China’s New Development Paradigm and Implications for Africa Industrialization

Xiaobo Zhang
Peking University & IFPRI

China’s Industrialization

• Chinese economy has become rapidly industrialized in just four decades, which took about 200 years in Europe and the U.S.

• What are the major drivers behind the rapid industrialization?

• What are the implications for Africa?
Reform Strategy (1978-now): Opening Up

• Inviting overseas Chinese diasporas to set up factories in China since the late 1970s

• Set up special economic zones to learn how to attract foreign development investment.

• China joined WTO in 2001.

• Aligning China’s abundant labor with foreign investment and tapping the global market.
Reform Strategy: Incentivize Individuals and Local Governments

- 1980s: Gave farmers the user rights to cultivate their land;

- 1990s: Fiscal decentralization (local and central governments share revenues according to a formula)

- 1990s: Privatize town-village enterprises and some state-owned enterprises.
Cluster-based Industrialization

• Thanks to the increasing market size and facilitating role of local governments, thousands of industrial clusters have emerged.

• The cluster-based industrialization has two key features:
  – Lower capital requirement to set up a business due to fine division of labor.
  – Labor-intensive. Good for employment.
A Few Clusters

• Shengzhou Town produces 40% of ties worldwide;
• Datang Town produced 6 billion pairs of socks per year;
• Baigou in Hebei Province: largest suitcase and bag production center, 40% of national market, and half million workers;
• Songxia Town produced 350 million umbrellas every year (many of which are sold in convenience stores in Japan).
Employment Growth

- China’s economic growth is largely driven by shifting surplus labor from the low-productivity agricultural sector to the more productive industrial sectors.

- With surplus labor, the industrial sector initially expanded and increased its labor force with no pressure to raise wages. Powered by cheap labor, China has become the “world factory” in just three decades.
China Has Reached a New Paradigm
The Export-oriented Model Has Run Out of Steam

• The combination of increasing labor demand in the nonfarm sector and demographic transition has resulted in a labor shortage.

• Real wages have been increasing by more than 10% a year since 2003/2004.

• China has passed the so-called “Lewis turning point”.

Daily Wages in Harvest and Slack Seasons

Zhang, Yang, and Wang (2011)
Labor-intensive Manufacturing Sector Faces Four Choices:

- **Up**: Upgrade quality to move up the value chain;
- **Down**: shut down operations (and switch to other sectors)
- **In**: Relocate their business to places, such as inland, with lower labor costs.
- **Out**: Shift labor-intensive industries to other countries.
How Do you Respond to Labor Shortage?

% of respondents, from this and previous surveys

Invest more in capital equipment

Move capacity inland

Move capacity out of China

Source: Standard Chartered Research
Invention patents in the US show a rising trend

Invention Patents Granted in USPTO by Different Countries

Wei, Xie, and Zhang (Journal of Economic Perspective, 2017)
Growing patent citations indicate quality improvements

Citations on Invention Patents Granted by USPTO: Cross-country Comparison

Wei, Xie, and Zhang (Journal of Economic Perspective, 2017)
Number of Patents Granted per Million Yuan of Value-Added (by firm capital intensity)

Xie and Zhang (CEJ, 2015)
Share of Manufacturing Industries in Coastal Areas

曲玥、蔡舫、张晓波（2012，经济学季刊）
Case of Pingyu County in Henan Province

• The county has developed extremely fast in the past decade;

• Four new industries have emerged and all of them were initiated by return migrants who used to work in the coastal region.

• They came home to take advantage of stay-home wives: “Smart housewife project” (巧媳妇工程)
Survey in Pearl River and Yangtze River Delta (Prof. Justin Lin’s group) Indicates that

- 27% of footwear companies consider moving overseas.

- Among all the firms, about 10% have intentions of relocating production lines to other countries.

- But in Henan Province (an inland province), only 0.33% reported the intention of going abroad.
Go-in-group Strategy

• When Chinese firms invest overseas, they often go in group so as to pool resources to deal with some common concerns, such as on security, lack of infrastructure, short of suppliers, and red tapes.

• They also prefer to settle in industrial parks with ready-to-go factory buildings and stable power supply.
Huajian, Ethiopia
China accounts for half of world steel output in 2013.
Cement

• China produced 2.41 billion tons of cement, accounting for about 60% of world cement production.

• China’s cement production in 2011-2012 exceeds the total production in the US over the entire 20th century.

• Capacity utilization is 63%, far below the normal level of 80%.
Going Abroad Strategy

• In 2014, Hebei Province announced a plan of relocating steel, cement and glass industry overseas:
  – 5 million tons of steel, 5 million tons of cement, and 3 million tons of glass overseas by 2017;
Huge Potentials in Africa

• Total cement production in Africa in 2013 was only 4% of Chinese output. Cement price in Africa is about 6 times of that in China.

• China has built up a complete supply chain in infrastructure development and accumulated rich experience in the past three decades.
Role of Infrastructure Investment

• Lower transaction costs and facilitate market integration;

• Improve both agricultural and manufacturing productivity, creating more job opportunities, in particular for the youth.
As Income Goes Up in China,

• The demand for high-quality agricultural products, such as Ethiopian coffee, shots up.

• The natural beauty has also attracted massive number of Chinese tourists.
Lessons of China’s Industrialization

• Opening up and reform are the key.
• China’s industrialization is largely cluster-based. Most industrial policies are at the local level.
• Roles of central government: maintaining stability, encouraging inter-region competition, and investing in infrastructure.
• Productive public investment comes first before social welfare programs.
Implications for Africa

• China’s new development paradigm provides an opportunity for Africa’s industrialization.

• Most African countries pay great attention to attracting FDI. Please don’t ignore indigenous clusters.

• Tourism and agriculture sectors likely have huge potentials.