The "One Belt, One Road" Initiative, Business Opportunities, and Risk Management

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This Talk

- a description of the One-Belt One-Road (B&R) Initiative
- a discussion of the economic impacts of the initiative on the countries along the roads and some other countries
- an exploration of the business opportunites caused by the initiative
- an analysis of the risks and risk management

The Initiative

- a huge project proposed at the end of 2013, consisting of a series of land routes and sea routes that connect more than 60 countries together
- The Land Silk Road consists of mainly high-speed railways and the Maritime Silk Road includes new or improved seaports.

Maps of the B&R

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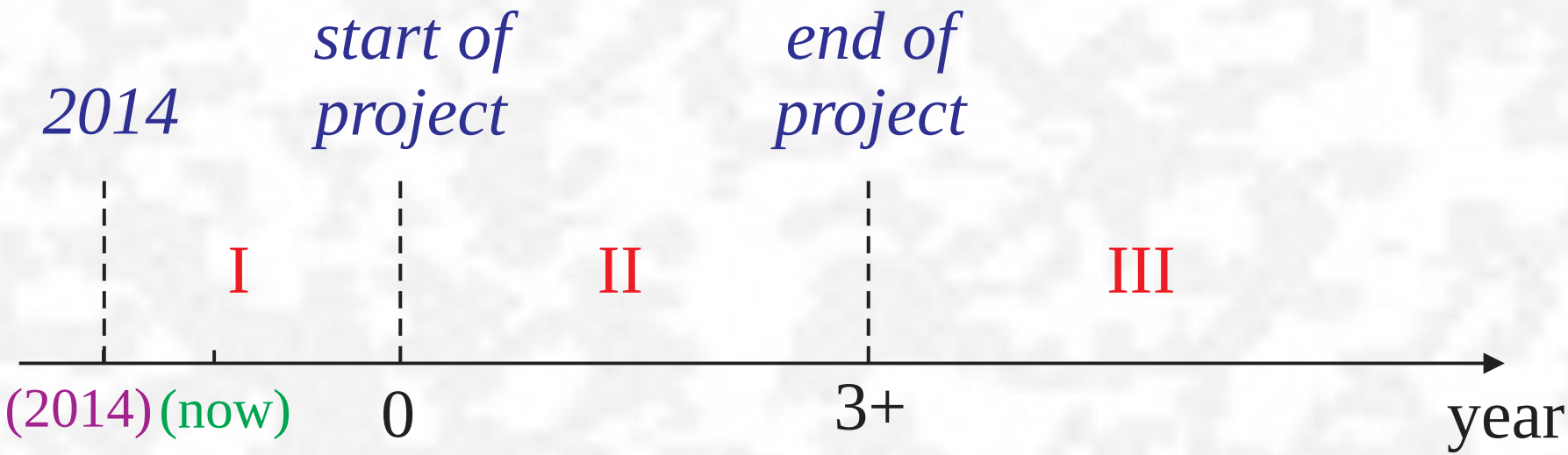
Sizes of the Countries

Region/country	Number of countries	GDP, 2014, US$Bn	GDP, %
Central Asia	6	360	0.476
Southeast Asia	11	2,480	3.273
South Asia	7	2,587	3.415
West Asia	17	3,399	4.487
Russia and Mongolia	2	1,873	2.472
East Europe	19	1,765	2.330
North Africa	1	287	0.378
China	1	10,360	13.676
Total	64	23,111	30.507

Stages of the Initiative



- I: promotion and negotiation
- II: construction of the facilities:
- III: post-construction

Promotion and Negotiation

- an investment by the relevant governments, particularly China
- China's assets: fantastic track record, availability of financial resources: Silk Road Infrastructure Fund (US$40 billion) and the Asian Infrastructure Investment Bank (US$100 billion)
- So far, many countries have shown interest and willingness to cooperate.

Construction

- injection of investment funds;
- technical; mainly China's technology
- There will be big demands for a wide range of products, services, and professionals.

An Example

- The Jakarta-Bandung High-Speed Railway

- Negotiation: Japan, 2008 -, China, 2014 -
- signed with China on October 16, 2015
- distance: 150 km; max speed - 300 km per hour; travel time drops from 3 hours to less than 40 minutes, investment = about US$5.5 billion, completed by 2019

Land and Maritime Silk Roads

- Land Silk Road: mainly creation of new routes and lowering of the costs and/or time;

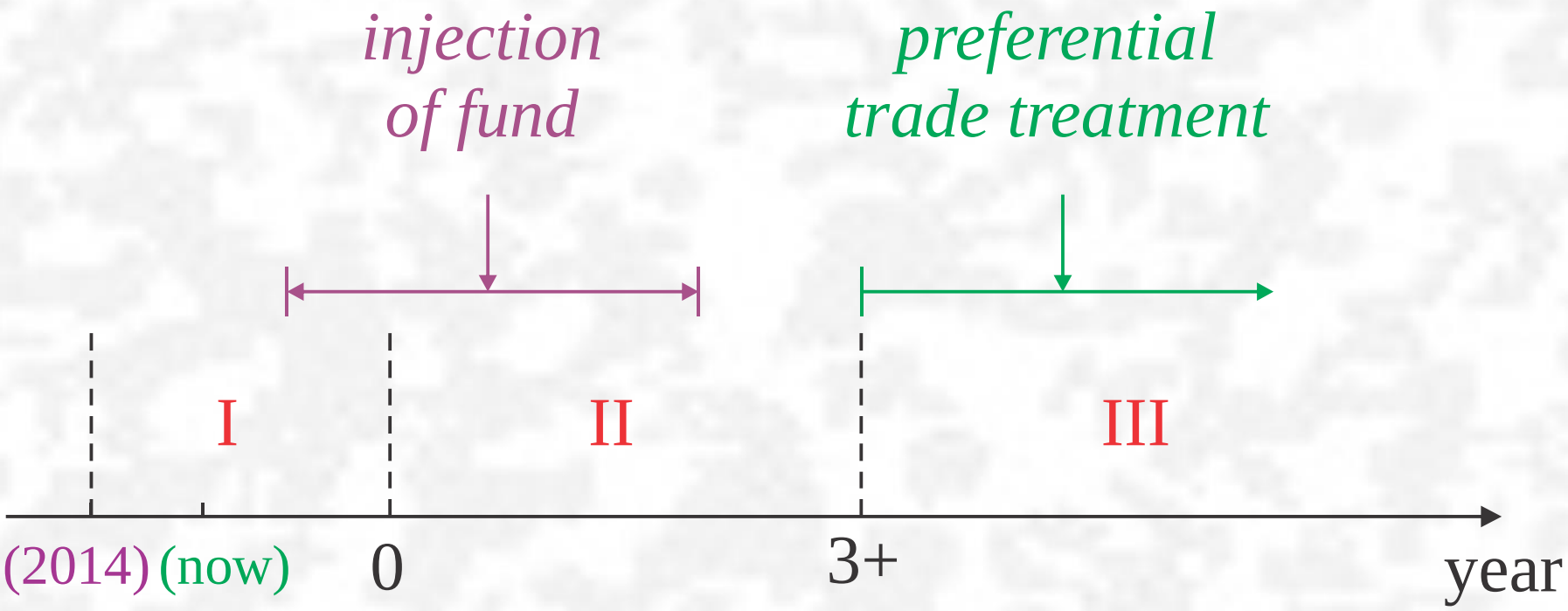
- Maritime Silk Road: removing bottlenecks - building seaports and related facilities; not much impacts on the time of transport of goods

Economic Impacts

- Depends on the stages of construction;

- Only analytical frameworks are suggested here. There are no empirical results.

Economic Impacts



Injection of Investment Fund

- impacts mainly on the local economy;
- macroeconomic impacts: rise in employment; multiplier effect
- economic growth: growth caused by capital accumulation, growth in labor force, technology improvement (technology transfer, innovation, imitation), education, foreign direct investment

Preferential Trade Treatment

- The Land Silk Road greatly reduces the time (and probably cost as well) of transportation
- similar to shortening the distance between each pair of countries – *trade creation*
- The Jakarta-Bandung railway plan suggests that the travel time could be reduced by 77%.

Preferential Trade Treatment

- The benefit does not extend to countries not along the Road – *trade diversion*: trade shifted from non-initiative countries to initiative countries.
- The Maritime Silk Road has a lower degree of exclusiveness, and it has little impact on the time of transportation.

An Example of Trade Creation/Diversion

- China imports machines from Germany and Japan (and other countries as well).
- Currently, it takes about 18 days to transport goods from Germany to China.
- The Land Silk Road will substantially reduce the transport time; the Jakarta-Bandung case suggests that the Germany-China transport time may be reduced to 4 to 5 days.

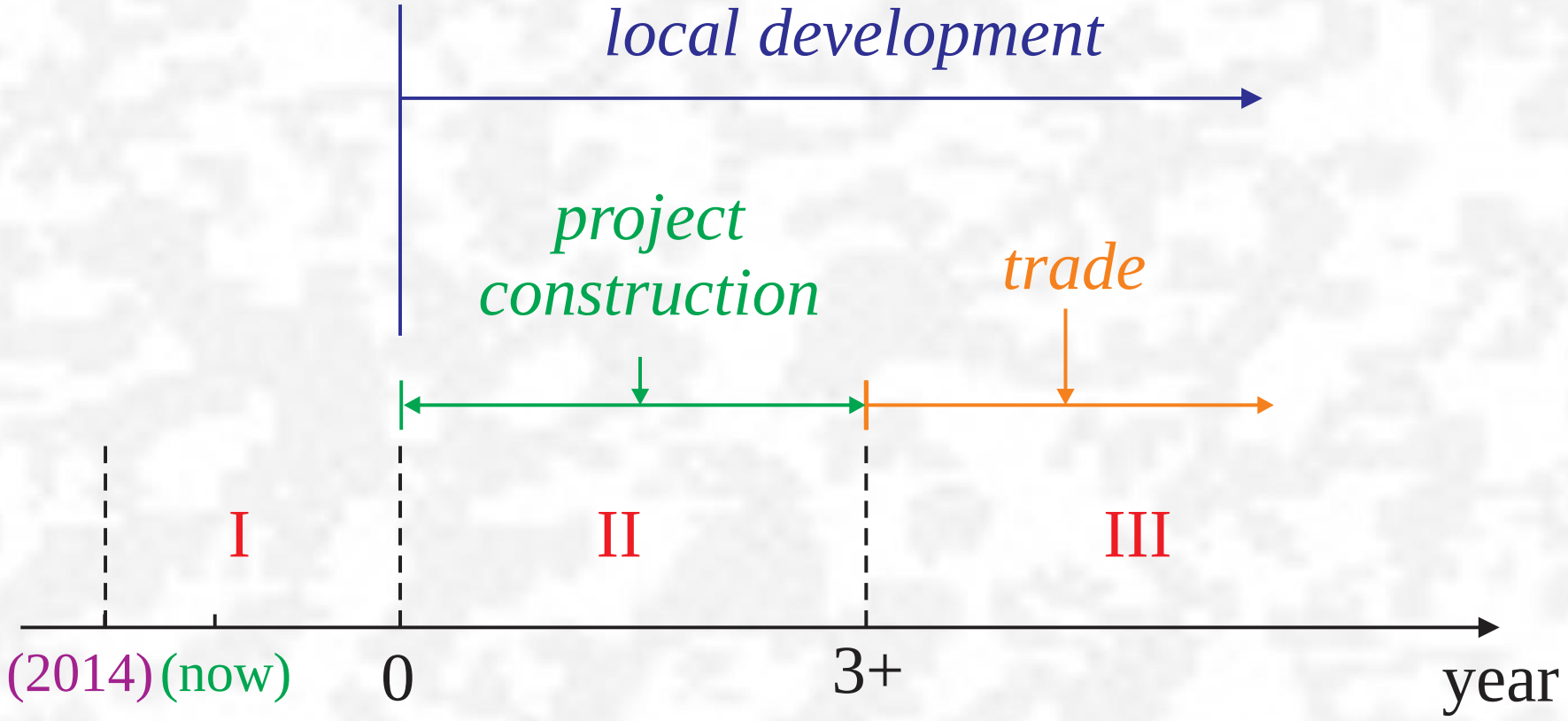
An Example of Trade Creation/Diversion

- Trade Creation – The reduction in the transport will encourage China's purchase of machines from Germany.
- Trade Diversion – Part of China's increase in the import from Germany may be at the expense of the import from Japan.
- The Land Silk Road tends to have positive impacts on Germany-China trade but negative impacts on Japan-China trade.

Impacts of Other Types of Trade

- Strategic trade applies also to other countries along the Land Silk Road; tends to benefit a country of origin, probably at the expense of some competing non-road countries.
- Pure import – may also have trade creation (tends to be good) and trade diversion (tends to be bad).
- Intraindustry trade – tends to benefit both countries.

Business Opportunities



Business Opportunities

- to determine what goods and services are needed;
- promotion and negotiation – mainly the work of the Chinese government
- project construction – Some Chinese firms may be responsible for planning, coordination, and procurement, but there will be great demands for a wide range of products.

Business Opportunities

- many roles for outside companies, especially if the funds come from the AIIB;
- local development – bigger roles for outside companies, as local residents' income rises; foreign direct investment may occur;
- trade – involves exports and imports of products and services

Two Levels of Investment

- the optimal investment in each of the countries;
- optimal allocation of a given investment fund among the countries;
- Some economies of scale may exist.

Risk Management

- Investment is risky because the future is unknown.
- Investing in a new country is even riskier because there are much more unknown information and barriers such as language, culture, legal, and politics.
- The reward from a right investment in a Road country can be huge.

The Extended Expected-Return Approach

- The expected return to an investment is

$$E = pG + (1 - p)B.$$

- where G is the return if the *good* state of nature occurs, and B is the return if the *bad* state of nature occurs.
- the expected-return approach states that the investment should be carried out if $E > 0$.

Two Issues

- Risk neutrality. Government does not gamble with people's money, and government should try to avoid risks as much as possible..
- Volatility. The capital asset pricing model (CAPM) describes the trade-off between the volatility of a stock and the expected return of the stock.
- It is difficult to estimate the volatility of a B&R Initiative project and its expected return.

The Extended Approach

- If the values of the parameters in the previous equation can be changed, at a cost, then the profit of a firm is

$$\pi = E - C,$$

- where C is the cost of changing the values of the parameters. A bigger C means that a bigger E will be produced.
- How much cost should the firm spend? A: It is the value at which an extra dollar spent on C will bring an extra dollar of E.

The Parameter Values

- *E* is increased if there is a rise in *p* or *G*, or there is a drop in *B*.
- an increase in *p*: a better knowledge of the risk; get more and better information
- an increase in *G*: an increase in the return in a good state; raising the price of a project
- a drop in *B*: a decrease in the loss when the bad state occurs, getting some form of compensation

Case 1: Mexico

- Mexico City–Querétaro High-Speed Railway.
- 210 km long, 16 km on viaducts and 12 km in tunnels, with a design speed of 300 km/h. Expected completion date is by the end of 2017
- After a delay, the Mexican government eventually announced its indefinite postponement.
- The China Railway Construction Corporation was paid a penalty of only US$1.3 Mn, which is only a small fraction of what the Chinese company had spent in the study of the plan.

Case 2: Sri Lanka

- Colombo Port City project.
- The project started in Sept. 2014, but was stopped in January 2015, after the rise of a new government.
- The project was allowed to resume in March 2016. However, so far no mentioned had been made about compensation.

Thank you very much.