

Greening China's Financial System: *The Strategic Role of Development Banks*

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Greening China's Financial System



Green Credit Policies in China: **Drivers**

- ◆ Conventional Development Strategy: '*pollute first, clean up later*'
- ◆ State Council (2005): *Decision on Implementing Scientific Outlook on Development and Strengthening Environmental Protection*
- ◆ 11th Five-Year Plan (2006-2010)
- ◆ 12th Five-Year Plan (2011-2015)
- ◆ 13th Five-Year Plan (2016-2020)



Green Credit Policies in China: *Key Milestones*

First Green Credit Policy

2007

MEP, CBRC, and PBOC: *Opinions on Implementing*

Environmental Protection Policies and Rules and Preventing Credit Risks

A Major Step Forward

2012

CBRC:
Green Credit Guidelines

Strengthen Implementation

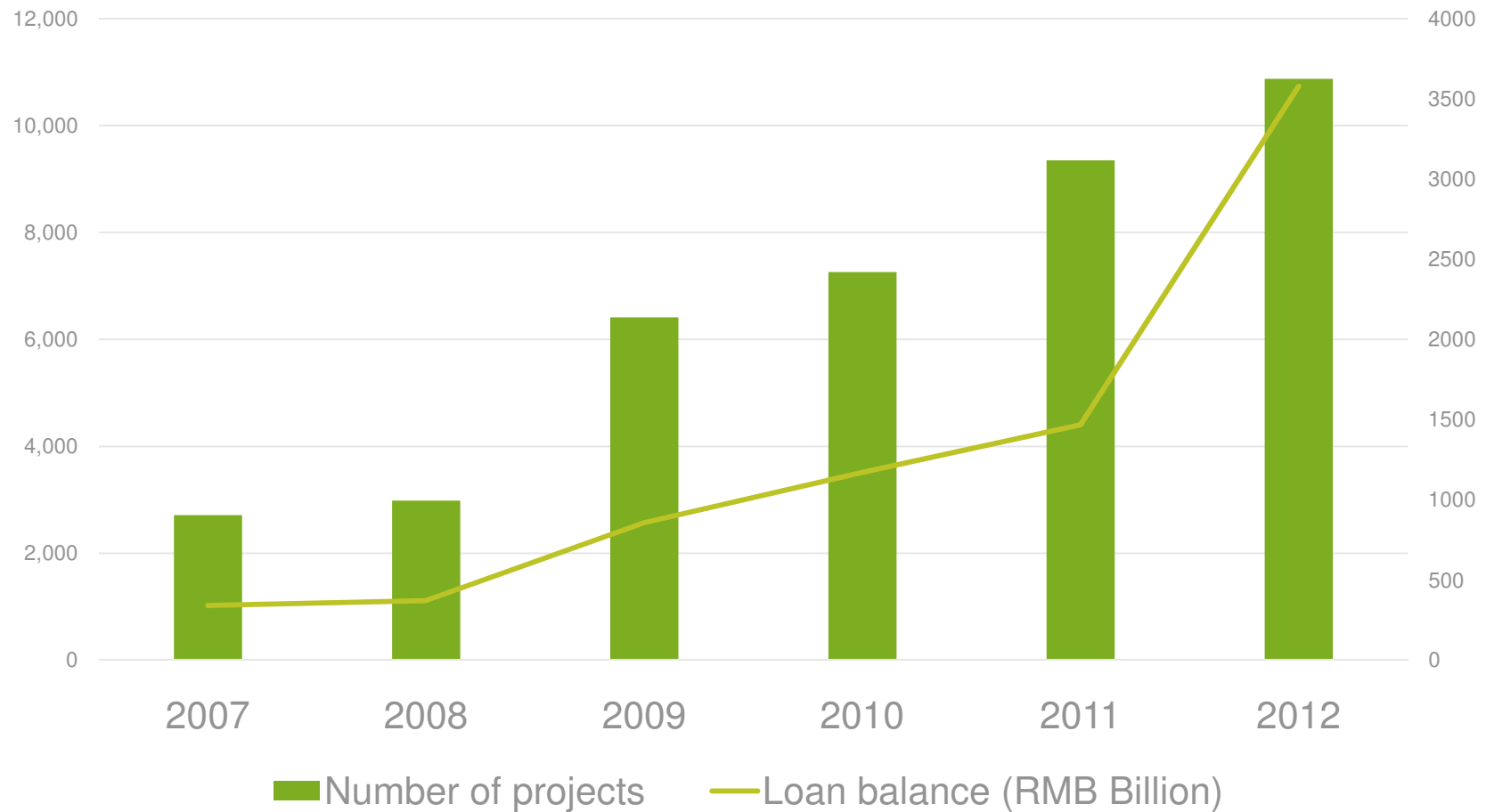
2014

CBRC:

Key Evaluation Indicators about the Implementation of Green Credit Guidelines

Green Credit Policies in China: Implementation

Banking Institution Loans to Energy Conservation & Environmental Protection Projects



Source: Zadek and Zhang, 2014: 17

Green Credit Policies in China: Implementation

Challenges in Implementation

- ◆ Self-evaluation => mock compliance
- ◆ Perverse incentives:
 - Local governments
 - Commercial banks
- ◆ No clear reward and punishment system

In Search of Solutions

- ◆ Establish the Green Credit Reporting System
- ◆ Collaborate with the MOF and NDRC to provide incentives
- ◆ Improve the Green Credit Evaluation System
 - integrate the evaluation results in *regulatory rating* of financial institutions and *performance evaluation* of senior executives

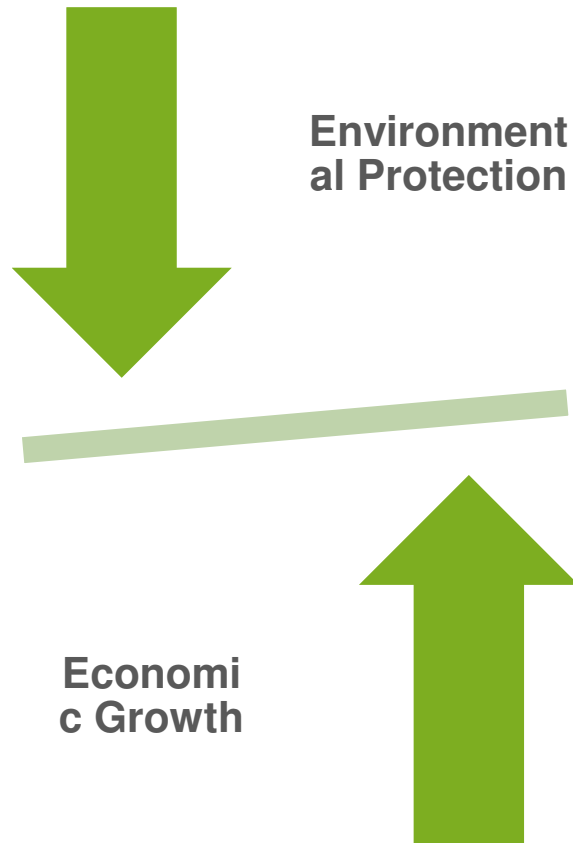


The Strategic Role of Development Banks



The Strategic Role of Development Banks: *Market Incubation*

Tradeoffs



✦ green growth =
investment opportunities

✦ fear of the unknown
=> risk misperception
=> first-mover problem

✦ Scalable sustainable
development financing
entails *market incubation*.

The Strategic Role of Development Banks: *Public Entrepreneurship*

- ✦ **Public entrepreneurship is the capacity to organize, scale up and sustain long-term finance. (Xu and Carey, 2015)**
 - A comprehensive long-term vision
 - Acting on a decisive scale in the presence of risk
 - Foster learning-by-doing dynamics to enabling bottom-up initiatives to flourish and scale up
- ✦ **Development banks are strategically positioned to take up the role of public entrepreneurship.**
 - The mandate of development banks is to achieve *public mandates* (as opposed to *profit maximization* in the case of commercial banks)
 - Rely on sovereign creditworthiness to raise bonds on capital markets with *greater risk appetite* (in contrast with *tax-funded ODA*)
 - Deploy *market mechanisms* (rather than adhering to *administrative command* to allocate resources in the case of traditional policy banks)



China Development Bank



A Brief History of CDB

The First Stage:
1994-1998

- A traditional policy bank

The Second Stage:
1998-2013

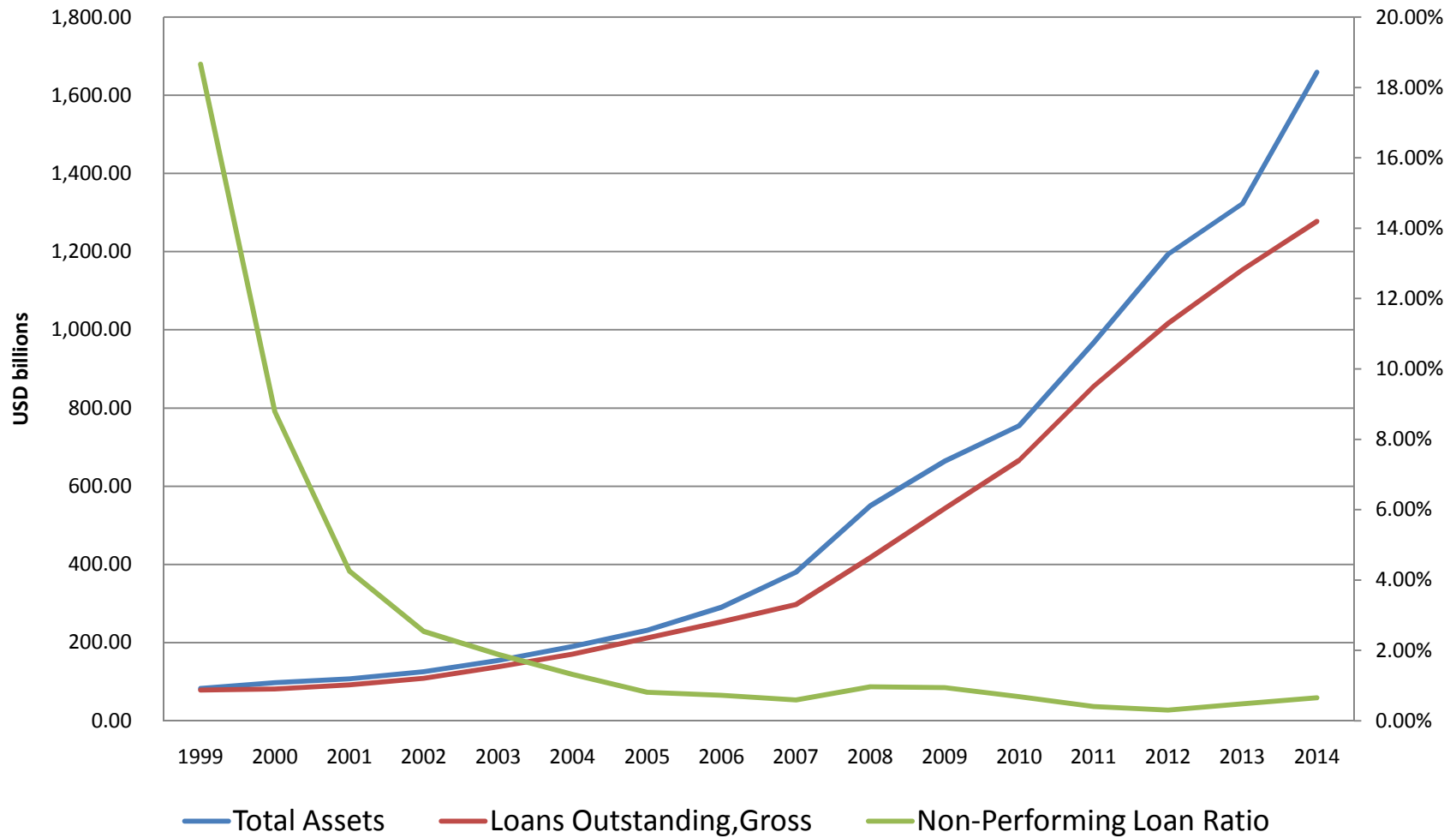
- Market-oriented reforms

The Third Stage:
2013-

- A development financing institution
- 'rely on market mechanisms to serve the national development strategy'

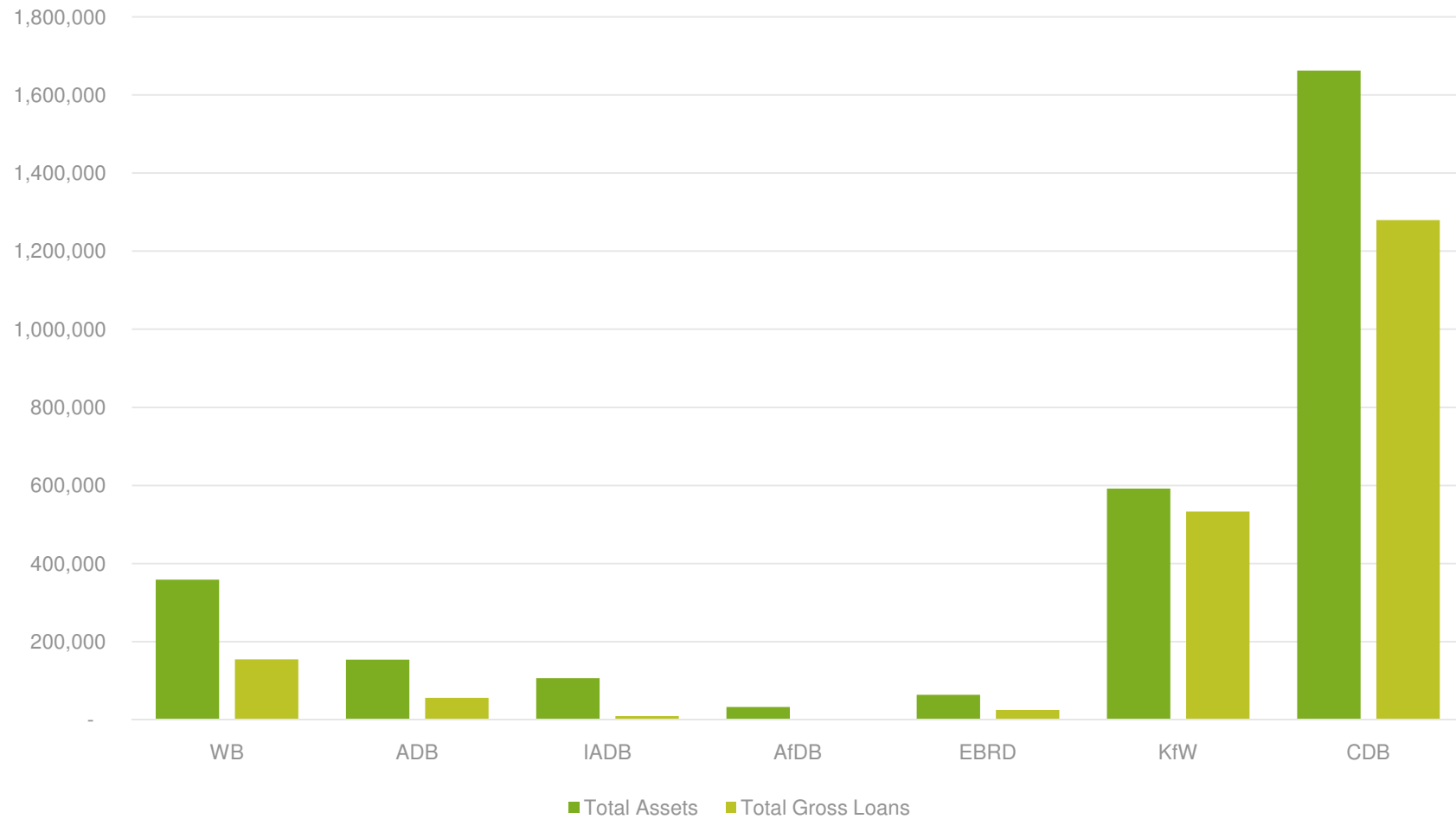
Financial Highlights of CDB

Total Assets, Gross Loan Portfolio, and NPL Ratio



Financial Highlights of CDB

CDB VS Other Development Banks
(USD millions)

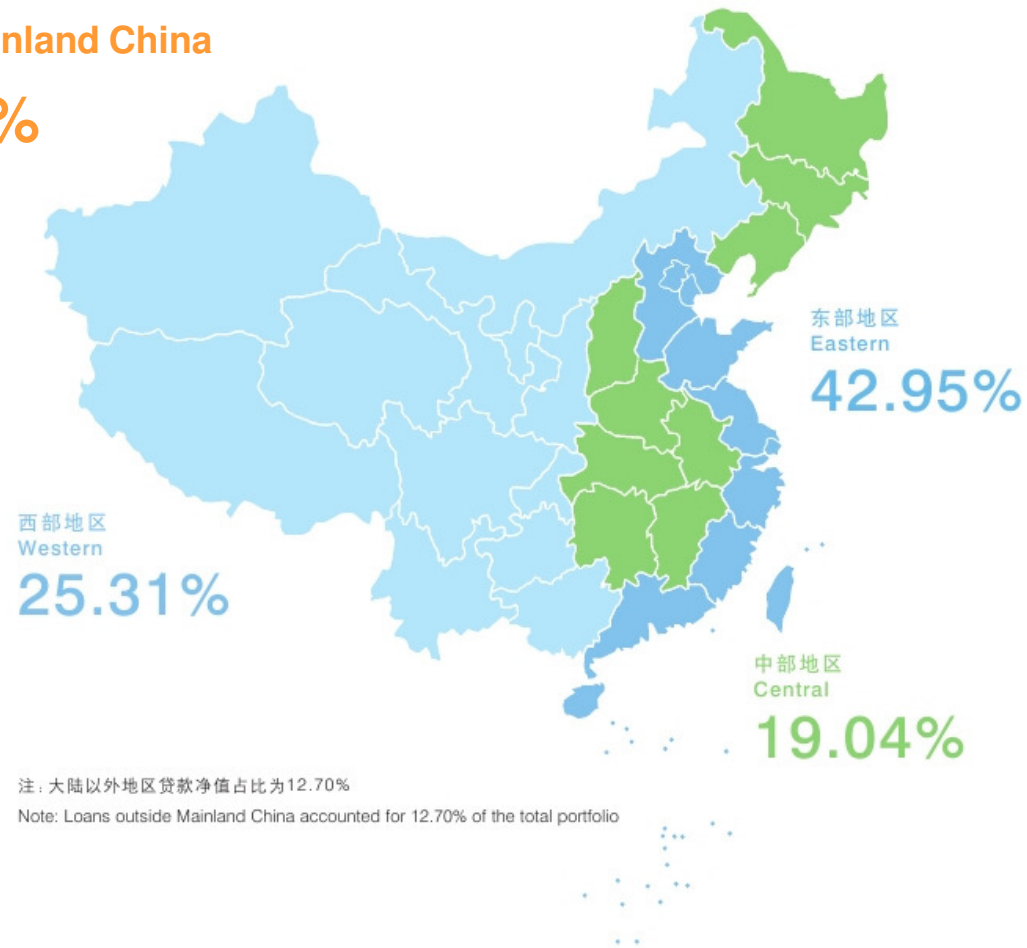


Financial Highlights of CDB

Net Loan Balance: Breakdown by Geography in 2014

Overseas outside Mainland China

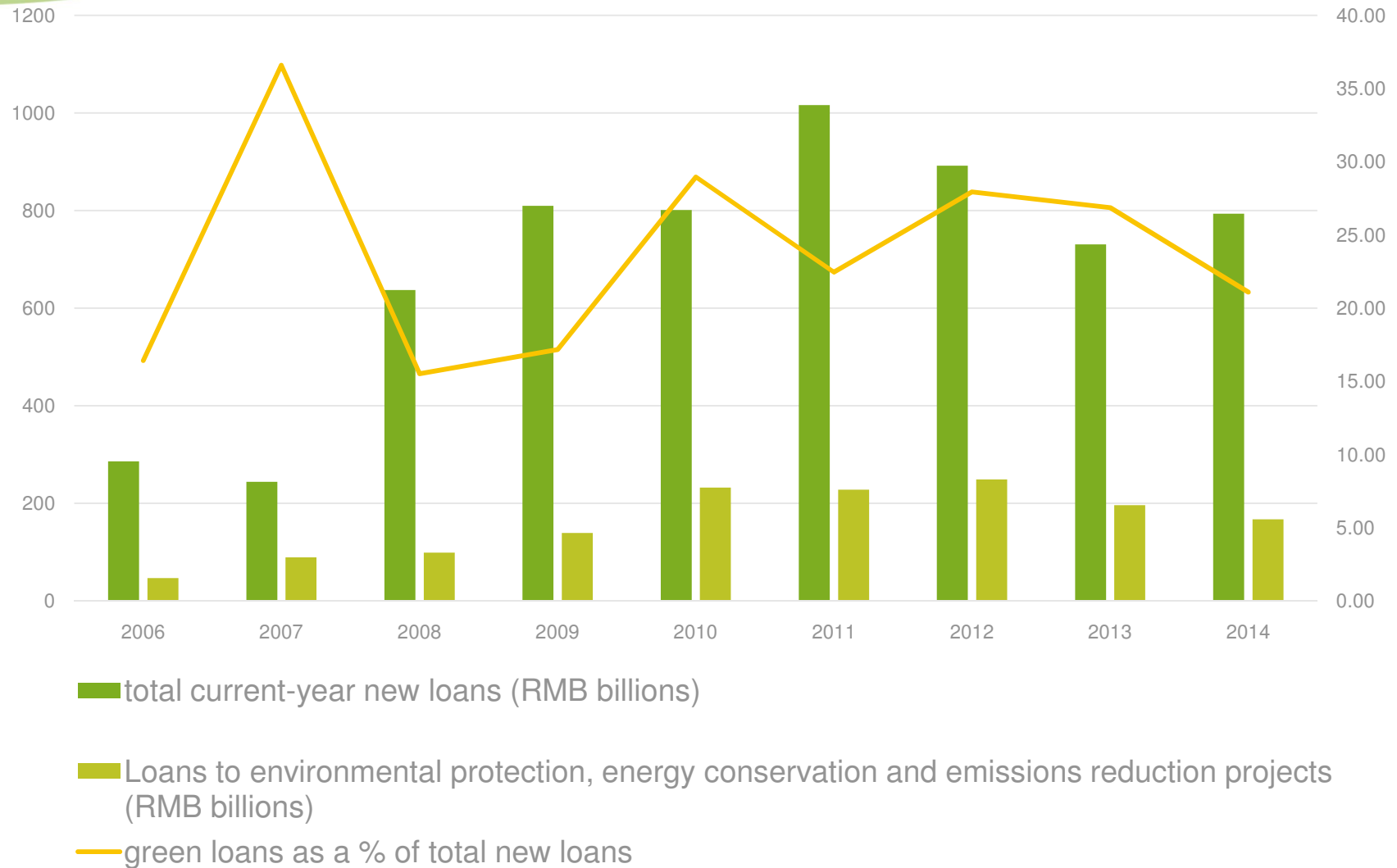
12.70%



Public Entrepreneurship in Action: *CDB as a forerunner of green finance*

- ◆ In 2005 in response to the national strategy of promoting 'sustainable development', CDB promised to provide 50 billion RMB loans within five years to support environmental protection.
- ◆ Before the Green Credit Policies was formally launched in 2007, CDB has already integrated *environmental impact assessment* into its operations. CDB becomes a role model for other Chinese banks to follow.
- ◆ In 2014, CDB acted as a director member of the first Green Credit Committee of the China Banking Industry

Public Entrepreneurship in Action: Growth of Green Credits in CDB



Public Entrepreneurship in Action: *Market Incubation Tops the Agenda*

- ◆ *“Western economies built their developed markets using a long process...”*
- ◆ *We do not have time to reinvent the wheel; we do not have the luxury of indulging in the mistakes of adolescence as we evolve toward maturity...*
- ◆ *Systems and markets can be built. China’s market deficiencies can be overcome through cooperation between banks and government.”s*



Chen Yuan, *Aligning State and Market: China’s Approach to Development Finance*

Public Entrepreneurship in Action: *Case 1: Renewable Energies*

- ◆ CDB: renew energies = ‘an strategic emerging industry’
- ◆ Since 2003, CDB has played a leading role in financing renewable energies.
- ◆ From 2010 to 2015, outstanding loans in renewable energies have increased by five times:
 - Wind Power: increase by **3** times (6 countries; 27 provinces);
 - Solar Power: increase by **200** times (9 countries; 18 provinces).



Public Entrepreneurship in Action:

Case 1: Renewable Energy

- ◆ Longyangxia Solar-hydro 320MW Photovoltaic Power Station
 - This project is **the largest photovoltaic power project** in the world and the first solar-hydro hybrid photovoltaic power project in China. The project has a total installed capacity of 320MW and a total investment estimation of RMB 3.73 billion, and the Bank committed RMB 2.98 billion in loans. As of the end of 2014, RMB 1.8 billion had been disbursed.



Public Entrepreneurship in Action:

Case 1: Solar Power Industry

- ◆ Solar Power Industry: a silent 'sunshine revolution'
- ◆ **Scale Matters:** China's solarcell production rocketed from just **50 megawatts** of generation capacity in 2004 to **23,000 megawatts** in 2012, by which time it was supplying more than **70 per cent** of the world market.
- ◆ Swanson's Law holds that every time the total cumulative production of solar panels doubles, their cost drops by 20 per cent.
- ◆ The steady decline in costs could lead to widespread adoption of solar power.
- ◆ Cases:
 - Jinglong Group and CDB
 - 2010, 30 billion RMB (5 billion USD) 'Agreement on Financial Partnership'
 - Jinko Solar
 - 2012, 1 billion USD, 5 years

Public Entrepreneurship in Action:

Case 2: Electronic Vehicles

- ◆ In response to China's new policies on environmental protection and new energy industry, CDB vigorously supported BYD Auto to develop itself into a world-leading enterprise in the new energy industry.
- ◆ After receiving continuous financial support from CDB for a few years, BYD Auto has transformed from a little-known private company into an industrial pioneer with an annual sales volume of 50 billion yuan and a total asset of almost 52.7 billion yuan, making a positive contribution to China's low-carbon economy.





Global Governance of the Renaissance of Public Entrepreneurship



Harnessing Public Entrepreneurship as a force for good

- ◆ The renaissance of development banks has embarked on a process of “**creative destruction**” in the established international rules.
 - **Creative:** place competitive pressures on advanced economies to scale up large-scale and long-term finance in ways that redress the undue rigidities in the existing rules
 - **Destructive:** undermine the effectiveness of existing rules, running the risk of further rounds of financial arms races and debt crises.



- ◆ Xu, Jiajun and R. Carey, “Post-2015 Global Governance of Official Development Finance: Harnessing the Renaissance of Public Entrepreneurship,” *Journal of International Development*, 27, 856-880.



Thank You!

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