

# **China: Towards Efficient, Inclusive, and Sustainable Urbanization**

A Joint Study by DRC and the World Bank

**Bert Hofman, World Bank**

**and**

**Pei-Lin Liu, DRC China**

# Achievements of China's Urbanization

- Urbanization rate increase from less than 20% in 1978 to 52% in 2012
- Urban population increase 500 m
- Pulled 500m+ people out of poverty
- Turn China into an upper-middle income country in 2010
- But China is still less urbanized than can be expected based on income level

# Challengers of China's urbanization

- Non-inclusive
  - 260m residents of urban do not have the fully access to urban public services
  - only 20% migrants with their families
- Non-sustainable
  - water, air and soil pollution incur heavy cost on people's health
  - energy intensity, although much lower than it used to be, still remains to be higher than advanced economies

# Challengers of China's urbanization

- Inefficient capital use

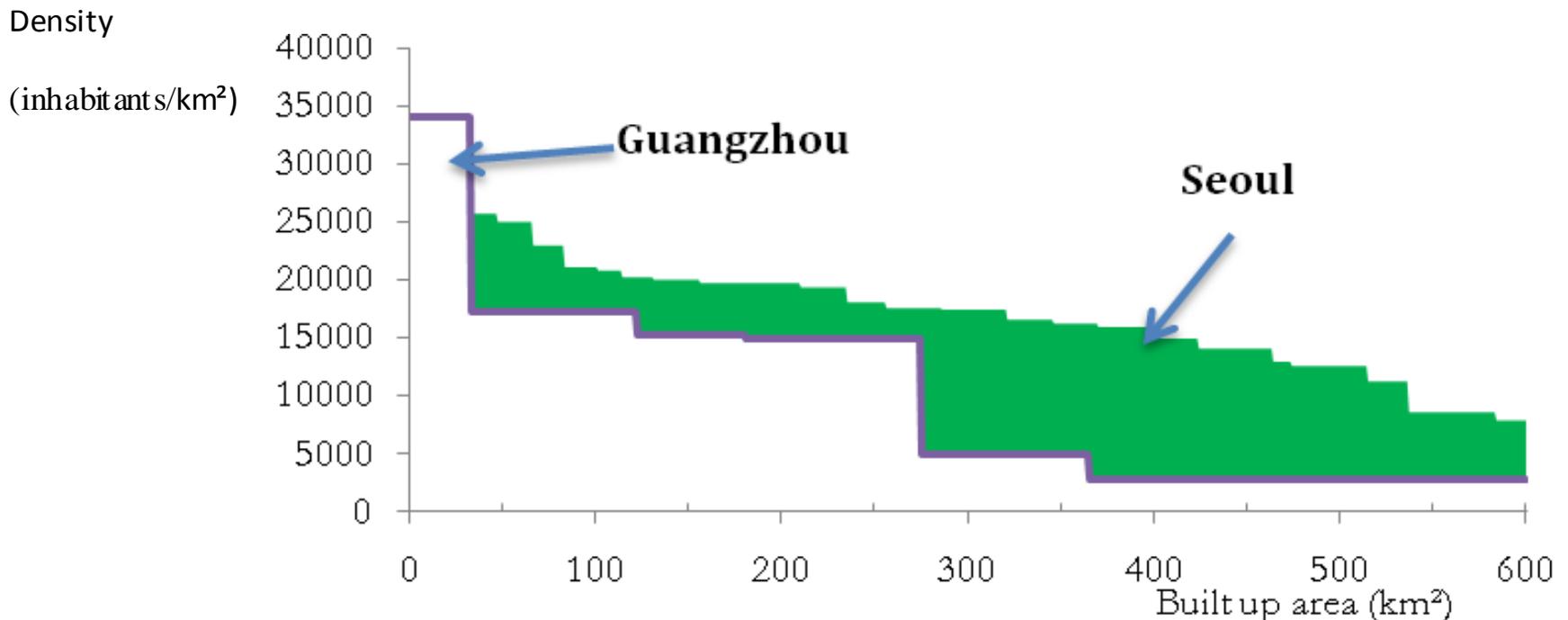
Returns on capital are declining over time: China compared with Japan; the Republic of Korea; and Taiwan, China

	<b>Gross fixed capital formation (percentage of GDP)</b>	<b>Average annual GDP growth</b>	<b>Incremental capital-output ratio</b>
<b>China (1991–2011)</b>	<b>36.7</b>	<b>10.4</b>	<b>3.6</b>
<b>China (2009–2011)</b>	<b>45.4</b>	<b>9.6</b>	<b>4.7</b>
<b>China 2012</b>	<b>46.1</b>	<b>7.8</b>	<b>5.4</b>
<b>Japan (1961–1970)</b>	<b>32.6</b>	<b>10.2</b>	<b>3.2</b>
<b>Korea, Rep. (1981–1990)</b>	<b>29.6</b>	<b>9.2</b>	<b>3.2</b>
<b>Taiwan, China (1981–1990)</b>	<b>21.9</b>	<b>8.0</b>	<b>2.7</b>

*Source:* Urbanization study team based on CEIC data (n.d.).

- Inefficient land use

Guangzhou could accommodate 4.2 million more people if it has Seoul's density profile



# A New Urbanization Pattern to Match the Country's Evolving Development Goals

- China's next wave of urbanization can be
  - more ***efficient*** through better allocation of land, labor and capital.
  - more ***inclusive*** by providing all people access to equal opportunity to benefit from urbanization.
  - more ***sustainable*** by providing an urban quality of life commensurate with the desires of China's people with a better management of its natural resources and environment...

# A Reform Agenda for Efficient, Inclusive and Sustainable Urbanization



# Land Reforms

- **Better protecting rural land rights by:**
  - legalizing the central policy of “long term without change” for farmland leases
  - specifying the nature of the contractual rights to farmland;
  - improving land title registration by enforcing written land leases;
  - reforming and better defining collective ownership rights; and
  - defining “public interest” for which the government can exercise its eminent domain power.
- **A more market based allocation of land through:**
  - clarifying equal market entry of collective and state construction land, in line with land use plans and regulations
  - shifting land use from industry toward services and residential use, and pricing of industrial land in line with competing uses to improve the use of this land and strengthen local government finances.
- **More flexible use of existing urban land through better planning and zoning;**
- **more transparency in secondary market transactions;**
- **integrating urban villages into the formal urban development process.**

# Hukou Reforms

- Hukou system to evolve into a *residency system*
- The residency system to establish the rights on public services needed for mobility, including health, education, and other public services
- Over time, minimum level of services equalized across China
- Hukou can be retained to register the rights linked to origin, such as land.
- Pension system should be made portable, which over time is likely to require central administration

# Finance Reforms

- **Improve the revenue base of local governments, by mainstreaming a property tax on housing and charging higher prices for services to provide local governments a stable, sustainable source of finance;**
- **Improve the intergovernmental grants system, by moving embarked grant systems to a general grants system that considers revenue capacity and expenditure needs;**
- **Establish an explicit framework for local government borrowing, including rules that define which local governments can borrow, from whom they can borrow, and under what conditions they can do so; and rules that define what happens in case of default.**
- **Reform the financial sector to enhance fiscal discipline of local governments, including exposure limits, concentration limits, and insider lending limits.**

# Urban Planning and Design

- **At the national level, connectivity among cities;**
- **At the regional level, promoting clusters of cities**
- **Within cities, flexible zoning that promotes smaller plots and more mixed land use to promote denser and more efficient development;**
- **Better use of urban land by:**
  - **rezoning excess industrial land into commercial and residential land,**
  - **raising floor-area ratios,**
  - **integrating urban villages into urban planning,**
  - **better linking transport infrastructure with urban centers.**

# **Managing environmental pressures**

- **Strengthening the institutions, incentives, and instruments that enable effective enforcement across sectors and at an appropriate geographic scale;**
- **Establishing an intergovernmental transfer mechanism for environmental compensation;**
- **Improving data collection with wider information dissemination for greater public participation;**
- **Rebalancing environmental policy instruments toward more market-based tools such as taxes and trading systems for carbon, air and water pollution, and energy use;**
- **Better leveraging the legal system to complement government enforcement by expanding and formalizing current experiments with environmental courts.**

# Improving governance at the local level

- The performance evaluation system of local officials could be adjusted to give greater weight to variables that will drive a more efficient, inclusive, and sustainable urbanization;
- Improving local government financial management and transparency could contribute to more efficient and sustainable urbanization through introduction of a medium-term expenditure framework, comprehensive budgets that include all off-budget funds, and disclosure of full financial accounts including a local government balance sheet;
- new governance structures for metropolitan areas could realize agglomeration benefits and manage externalities.

# Reforms will result in more efficient, inclusive and sustainable urbanization

	2010	2030 baseline	2030 reforms
Urbanization rate (percent)	52	66	70
Share of labor force in agriculture (percent)	38	17.1	11.6
GDP (trillions of 2013 US\$)	8.5		24.5
GDP (average annual growth past 5 years)	8.3	4.9	5.2
Total factor productivity <sup>a</sup> (average annual growth over past 5 years)	2.2	2.1	2.5
Consumption share of GDP (percent)	46.5	62.0	66.5
Investment share of GDP (percent)	48.8	35.5	30.9
Secondary industry share of GDP (percent)	48.8	37.2	33.7
Tertiary industry (services) share in the economy (percent)	41.8	58.5	60.6
Urban-rural income disparities (ratio)	3.8	3.3	2.6
Energy consumption per GDP (Tce/RMB 10,000)	1.41	0.73	0.64
Carbon dioxide emission per GDP (ton CO <sub>2</sub> /RMB 10,000)	3.32	1.68	1.39

Source: Based on DRC CGE Model simulations.

# Reforms will result in major savings in infrastructure spending

	Baseline scenario				Reform scenario		
	2008–12	2013–17	2018–30	2013–30	2013–17	2018–30	2013–30
<b>Urbanization costs (CAPEX and OM)</b>	<b>8.6</b>	<b>7.3</b>	<b>5.6</b>	<b>6.1</b>	<b>6.8</b>	<b>4.9</b>	<b>5.4</b>
<b>Infrastructure investment</b>	<b>3.5</b>	<b>2.7</b>	<b>2.5</b>	<b>2.5</b>	<b>2.1</b>	<b>1.7</b>	<b>1.8</b>
Roads	1.9	1.4	1.2	1.3	0.9	0.7	0.7
Subways	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Draining	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Sewage	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Landscaping	0.4	0.3	0.2	0.2	0.2	0.1	0.1
Garbage treatment	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Water	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Heating	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Social services</b>	<b>5.1</b>	<b>4.6</b>	<b>3.1</b>	<b>3.6</b>	<b>4.8</b>	<b>3.2</b>	<b>3.6</b>
Social housing	2.0	1.4	0.5	0.7	1.4	0.5	0.7
Education (includes labor costs)	3.1	3.2	2.6	2.8	3.3	2.7	2.8
Health	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Central and local governments</b>							
<b>Fiscal space</b>	<b>33.3</b>	<b>31.8</b>	<b>30.4</b>	<b>30.8</b>	<b>29.8</b>	<b>29.9</b>	<b>29.9</b>
Fiscal revenues	25.0	26.5	25.9	26.0	26.7	26.7	26.7
Net borrowings	8.3	5.3	4.5	4.7	3.1	3.3	3.2
<b>Total expenditure</b>	<b>31.9</b>	<b>31.1</b>	<b>29.6</b>	<b>30.0</b>	<b>30.5</b>	<b>28.3</b>	<b>28.9</b>
Recurrent primary expenditures	23.6	23.6	23.3	23.4	23.6	23.2	23.3
Capital expenditures	6.0	4.7	3.4	3.8	4.3	3.0	3.4
Interests	2.3	2.9	2.9	2.9	2.6	2.1	2.2