total asset value, employing 89.3% of workforce, yet **ROA** (return on assets) only **1.4%** compared with 6.08% in private enterprises and **8.48% in FOEs**

- Total outstanding bank lending to all **LGFVs** reached **$1.4 trillion** by end-September 2012, up 25% year on year, according China Banking Regulatory Commission. **35% insecure, or at high risk of default.** Most experts place LGFV loans liable to go sour between 30% and 40% of the total.

- This is a consequence of **non-market-pricing of capital – financial repression** by suppressing deposit interest rates resulting in demand for dubious “wealth management products” (“shadow banking”), massive capital surplus investing in low-yield US treasuries and **non-profitable lending to local governments and SOEs.** Also results in global imbalance between China as creditor and US as debtor country.
Acute inequalities curb consumption growth and raise social tension.

Rising inequality
The gap between rich and poor has risen in China, although more in urban areas than rural areas.

(Gini index; percent)


The Gini index is a measure of income inequality within a population.

Excessive saving rates

China’s Growing Wealth Gap
China’s rural-urban wealth gap was the widest last year since the nation launched its economic transformation three decades ago.

The average income of urban dwellers nearly doubled between 2001 and 2005. City people are becoming more educated. By contrast in rural areas, incomes have remained stagnant and schools have become more expensive.
Resource scarcity and ecological strain

- 97% power reliant on water
- 50% GDP in water-scarce provinces
Socio-political dynamics

Central Political & Legislative Affairs Committee
Central Guidance Commission for Building Spiritual Civilization

Extractive regimes – Revolutionary ideals
Perceived power abuse

Civic protests - 180,000@ yr 500@day
Food safety
Aspiring young citizenry

Weibo – 100 m twits@day
Institutional deficits

Check against rent-seeking and abuse of power
Major reforms ahead

2020 Target

• China to become middle-income country by 2020 - President Hu, 18th Party Congress
• From $5,500 in 2012 to $10,000 requires average growth < 7% - Not beyond reach

2030 – World Bank Report with Development Research Centre of State Council (468 pages)

• Local authorities to be regulated (v land grabs)
• SOE reform
• Hukou reform
• Universal access to healthcare, education and housing
• Improve governance through the middle-class
• Liberalize financial system to achieve higher TFP
• RMB internationalization and eventual full convertibility
• Green economy with cap and trade + procurement standards
• Responsible stake-holder in global order
Social Contract

- **Healthcare for 90% population** - Government pays *half*, up from 16% in 2001
- **Old Age Pensions** averaged RMB 1,173 in January 2009 (> national average wage, still well below going wage in cities);
- A *minimum living-standard guarantee program* to top up cost of living (average monthly transfer from US$9.4 – US$38.6 p.m.)
- But *not adequate to provide sense of security* for chronic diseases and prolonged hospitalization; biggest incentives to save are housing and university education
- Avoiding *Western welfare states* which breed sense of permanent entitlement – UK social security = 14% of GDP – high standard of healthcare with free complementary (non-essential) treatments.
- Most critical challenge is the *hukou system* creating a nation-wide social and economic divide, which needs *urgent reform to enhance labour mobility*. 
Ideas of a 10-year roadmap for political reform

Professor Yu Jianrong, Chinese Academy of Social Science, April 2012

Phase One - 2012 – 2015

(1) Rural land rights, improved welfare, and hukou system changed

(2) Staff, finance, and properties of primary and intermediate courts to be controlled at provincial level; life appointment of judges with high salaries, subject to mandatory mobility and strict accountability; retrograde and obsolete state organs to be abolished, e.g. “political-legal committees” below the provincial level (as they often tend to take the law into their own hands), the State Bureau for Letters and Calls for petitions to Beijing (outstanding grievance cases to be resolved through judicial processes), and the labour re-education system (thereby safeguarding citizens’ personal rights)

(3) Press freedom and freedom of expression. This extends to transparency of administrative information, declaration by officials of their private assets, and prohibition of punishment for expression.

(4) Social development and civil society. This covers the improvement of neighbourhood management, promotion of charitable organizations, and protection of religious organisations.

Phase Two – 2016-22

(1) Professionalization of county-level deputies elected to the National People’s Congress; scrapping the system of appointing county-level officials from the outside; introducing “differential-quota” competitive elections for the top county leader; and turning county and township levels of government into subordinate outposts of higher authorities.

(2) Open society. This comprises the formulation of laws for press freedom and laws for political parties. The management of the media and political organizations is to be liberalized.
Innovation – from numbers to proprietary technologies and brands

- **Top patent filer** first developing country in a century
- Largest **36.4% growth 2011** v EU 5.4% decline
- **80% home-grown** filings v 50% in US
- 30 x increase in **complex filings** 1995-2008
- 1.4m **trade mark filings** out of 4.2m worldwide
- 2010-11, **61.8%** of trade mark **filings worldwide** v US 6.2%
- 90% of global growth in **industrial design filings** 09-11
- + 60% in **R & D productivity** (filings @$ )2000-1
World is won by brain and brand not by brawn

- **Lenovo** a success story

- Another way is to *own or co-own an established brand*
Targeted industries, technologies and services

The 7 major strategic new industries in China’s 12th Five-year Plan
A total of 35 projects for various sub-industries

1. Energy saving and environmental protection
   - Focused on high-efficiency energy saving, advanced environmental protection, recycling usage, reusing waste products (coal cleaning, seawater)

2. Next generation IT
   - Next-gen mobile communications, next-gen Internet core equipment, smart devices, Internet of Things, convergence of telecoms/cable TV/Internet networks, cloud computing, new displays, IC, high-end software, high-end servers, digitization of culture and creative industries

3. Bio industries
   - Bio-pharmaceuticals, innovative pharmaceuticals, biomedicine, bio-agriculture, bio-manufacturing, marine biology

4. High-end assembly and manufacturing industries
   - Aerospace and space industries, rail and transport, ocean engineering, smart assembly

5. New energy sources
   - Nuclear power, solar power, wind power, biomass power, smart power grids

6. New materials
   - New function materials, advanced structure materials, high-performance composite materials, generic base materials

7. New energy-powered cars
   - Development is focused on electric hybrid cars, pure electric cars, fuel cell cars

7 Major Strategic New Industries
Global power of cities

RISE OF THE MEGACITIES

According to the UN, almost 190,000 people move into cities every day—an estimated 2.5 people a second.

There are currently 23 megacities with populations over 10 million...

(Rankings based on latest available data)

1. Tokyo
2. Mumbai
3. Mexico City
4. New York
5. São Paulo
6. Shanghai
7. Kolkata
8. Delhi
9. Chengdu
10. London
11. Dhaka

...by 2035 there will be 36

77% of the Latin American population is urban and urbanization rates keep rising.

8.75m in 2010
15.04m in 2025

By 2030 India will have:

68 cities of more than 1 million
6 megacities with populations of over 10 million

These will need 2.5 sq km of urban space and 7,000 km of roads and subways—20 times what has been built in the last 20 years

By 2030 China will have:

221 cities with 1 million or more inhabitants
23 cities with five million or more

Global urban growth between 2005 and 2025 will be three times greater than the entire population of the United States today

Percentage of India’s population living in an average of 50 square meters (approximately $45 per day)

Percentage of India’s population living in an average of 25 square meters (approximately $265 per day)
Largest and fastest urbanization in history

McKinsey Global Institute –

- **350 m more urbanites** > whole of US, **by 2025**
- **1 b** in cities **by 2030**
- **221 new cities** @1 m v 35 in Europe
- **170 mass transit systems** will be built
- **50,000 skyscrapers** = 10 NY Cites

- **54% of urban GDP** in **900 smaller cities**
  by 2025, to house **70% population**

- China’s **GDP** will have **multiplied 5 times**
McKinsey Quarterly – Mapping China’s Middle Class (June, 2013)

- Urban consumers ($9,000 - $34,000 household income \( \text{PPP (x2.5) - Brazil/Italy} \))
  to grow 4% (2000), 68% (2012), to 75% (2022)

- Upper Middle Class ($16,000 - $34,000) v Mass Middle Class ($9,000 - $16,000)
  (2012) 14% v 54% - (2022) 54% v 22%

- Megacity (Tier 1) v Tier 3/4 cities (2012) 40% v 15% + 3% v
  (2022) 15% v 31% + 8%

- Generation 2 (G2) (up to 25 yrs of age) 200 m or 15% urban consumption (2012)
  v 35% and numerically 3x US baby boomers) (2022) – Largest e-marketplace

- Overall, 80% under 45 years of age. v 30% in the US and 19% in Japan (The Chinese Dream, Bestseller Press, 2010).

- According to Brookings Institution, consuming middle-class to grow from
  12% to 70% of China’s population by 2030.

- World Luxury Association 2010-2011 report - world’s largest luxury market
  from 2012.

- 2.7 m US$ millionaires, 251 US$ billionaires (Hurun Wealth Report, Nov 2012)
  (v 13% or 150 m < $1.25 @day)

- Consumption 36% GDP (v 71% in US) but Credit Suisse - China to displace
The holy grail of China’s consumer markets

- Oct, 2012, Consumption = 55% GDP > Investment (50%) and net exports (5.5%) (Reuters)
- Now 157 m consumers, world’s largest but only 12% population, to grow to 70% by 2030 (income 100% > $100/day PPP)
- Consumer trend shifting westward, to interior, 2nd and 3rd tier cities (Chengzhou, Chongqing, Hunan, Hebei, Anhui etc) Follows manufacturing relocation trend. Foreign brands focus on rapidly growing 3rd tier cities (Trading China, Reuters, April, 2013)
- Post-'80s overspend their parents. Extra 126.5 m over 65 by 2020, but those over 55 still reluctant to consume (Mckinsey Quarterly, March 2012)
China - the world’s largest e-tailing marketplace

MGI ("China’s e-tailing Revolution"), March 2013

- E-tailing $190 b sales 2012
- 120% CAGR since 2003
- > 6 m e-merchants on Taobao
- Singles Day 2012 - $4 b online sales > U.S. Cyber Monday
- E-tailing huge potential –
- Largest online population with 130 m residential broadband accounts
- Broadband penetration only 30%
- Online sales to reach $650 b by 2020
- Potentially to lift private consumption” + 4-7 % by 2020
- Tier 4 cities average online shopper 27% disposal income through e-tailing
- To boost retail sector productivity + 14%
China’s “dollar trap”

(Redbacks for Greenbacks: The Internationalization of the Renminbi, Francois Godement et al., China Analysis, European Council on Foreign Relations and Asia Centre, November 2010)

• ‘Economy too serious to be left entirely to economists’ – Clemenceau

• Our Currency, Your Problem – April 2005, Hoover Institution, Niall Ferguson – ‘Bush tax cuts and war on terror financed with a PBOC overdraft (China’s huge purchase of Treasury bills), a ‘Chinese tribute ‘to the American Empire’, April, 2009

Since 1944, the dollar has lost 97% of value against gold. Following continuing bouts of QEs, 13 March, 2009, Premier Wen Jiabao openly worried about China’s $1 trillion in US Treasuries. To some in China, US monetary policy a central pillar of US ‘economic hegemony’ and floating rate as ‘a mechanism for plunder.’

• Exchange rate very heart of China’s economy, which underpins political survival. Wary of leaving it entirely to market forces beyond the nation’s control.
….. and how to get out of it
RMB to become a world currency

- "Eclipse: Living in the Shadow of China’s Economic Dominance", Arvind Subramanian, Senior Fellow at the Peterson Institute for International Economics, Washington D.C., October 2012 - 
  Currency movement coefficient (CMC)

- **East Asia already a RMB bloc** - 7 currencies out of 10 co-move 40% greater than for the dollar. More currency swaps e.g. with Korea.

- With China’s expanding global trade, a larger **RMB bloc** could emerge in the **mid-2030s**

- Directly **convertible now** with greenback, yen and now Australian dollar.

- **RMB internationalization quickening** – Australia holds RMB for 5% currency reserve; HK leading offshore centre (offshore RMB interbank rate-fixing (to be aided by Qianhai) with London, Singapore, Taiwan and other centres vying for a share

- **RMB to become a leading global reserve currency** – but full financial liberalization is the price (perhaps in a decade?)
Make capital work globally ....

No. 3133  WebMemo  February 3, 2011

China’s Worldwide Reach
The United States is second to Australia in drawing Chinese non-bond investment.

Figures are in billions of dollars; key nations in italics.

EUROPE $34.8
- Britain $8.5
- Switzerland $7.2
- Greece $5.0

WEST ASIA $45.2
- Iran $15.1
- Kazakhstan $11.4
- Russian Fed. $6.7

EAST ASIA $31.6
- Indonesia $12.8
- Singapore $7.0
- Vietnam $6.4

U.S. $28.1

WESTERN HEMISPHERE $61.7
- Brazil $14.9
- Canada $10.2
- Venezuela $8.9

SUB-SAHARIAN AFRICA $43.7
- Nigeria $15.4
- South Africa $6.2
- D.R. Congo $5.9

ARAB WORLD $37.1
- Algeria $9.2
- Saudi Arabia $8.1
- Iraq $4.3

AUSTRALIA $34.0

Source: Heritage Foundation dataset. China’s Outward Investment: Non-bond Transactions over $100 million, from January 2005 to December 2010, available upon request from The Heritage Foundation.

transactions now dominate Chinese spending. A related feature in both Heritage and official Chinese data is the preeminence of large, centrally controlled state entities as investors. Countries. The Heritage series is far more useful than Chinese data in determining what country destinations are ascendant. The Ministry of Commerce did not publish its breakdown of 2009 investment until November 2010. Even then, Hong Kong accounted for 63 percent of outbound investment because the PRC treats Hong Kong as a separate customs territory. In fact, investment passes through Hong Kong heading elsewhere. The Heritage series tracks spending to its final destination.

The main event in 2010 was a flood of money into the Western Hemisphere outside the U.S., led by Brazil but also featuring Canada, Argentina, and Ecuador. Almost an afterthought in 2008, this is
Africa’s China-managed Special Economic Zones

• **MENA Regional Export Hub** – 20 sq.km zone in **Egypt near Suez Canal**, partnering with **Tianjin Economic Technological Development Area (TEDA)** for $2.5b FDI + 100 Chinese firms for ME and EU. Completion 2018. China to become Egypt’s largest trading partner

• **West Africa Manufacturing + Assembly Hub** - $500m Guandong Ogun Economic and Trade Cooperation Zone + Lekki Free Trade Zone with **GD Xinguang International Group, UBA, First Bank and Ogun State government**. Nigeria to become 7th largest economy 2050 (Goldman Sachs)

• **East Africa Logistics Hub** – Dar-es-Salaam, Tanzania (Export Processing Zone) to link Zambia via 1,860 km **TanZam Railway** plus Ethiopia – Eastern Industrial Park

• **Indian Ocean Trading Hub** – **Mauritius**, South African Development Community and Common Market for Eastern and Southern Africa; **CDB** to open first African branch; 210-hectare commenced construction 2007. **Shanxi’s Tianli Group** to build ‘i-Park’ with ‘intelligence, innovation, incubation, and interaction’ for high-value-added investors

• **Mining Hub** – Chambishi + separate Industrial Park in **Zambia** with **China Nonferrous Mining Group**, copper-belt concession for 60,000 jobs
Nicaragua's Congress has granted Wang Jing's Cayman Islands-registered HKND company a 50-year concession to develop a 286-km (178-mile) canal connecting the Caribbean with the Pacific via Lake Nicaragua, at a cost of $40 billion, to be completed in 6 years.

The canal is three times longer than Panama and can accommodate the largest container vessels, those Shanghai’s Linyungang can accommodate as the world’s deepest container port.

The canal to anchor China’s commercial and geopolitical interests in Latin and South America

Likely partner – China Railway Construction
A high-speed rail grand vision of continental proportions

- **Third Eurasian Land Bridge** – proposed railway network linking the Port of Shenzhen to Kunming onwards to Myanmar, Bangladesh, India, Pakistan and Iran, across Turkey to Rotterdam.

- **Across 20 countries** in Asia and Europe over 15,000 km, 3,000 to 6,000 km < sea route via the Indian Ocean and Malacca Straits.

- **Total annual trade volume of the regions traversed** - $300 b in 2009.

- A **branch line to start in Turkey, cross Syria and Palestine, and end in Egypt**, facilitating transportation from China to Africa.

- **To connect China’s world’s longest high-speed rail network, across the Eurasian Continent, to the Middle East, Western Europe, and Africa.**
Shale gas a strategic advantage

- **IEA - gas use to rise** by 50% for over 25% of world energy demand becoming second largest primary energy source after oil but ahead of coal.
- **US is set to overtake Saudi Arabia and Russia to become the world's biggest energy producer** by 2017, according to a 2011 November IEA report.
- U.S. Energy Information Administration (EIA) estimates that **China has** 1,275 TCF of technically recoverable shale gas reserve, or **19.25% of world’s total** v 862 TCF in the U.S.
- **Shale gas is 43% and 30% less in CO2 emissions** compared with coal and oil, which together represent some 90% of China’s total energy use, while 55.2% of China’s oil is imported.
- But **water intensity** plus **aquiver and waste water pollution** pose huge ecological challenge.
- **China to remain the world’s biggest customer.**
Five Year Plans going Green

- **Five Year Plan (2006-10)** narrowly delivered reduction of energy input @GDP by 20% and CO2 emission by 10%.

- **Five Year Plan (2011-15)** - non-fossil fuel to rise to 11.4% of primary energy consumption, energy intensity to reduce by 16%, CO2 emission by 17%.

- **IEA** - China investing $2.3 trillion in energy development 2001-30. $200 billion for renewable energy within next 15 years, to grow from 7% to 10% annually by 2010 and **20% annually by 2020**.

- National Development Reform Commission - **15% renewable energy by 2020**. Government to boost renewable energies target to **20%** of China’s total energy needs.
Staying the course in green development

Circular economy law, 2008

Sept, 2012 - Enacted permits (~$1@metric ton = 1 billion mts = ½ whole EU by 2015)

2020 - 2050 Targets (2012) –

Renewables (6.7%) - 16% - 45%;

Nuclear (0.7%) 4% - 10%;

Fossil (92.6%) 80% - 45%
Action on other long-term challenges
“Great Convergence” and “Great Re-divergence”

20.11. 2012, ASEAN+ 6 FTA = ½ world pop, 1/3 GDP

BRICS
Flexible bonds in a multi-polar world
Thank you

Andrew K P Leung, SBS, FRSA

www.andrewleunginternationalconsultants.com