ESTIMATING THE POTENTIAL ECONOMIC BENEFITS OF THE BELT AND ROAD INITIATIVE

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Workshop on “Assessing the Potential Impact of the Belt and Road Initiative on Sustainable Development Goals in Asian Economies”

25 September 2019, Bangkok
Main messages

• Potential economic welfare/output gains, across all BRI corridors, are estimated to be sizeable, at $86-$372 billion or between 1% and 3.5% of total output across all corridors.

• Estimated country-level output increases vary significantly, between 2% and 17%.

• Despite large benefits, economic risks are also notable.

• Further research is needed to assess social impacts and environment implications of BRI.
1. Estimating potential economic benefits
A computable general equilibrium approach

• CGE model is often used to estimate the *ex-ante* impacts of multilateral agreements on key economic variables

• Database: Global Trade Analysis Project (GTAP)
  • A linearized and static CGE model, with perfect competition
  • Household, corporate and government sectors, with international trade
  • 140 countries
  • 57 industries
  • Base year 2015
Simulation assumptions

• Conceptually, BRI could affect an economy through various channels
  • Trade: access to markets, inputs and technology
  • Investment/connectivity: building networks of transport, energy and ICT
  • Movement of people: migrant workers, tourism
  • Financial cooperation: availability of financing to undertake projects

• Assuming changes in 5 GTAP CGE model parameters
  • Lower import tariff rates
  • Lower cross-border transport and transaction costs
  • Higher economy-wide productivity (3 parameters)
### Three simulation scenarios

<table>
<thead>
<tr>
<th>GTAP parameter</th>
<th>Low-case scenario</th>
<th>Base-case scenario</th>
<th>High-case scenario</th>
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</thead>
<tbody>
<tr>
<td>Tariffs on bilateral imports</td>
<td>-15%</td>
<td>-30%</td>
<td>-40%</td>
</tr>
<tr>
<td>Transaction cost in bilateral trade</td>
<td>-10%</td>
<td>-30%</td>
<td>-40%</td>
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<tr>
<td>Large economies</td>
<td></td>
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<tr>
<td>Small economies</td>
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<tr>
<td>Factor input productivity</td>
<td>+0.25%</td>
<td>+0.5%</td>
<td>+0.75%</td>
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<tr>
<td>Technological change in shipping</td>
<td>+0.25%</td>
<td>+0.5%</td>
<td>+0.75%</td>
</tr>
<tr>
<td>Value-added productivity</td>
<td>+0.25%</td>
<td>+0.5%</td>
<td>+0.75%</td>
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</tbody>
</table>
Estimating economic impacts in 6 BRI corridors
Output gains across all BRI corridors

Billion $:

- BCIM: 167
- CAWA: 190
- ICP: 372
- CMR: 152
- CP: 86
- NELB: 216

Welfare gain, $billion
Welfare gain, % of group's GDP

% of GDP:

- BCIM
- CAWA
- ICP
- CMR
- CP
- NELB

Change in real GDP level (%):

- BCIM
- CAWA
- ICP
- CMR
- CP
- NELB
Imports tend to rise more rapidly than exports
Output gains: examples of ICP and BCIM

ICP

Per cent

China  Myanmar  Brunei Darussalam  Cambodia  Indonesia  Laos PDR  Malaysia  Philippines  Singapore  Thailand  Viet Nam

BCIM

Per cent

China  Bangladesh  India  Myanmar
2. Potential economic risks
Risk of balance of payments instability

• BRI investments are large relative to economy size
  • China-Kazakhstan deal is roughly $37 billion (over 20% of Kazakhstan’s GDP)
  • Kazakhstan’s external account indicators are rather weak
    • Current account deficit = 6% of GDP in 2016
    • External debt > 80% of GDP in 2015

• Macroeconomic stability can be undermined by (a) deteriorating trade balance, and (b) eased access to large foreign loans
  • Higher risk in small economies with underdeveloped financial markets, less effective debt management
Rapid economic growth could push up inflation

Change in GDP deflator (%)

- BCIM
- CAWA
- ICP
- CMR
- CP
- NELB

China
Kazakhstan
Kyrgyzstan
TTU
Iran
Turkey
3. Possible future research areas
Possible future economic research on the BRI

- More detailed economic/social/environment impact analysis
  - Sectoral employment
  - Poverty and income distribution

- Making economic gains inclusive
  - Linking in-country BRI hubs with rural areas

- Meeting large investment and financing requirements
  - Cross-border public-private partnerships
  - Domestic capital market development
Thank you

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