# National Economic Education Delegation



#### Vision

- One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.

#### Mission

 NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.

#### NEED Presentations

- Are **nonpartisan** and intended to reflect the consensus of the economics profession.





# China's Belt and Road Initiative: What is it? And is it good or bad for the United States?

Alan V. Deardorff **University of Michigan** 

For presentation at Adult Learning Institute Oakland Community College October 16, 2019







**Figure 1** The geographical coverage of the One Belt, One Road Initiative. Source: © The Economist Newspaper Limited, London (2 July 2016). Reproduced with permission. (Color figure available online.)



# **Outline: The Belt and Road Initiative**



- What it is
- Projects
- History
- Before BRI
- Effects of BRI
- Pros and cons
- Implications for United States







# **BRI: What it is**



- BRI is (from Deardorff's Glossary of International Economics)
  - Initially called the One Belt, One Road Initiative,
  - this is a massive undertaking by the Chinese government to build infrastructure
    - o on land (the belt), and
    - on sea (the road)
  - between China and
    - other parts of Asia,
    - Europe, and
    - o Africa











# As stated by Cavanna 2018 BRI is

- "\$4 trillion of promised investments
- in 65 countries representing
  - o 70 percent of the world's population,
  - o 55 percent of its GNP, and
  - o 75 percent of its energy resources?"









# Projects of BRI







# **BRI: What it is**



- BRI infrastructure projects (BRI Website lists 118)
  - The "Belt"
    - Railroads
    - Light rail and mass transit
    - Roads
    - Airports
    - o Dams
    - o Gas pipelines
    - Fiber optics
    - Power plants (coal, gas, hydro, solar, wind)
    - Transmission lines
  - The "Road"
    - o Ports
    - Harbors







One of the BRI key projects: The Khorgos Gateway in Kasakhstan Picture Credit: Khorgos Gateway China's Belt and Road Initiative forges intertwining economic, political, and security ties between Africa and China, advancing Beijing's geopolitical interests.



The Chinese-built Addis Ababa-Djibouti Railway. (Photo: Skilla1st)



A Chinese-style beach pavilion near the Anaklia Port. (Photo by Bradley Jardine)



▲ Belt and Road construction site at Colombo port, in Sri Lanka. Photograph: Xinhua / Barcroft Images



The land reclamation project in Colombo, Sri Lanka, jointly undertaken by China Communications
Construction Co. Ltd. and the Sri Lankan Government under the Belt and Road Initiative. Completed
on January 16, it reclaimed 269 hectares of land in less than three years (XINHUA)



In this Dec. 3, 2018, photo, a Panama Canal worker docks the Chinese container ship Cosco at the Panama Canals' Cocoli Locks, in Panama City. China's expansion in Latin America of its Belt and Road initiative to build ports and other trade-related facilities is stirring anxiety in Washington. As American officials express alarm at Beijing's



The level-2 station of the Nam Ou project has been in operation since 2016. The project, with an installed capacity of 1,272 megawatts, is invested in and constructed by Power Construction Corp of China at a cost of \$2.73 billion. Provided to CHINA DAILY



Photo: (March 20, 2019) No 1 tunnel of Jakarta-Bandung High Speed Railway Station Halim, underway to assemble a huge Tunnel Boring Machine – Indonesia.







# History





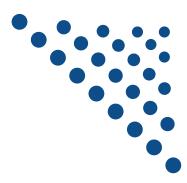
### The Ancient Silk Road

- A trade route from between
  - Asia (including East, South-East, and South Asia),
  - o East Africa, and
  - Europe
- Opened in 130 BC, remained in use until 1453 AD
  - Closed by Ottoman Empire









# The Ancient Silk Road(s)

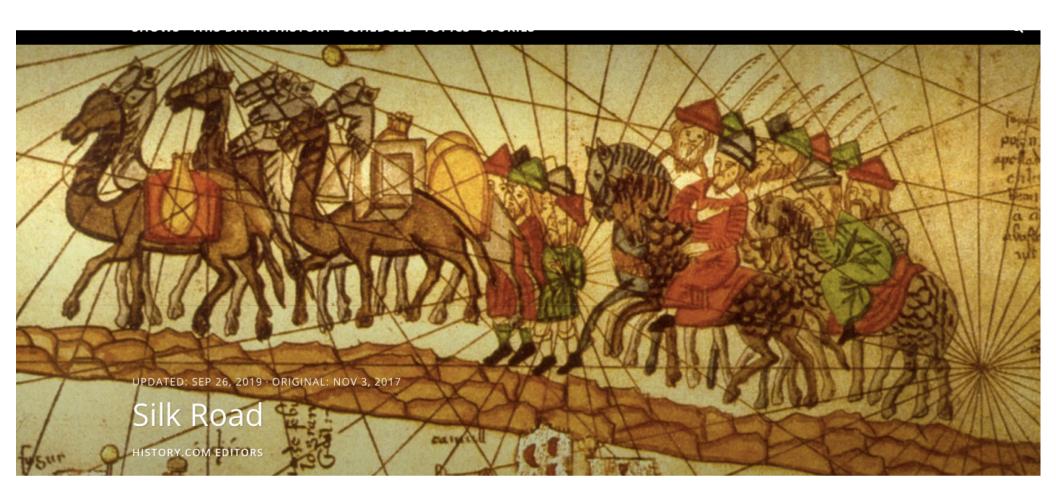
- Named for trade in silk, but also traded much more (per History.com):
  - fruits and vegetables, livestock, grain, leather and hides, tools, religious objects, artwork, precious stones and metals
  - o language, culture, religious beliefs, philosophy and science.
  - o paper and gunpowder, both invented by the Chinese
- Name is recent, per UNESCO. It had no name when being used. Named in mid-19<sup>th</sup> century:
  - o by German geologist, Baron Ferdinand von Richthofen,
  - Die Seidenstrasse (the Silk Road)







Julice. History.com



Source: History.com

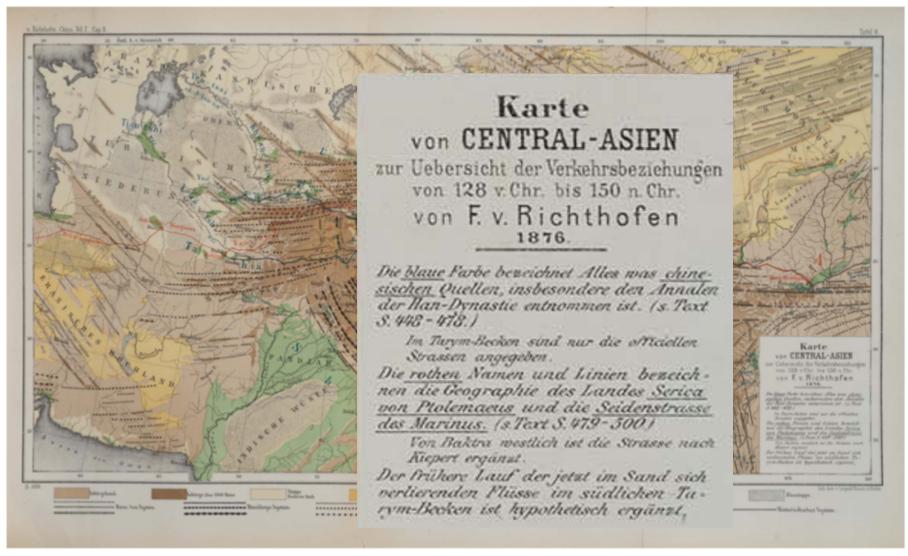


Figure 4 Map of Central Asia for overview of trade routes and movements. Source: Fold-out map facing page 500 of von Richthofen (1877). (Color figure available online.)



**Figure 1** The geographical coverage of the One Belt, One Road Initiative. Source: © The Economist Newspaper Limited, London (2 July 2016). Reproduced with permission. (Color figure available online.)





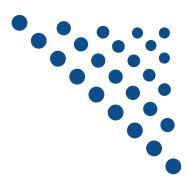
#### The Belt and Road Initiative

- Announced by China's President Xi Jinping, 2013
- Two prongs:
  - Overland Silk Road Economic Belt
  - Maritime Silk Road
- Purpose: To "break the bottleneck of Asian connectivity"
- Coverage: Over 60 countries have signed on or indicated interest
- Cost: Estimated to total \$1.2-1.3 trillion by 2027
- Motivation: Counter to the US "Pivot to Asia" under Obama









## Additional BRI purposes

- Help China be more assertive in world affairs
- New markets for China's consumer goods and excess industrial capacity
- Pushback against US influence
- Develop new investment opportunities
- Boost Chinese income and domestic consumption
- Shape international norms and institutions
- Improve China's image among its neighbors
- Boost links to historically neglected western regions of China
- Secure long-term energy supplies
- Restructure economy to avoid the "middle-income trap"









### Countries pledging support for BRI:

- (Incomplete list of MOUs and Joint Statements/Communiques)
- **2014**: Thailand, Timor-Leste
- **2015:** Azerbaijan, Bulgaria, Czech Republic, Hungary, Indonesia, Kazakhstan, Poland, Romania, Serbia, Slovakia, South Africa, Turkey
- 2016: Egypt, Latvia, Myanmar, Papua New Guinea
- **2017:** Albania, Bosnia & Herzegovina, Croatia, Finland, Israel, Lebanon, Madagascar, Maldives, Montenegro, Morocco, New Zealand, Panama, Philippines, UAE
- **2018:** Afghanistan, Algeria, Antigua & Barbuda, Bahrain, Bolivia, Cameroon, Chile, Costa Rica, Cote d'Ivoire, Ecuador, Ethiopia, Fiji, France, Ghana, Greece, Grenada, Guyana, Kenya, Libya, Malta, Nigeria, Niue, Oman, Pakistan, Portugal, Rwanda, Samoa, Senegal, Seychelles, Sierra Leone, Singapore, Somalia, Tonga, Trinidad & Tobago, Tunisia, Vanuatu
- 2019: Barbados, Italy, Jamaica, Luxembourg







#### Many in Asia, but also

- Europe
- Middle East
- Africa
- Countries pledging support for BRI:

   (Incomplete list of MOUs and Joint Statements/Communiques)
  - 2014: Thailand, Timor-Leste
  - **2015:** Azerbaijan, Bulgaria, Czech Republic, Hungary Indonesia, Kazakhstan, Poland, Romania, Serbia, Slovakia, South Africa, Turkey
  - 2016: Egypt Latvia Myanmar, Papua New Guinea
  - **2017:** Albania, Bosnia & Herzegovina, Croatia, Finland Israel, Lebanon, Madagascar Maldives, Montenegro Morocco New Zealand, Panama Philippines, UAE
  - 2018: Afghanistan, Algeria Antigua & Barbuda, Bahrain Bolivia, Cameroon Chile Costa Rical Cote d'Ivoire Ecuador Ethiopia Fiji, France Ghana Greece Grenada, Guyana Kenya, Libya Malta Nigeria Niue, Oman Pakistan, Portugal Rwanda Samoa, Senegal Seychelles, Sierra Leone Singapore, Somalia Tonga, Trinidad & Tobago, Tunisia Vanuatu
  - **2019:** Barbados, Italy Jamaica, Luxembourg









#### Many in Asia, but also

- Europe
- Middle East
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- Countries pledging support for BRI: (Incomplete list of MOUs and Joint Statements/Communiques)
  - **2014**: Thailand, Timor-Leste
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  - **2016:** Egypt Latvia Myanmar, Papua New Guinea
  - **2017**: Albania, Bosnia & Herzegovina, Croatia, Finland Israel, Lebanon, Madagascar Maldives, Montenegro Morocco New Zealand, Panama Philippines, UAE
  - 2018: Afghanistan. Algeria Antigua & Barbuda, Bahrain Bolivia, Cameroon Chile Costa Rica Cote d'Ivoire Ecuador Ethiopia Fiji, France Ghana Greece Grenada, Guvana Kenya, Libya Malta Nigeria Niue, Oman Pakistan, Portugal Rwanda Samoa, Senegal, Seychelles, Sierra Leone Singapore, Somalia Tonga, Trinidad & Tobago, Tunisia Vanuatu
  - **2019:** Barbados, Italy Jamaica, Luxembourg





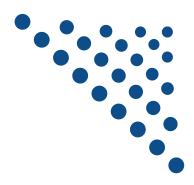




Source: Peel & Hornby, 2019

<sup>\*</sup> Have signed a formal memorandum of understanding with China endorsing the Belt and Road Initiative





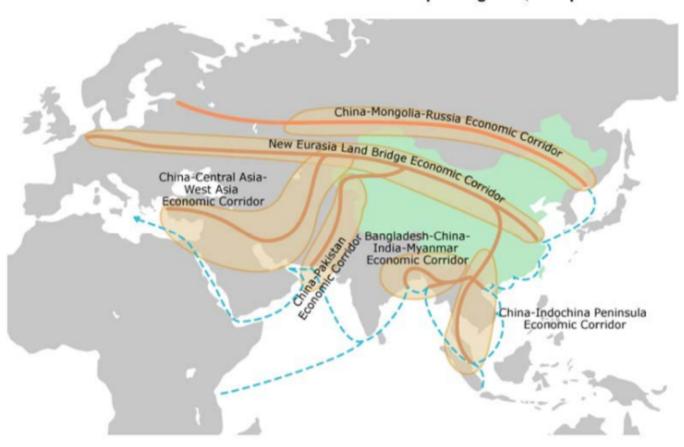
- Land route (the "Belt") will include six "corridors"
  - China-Pakistan
  - Bangladesh-China-India-Myanmar
  - China-Central Asia-West Asia
  - China-Indochina Peninsula
  - China-Mongolia-Russia
  - New Eurasia Land Bridge





Figure 1: Roadmap for the Belt and Road initiative

The Belt and Road Initiative: Six Economic Corridors Spanning Asia, Europe and Africa



Source: Garcia-Herrero & Xu, 2016

Source: HKTDC Research, http://china-trade-research.hktdc.com/business-news/article/One-Belt-One-Road/The-Belt-and-Road-Initiative/obor/en/1/1X000000/1X0A36B7.htm

China-Pakistan Economic Corridor (CPEC)	Bangladesh-China- India-Myanmar Economic Corridor (BCIMEC)	China-Central Asia- West Asia Economic Corridor (CCWAEC)	China-Indochina Peninsula Economic Corridor (CICPEC)	China-Mongolia- Russia Economic Corridor (CMREC)	New Eurasia Land Bridge Economic Corridor (NELB)
Pakistan	Bangladesh	Iran	Cambodia	Mongolia	Belarus
	India	Kazakhstan	Laos	Russia	Czech Republic
	Myanmar	Kyrgyzstan	Malaysia		Kazakhstan
		Tajikistan	Myanmar		Poland
		Turkey	Thailand		Russia
		Turkmenistan	Vietnam		Germany*
		Uzbekistan			

\*Not included within the geographic scope of the analysis

Figure 3: Countries in the Belt and Road Corridors

Source: Hillman, 2018



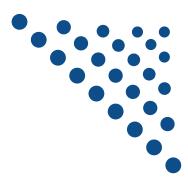


# **Before BRI**





# **BRI: BRI Countries before BRI**



#### Countries differed in

- Trade
- Direct investment
- Participation in global value chains
- Time to trade
- Rule of law
- Time to start a business

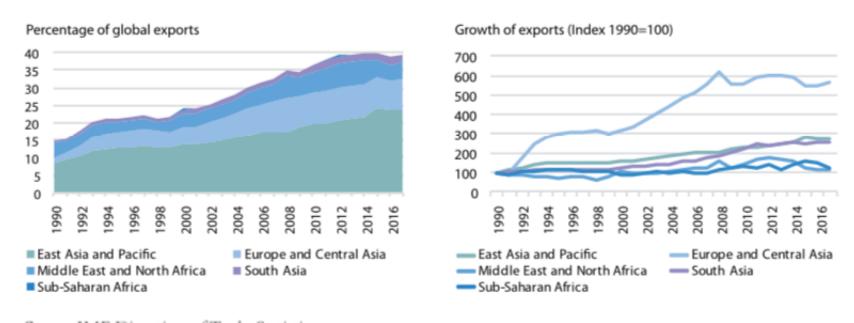
### Infrastructure investment needs





# Trade was growing, especially for East Asia.

Figure 1.1: Trade of Belt and Road corridor economies, by region, 1990-2016



Source: IMF, Direction of Trade Statistics.

Source: World Bank, 2019, Belt and Road Economics: Opportunities and Risks of Transport Corridors

Investment was growing more recently, especially for East Asia.

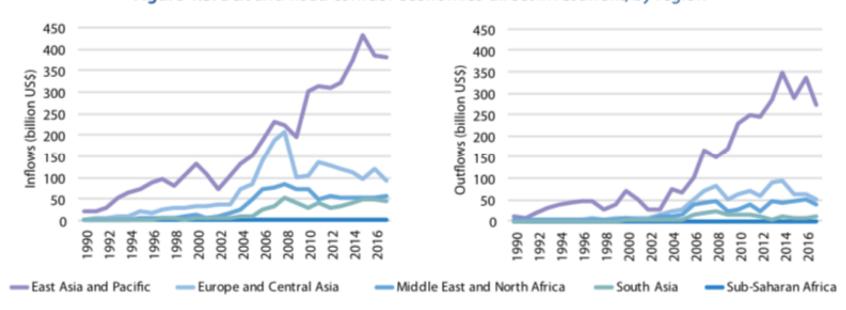
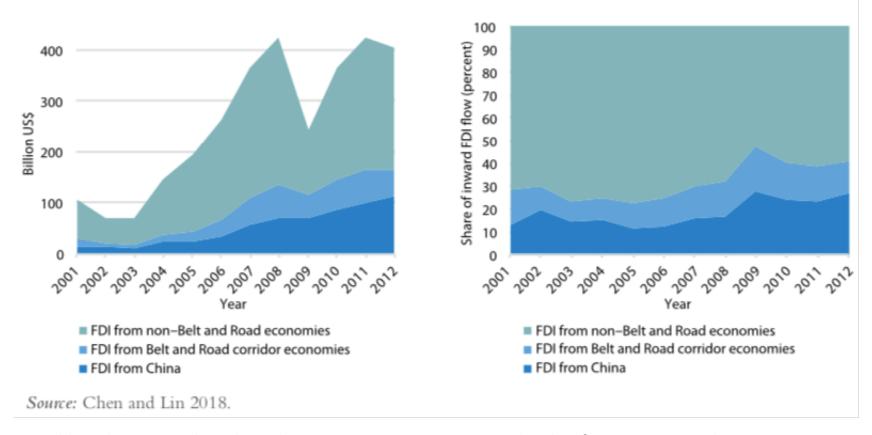


Figure 1.3: Belt and Road corridor economies' direct investment, by region

#### Investment was mostly from non-BRI countries.

Figure 1.4: Foreign direct investment in Belt and Road corridor economies, by source



#### Participation in Global Value Chains was moderate.

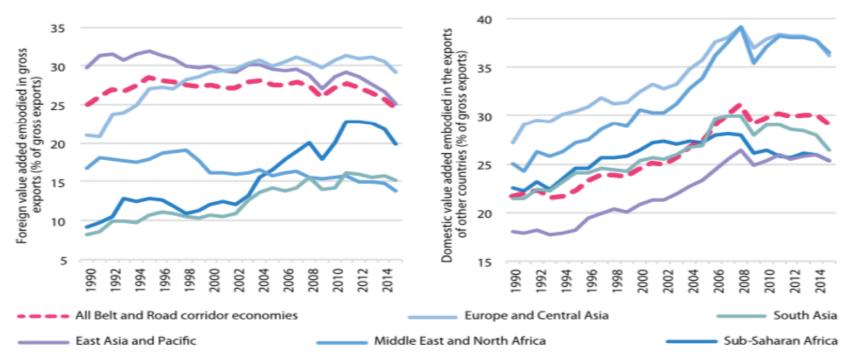


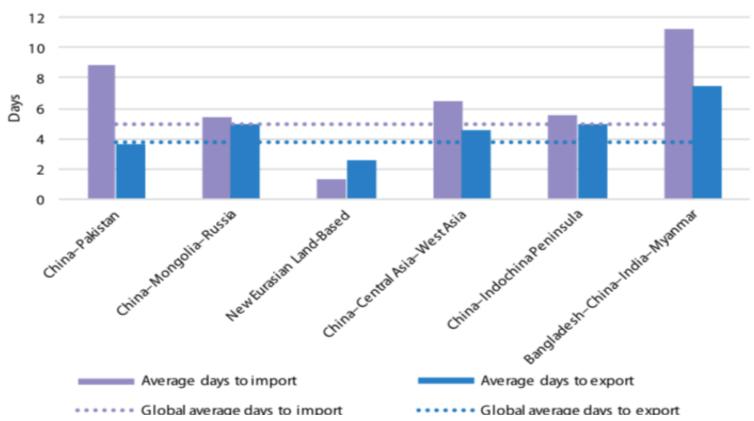
Figure 1.5: Belt and Road corridor economies' participation in GVCs, by region

Source: Eora Multiregional Input-Output Table.

Note: Gross exports and backward and forward participation encompass both goods and services.

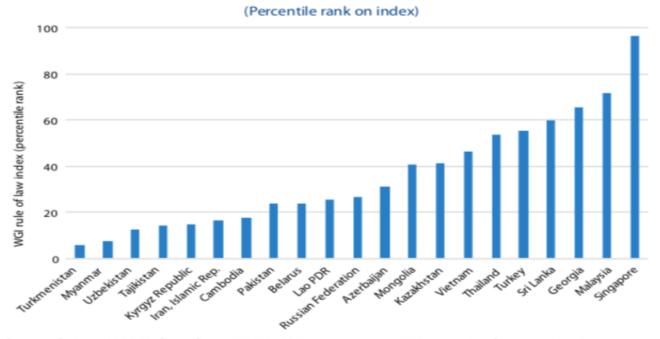
#### Time to trade was often excessive.

Figure 1.13: Average time to comply with import and export requirements, by BRI corridor



#### Many had weak Rule of Law.

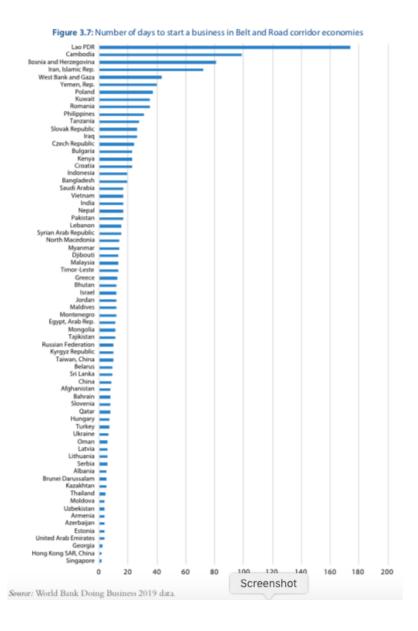
b. Rule of Law Index for 21 Belt and Road corridor economies



Source: a. Kher and Tran (2018), based on UNCTAD Investment Dispute Settlement Navigator. (http://investmentpolicyhub.unctad.org/ISDS). b. Kher and Tran (2018), based on World Bank World Governance Indicators. http://info.worldbank.org/governance/wgi/#reports.

Note: This index captures perceptions about the courts, judicial independence, the quality of contract enforcement, the fairness and speediness of judicial process, and the enforcement of property rights.

Days to start a business was often excessive.



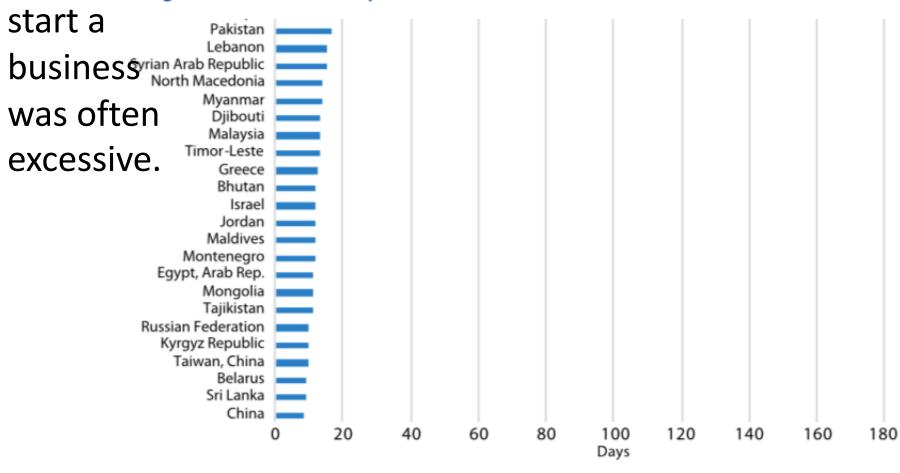
Days to Figure 3.7: Number of days to start a business in Belt and Road corridor economies Lao PDR start a Cambodia Bosnia and Herzegovina business Iran, Islamic Rep. West Bank and Gaza Yemen, Rep. was often Poland Kuwait Romania excessive. Philippines Tanzania Slovak Republic Iraq Czech Republic Bulgaria Kenya Croatia Indonesia Bangladesh Saudi Arabia Vietnam India Nepal Pakistan 20 0 40 60 80 100 120 140 160 180 Days

Screenshot

Source: World Bank Doing Business 2019 data.

Days to

Figure 3.7: Number of days to start a business in Belt and Road corridor economies



Source: World Bank Doing Business 2019 data.

Screenshot

Days to China Afghanistan Bahrain start a Slovenia Qatar business Hungary Turkey Ukraine was often Oman Latvia Lithuania excessive. Serbia Albania Brunei Darussalam Kazakhtan Thailand Moldova Uzbekistan Armenia Azerbaijan Estonia United Arab Emirates Georgia Hong Kong SAR, China Singapore | 0 20 40 60 80 100 120 140 160 180 Days

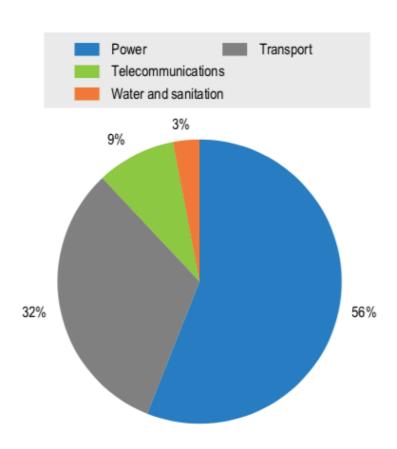
Figure 3.7: Number of days to start a business in Belt and Road corridor economies

Source: World Bank Doing Business 2019 data.

Screenshot

### Infrastructure needs were greatest in Power and Transport

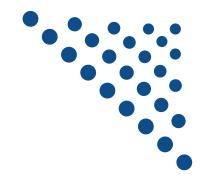
Figure 1. Infrastructure investment needs in Asia by sector, 2017



Source: OECD 2018

Source: ADB, 2017.





# **Effects of BRI**





#### **Effects of BRI**



- Effects of BRI from several <u>prospective</u> studies
  - World Bank 2019
    - World Bank, 2019, Belt and Road Economics: Opportunities and Risks of Transport Corridors
  - Bird et al. 2019
    - Bird, Julia, Mathilde Lebrand, and Anthony J. Venables, "The Belt and Road Initiative: Reshaping Economic Geography in Central Asia?" World Bank Group, Policy Research Working Paper, No. 8807, April 2019.
  - de Soyres et al. 2019
    - de Soyres, Francois, Alen Mulabdic, and Michele Ruta, "Common transport infrastructure: Welfare effects of the Belt and Road Initiative," VOX CEPR Policy Portal, July 12, 2019.







#### **Effects of BRI**

#### • Effects from World Bank 2019

- Shipping times
- Exports & FDI
- GDP
- Poverty
- Growth
- Debt

### Shipping times will fall, some more than 5%

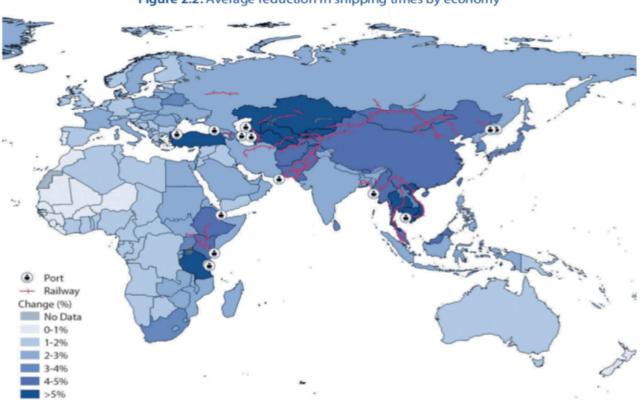
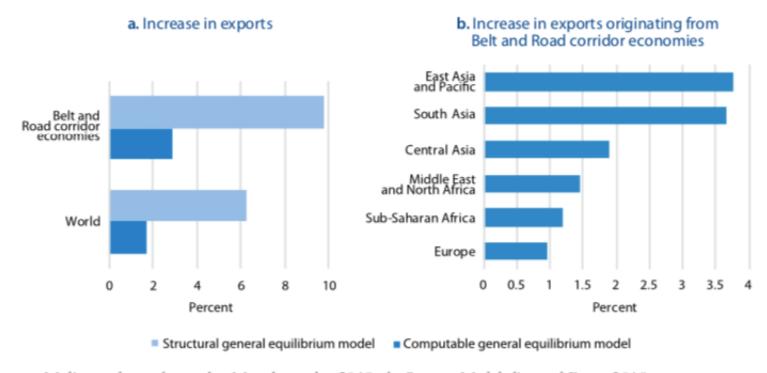


Figure 2.2: Average reduction in shipping times by economy

Source: de Soyres et al. 2018.

### Exports will increase (amounts vary by place and model)

Figure 2.3: BRI infrastructure improvements will increase exports (CGE and SGE models)



Sources: Maliszewska and van der Mensbrugghe 2019; de Soyres, Mulabdic, and Ruta 2019.

#### Most trade flows will rise, but some will fall

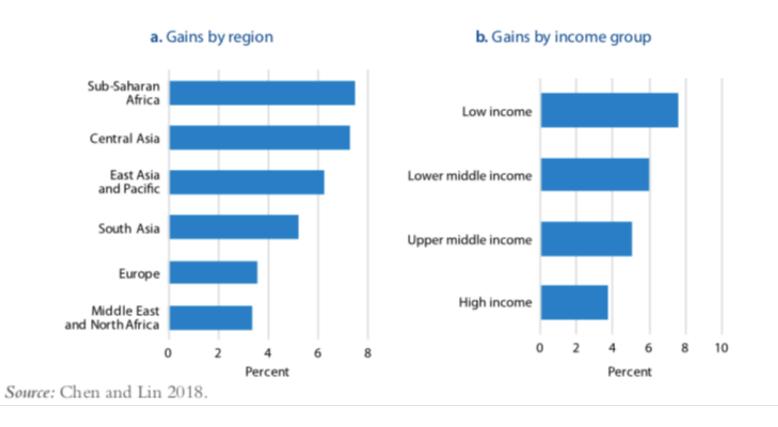
Table 2.1: Changes in trade among Belt and Road corridor economies (CGE model)

	From BRI to BRI	Central Asia	East Asia and Pacific	Europe	Middle East and North Africa	South Asia	Sub- Saharan Africa	Non-Belt and Road corridor economies
	Central Asia	35.24	4.28	-1.97	1.77	-0.30	1.21	-1.08
ý	East Asia and Pacific	1.90	6.00	3.16	10.85	3.83	7.91	2.07
rters	Europe	-2.37	5.37	-0.60	4.50	6.03	8.29	-0.79
Expor	Middle East and North Africa	1.66	7.04	7.59	-2.95	-0.67	-2.21	1.39
û	South Asia	-2.32	9.35	2.92	-5.06	-3.20	-3.55	5.15
	Sub-Saharan Africa	21.20	10.98	-2.68	-2.06	6.30	5.59	-2.17

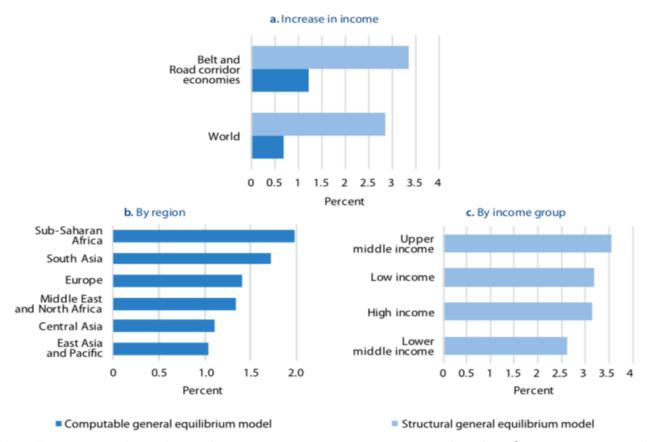
Source: Maliszewska and van der Mensbrugghe 2019.

#### Countries will get more foreign investment

Figure 2.4: Infrastructure improvements are projected to increase foreign direct investment



## Countries' GDP will rise (amounts vary by place and model) Figure 2.5: Infrastructure improvements are projected to increase GDP (CGE and SGE models)



#### Poverty will fall faster than without BRI infrastructure

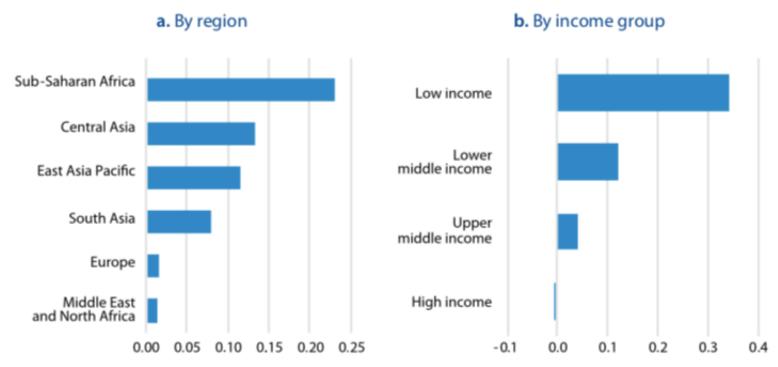
**Table 2.3:** Impact of the BRI on poverty (Poverty headcount ratios, percent, PPP US\$1.90 a day)

	Bangladesh			Kenya		
Scenario	2015	2030	Change	2015	2030	Change
Baseline	15.16	0.24		37.29	19.32	
New infrastructure	15.16	0.13	0.11	37.29	18.34	0.98
	Pakistan		Tanzania			
£:-	2015	2020	Cl	2015	2020	CI.
Scenario	2015	2030	Change	2015	2030	Change
Baseline	5.33	0.63	Change	40.69	9.03	Change

Source: Maliszewska and van der Mensbrugghe 2019.

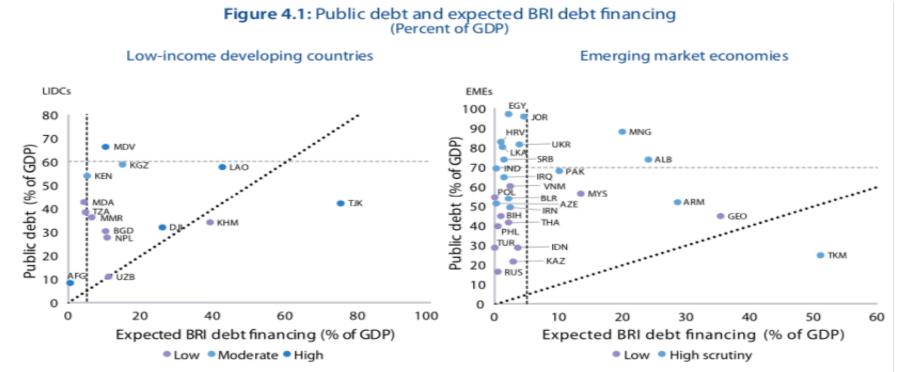
#### Growth rates will rise slightly

Figure 2.6: The BRI transport network will increase GDP growth through foreign direct investment (Percentage point increase in annual GDP growth)



Source: Chen and Lin 2018.

#### Public debt will increase, dangerously so in some countries



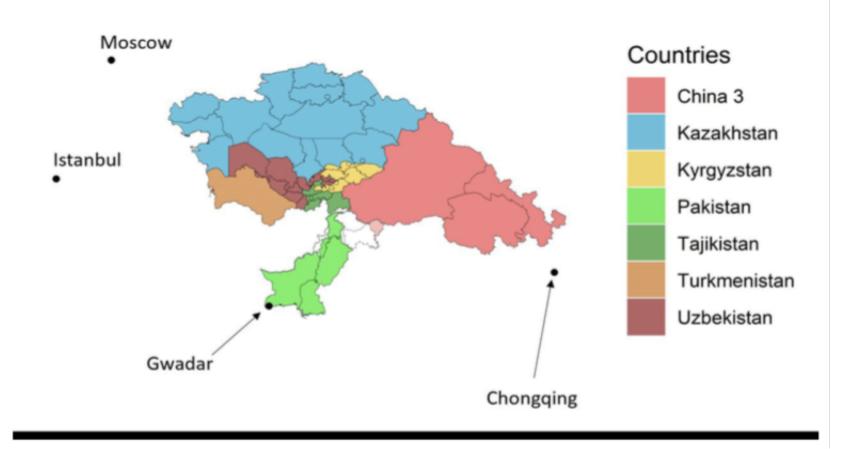
Sources: WEO, WIND Database, LIC DSF DSAs, and MAC DSAs.

Note: Assumes that (1) only BRI investments identified from 2016 to 2018 as under construction and planned would result in additional debt financing and (2) debt financing would amount to 40 percent of the cost of investment in the power, electricity, and mining sectors and 80 percent of the cost of the investment in transport and all other sectors.



- Effects from Bird et al.
  - Sample countries and their data
  - Real income gains from BRI

Figure 1: Map of countries, cells, and access points



Source: Bird et al., 2019

## Sample countries differ

Table 1: GDP and Population of sample countries.

	GDP (Billion USD)	GDP per capita (USD)	Population (Millions)
China-3	280.5	5066	55.4
Kazakhstan	135.0	7585	17.8
Kyrgyzstan	6.6	1101	6.0
Pakistan	282.5	1580	178.8
Tajikistan	7.0	796	8.7
Turkmenistan	36.2	6712	5.4
Uzbekistan	67.8	2128	31.9

Source: Bird et al., 2019

### BRI will increase growth in real incomes

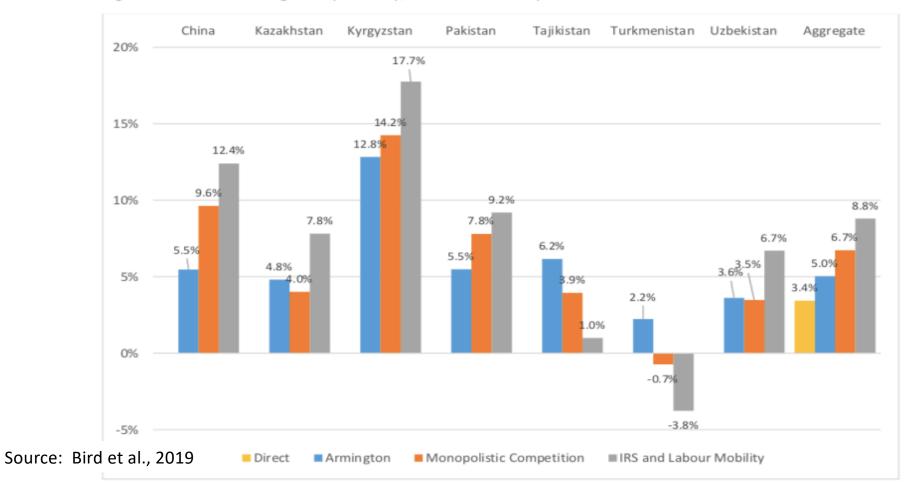
Table 5: Real income gains by country.

	Real Income Growth		
	Armington	Monopolistic Competition	
	(1)	(2)	
China-3	1.2%	2.0% M	
Kazakhstan	1.6%	2.1% M	
Kyrgyzstan	4.9%	4.4%	
Pakistan	1.8%	2.3% M	
Tajikistan	1.7%	1.5%	
Turkmenistan	0.3%	0.0%	
Uzbekistan	0.8%	1.0%	
Aggregate	1.4%	1.9%	

Source: Bird et al., 2019

### Gains vary by country and model

Figure 8b: Real income gains by country; infrastructure improvements and border effects



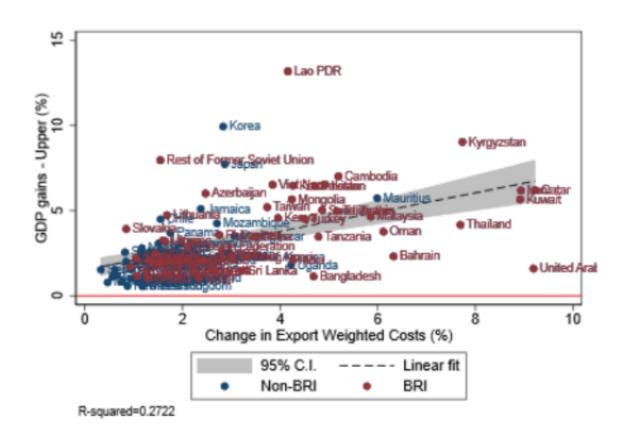


- Effects from de Soyres et al., 2019
  - GDP gains and changes in trade costs



# Countries differ greatly in their ability to take advantage of reduced trade costs

Figure 2 GDP gains and changes in trade costs



Source: de Soyres et al. 2019



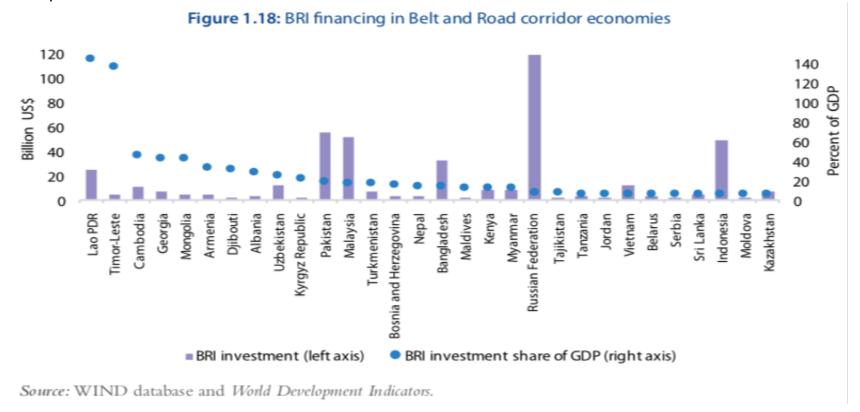


- Debt
- Environment



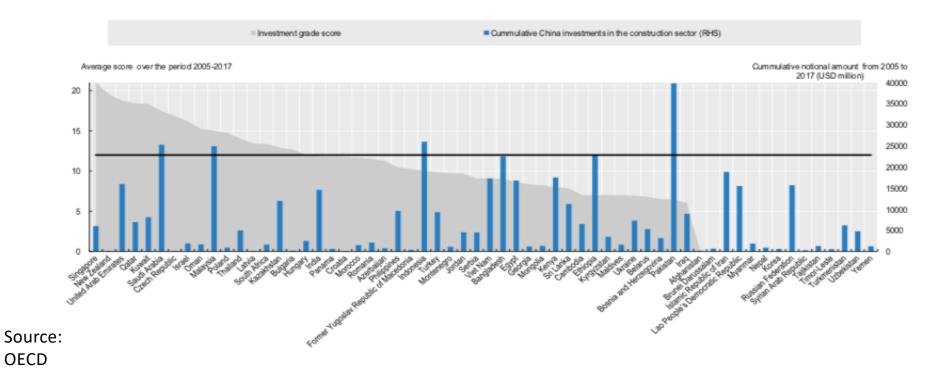
#### BRI debts, and debt burdens, vary greatly

- Most \$ to Russia, Pakistan, Malaysia, Bangladesh, & Indonesai
- Most per GDP to Laos and Timor-Leste



### BRI investment is only loosely related to credit scores

Figure 6. Credit rating score by BRI-participating economy versus construction project investment



Source: S&P, Fitch, Moody's. AAA and Aaa are given a score of 21; AA+ and Aa1 are given a score of 20, and so on, down to 1 for D and C at the junk end. Investment grade ends at BBB-/Baa3 at a score of 12.

2018

Some BRI countries are "dangerously indebted"



The Economist

However, China is open to debt renegotiation.
Many have had their debts

- Written off
- Deferred
- Terms adjusted

Source: Kratz et al. 2019

Table I: Summary of China's External Debt Renegotiations

Country	Year	Amount renegotiated	Outcome
Angola	2015	USD21.3bn	Refinancing: Terms renegotiated
Anguia	2018	Unclear	Ongoing
Botswana	2018	USD7.2mn	Write-off
Cambodia	2016	USD90mn	Write-off
	2001	USD34mn	Write-off
Cameroon	2007	USD32mn	Write-off
Gallielouli	2010	USD30mn	Write-off
	2019	USD78mn	Write-off
Congo	2019	Unclear	Ongoing
	2008	Unclear	Deferment
Cuba	2010	USD2.8bn	Write-off; Deferment
	2016	Unclear (Up to 3bn)	Write-off
Djibouti	2019	USD800mn	Ongoing
Ecuador	2017-2018	USD1bn	Terms renegotiated
Ethiopia	2018	USD3.3bn	Deferment
Ethiopia	2019	Unclear	Ongoing
	2002-2003	USD54mn	Write-off
Ghana	2007	USD126mn	Write-off
	2014-2015	USD1.5bn	Withheld further lending
Kazakhstan	2018	Unclear	Deferment
Lesotho	2018	USD10.6mn	Write-off
Maldives	2019	Unclear	Ongoing
Mongolia	2017	USD2.2bn	Refinancing: Deferment
Managhiana	2017	USD34mn	Write-off
Mozambique	2018	Unclear	Deferment
Sudan	2017	USD160mn	Write-off
	2012	USD307mn	Terms renegotiated
Sri Lanka	2016-2018	Unclear (At least USD1.1bn)	Asset seizure; Write-off; Refinancing
	2019	USD1bn	Refinancing
Tajikistan	2011	Unclear	(Rumored) asset seizure
Tonga	2018	Unclear	Deferment
Ukraine	2014	USD3bn	Deferment
Vanuatu	2016-2017	USD5mn	Write-off
	2015	Unclear	Withheld further lending
Venezuela			Deferment; Terms renegotiated; Withheld
renezuela	2016	Unclear	further lending
	2018	Unclear	(Rumored) refinancing; Deferment
Zambia	2017	Unclear (Up to USD4.4bn)	Ongoing
	2010	USD54mn	Deferment
Zimbabwe	2015	USD40mn	Write-off
	2018	n/a	Withheld further lending

Source: Rhodium Group research.

Table I: Summary of China's External Debt Renegotiations

Country	Year	Amount renegotiated	Outcome
Angola	2015	USD21.3bn	Refinancing; Terms renegotiated
Aliguia	2018	Unclear	Ongoing
Botswana	2018	USD7.2mn	Write-off
Cambodia	2016	USD90mn	Write-off
	2001	USD34mn	Write-off
Cameroon	2007	USD32mn	Write-off
Gallieroon	2010	USD30mn	Write-off
	2019	USD78mn	Write-off
Congo	2019	Unclear	Ongoing
	2008	Unclear	Deferment
Cuba	2010	USD2.8bn	Write-off; Deferment
	2016	Unclear (Up to 3bn)	Write-off
Djibouti	2019	USD800mn	Ongoing
Ecuador	2017-2018	USD1bn	Terms renegotiated
Ethiopia	2018	USD3.3bn	Deferment
Еппоріа	2019	Unclear	Ongoing
	2002-2003	USD54mn	Write-off
Ghana	2007	USD126mn	Write-off
	2014-2015	USD1.5bn	Withheld further lending

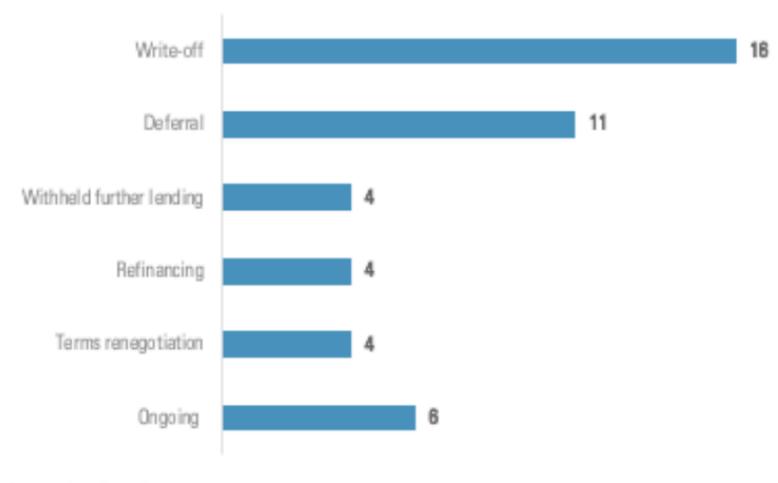
Source: Kratz et al. 2019 Table I: Summary of China's External Debt Renegotiations

Table I: Summary of China's External Debt Renegotiations						
Kazakhstan	2018	Unclear	Deferment			
Lesotho	2018	USD10.6mn	Write-off			
Maldives	2019	Unclear	Ongoing			
Mongolia	2017	USD2.2bn	Refinancing; Deferment			
Mozambique	2017	USD34mn	Write-off			
iviozambique	2018	Unclear	Deferment			
Sudan	2017	USD160mn	Write-off			
	2012	USD307mn	Terms renegotiated			
Sri Lanka	2016-2018	Unclear (At least USD1.1bn)	Asset seizure; Write-off; Refinancing			
	2019	USD1bn	Refinancing			
Tajikistan	2011	Unclear	(Rumored) asset seizure			
Tonga	2018	Unclear	Deferment			
Ukraine	2014	USD3bn	Deferment			
Vanuatu	2016-2017	USD5mn	Write-off			
	2015	Unclear	Withheld further lending			
Venezuela	2016	Unclear	Deferment; Terms renegotiated; Withheld further lending			
	2018	Unclear	(Rumored) refinancing; Deferment			
Zambia	2017	Unclear (Up to USD4.4bn)	Ongoing			
	2010	USD54mn	Deferment			
Zimbabwe	2015	USD40mn	Write-off			
	2018	n/a	Withheld further lending			

Source: Kratz et al. 2019

Figure I: Distribution of Debt Renegotiation Outcomes

Instances



Source: Kratz et al. 2019

Source: Rhodium Group research.



#### **Environment effects**



- "Many of BRI's major corridors are known to pass through ecologically sensitive areas."
  - Teese, Patrick, "Exploring the Environmental Repercussions of China's Belt and Road Initiative," EESI, October 30, 2018.
- "Deforestation risks are especially high in Southeast Asia."
  - Losos, Elizabeth, Alexander Pfaff, and Lydia, "The Deforestation Risks of China's Belt and Road Initiative," Brookings, January 28, 2019.
- "In 2018, over 40 percent of the BRI lending for the power sector was still in coal projects."
  - Nakano, Jane, "Greening or Greenwashing the Belt and Road Initiative?" Center for Strategic and International Studies, May 1, 2019.
- "Much of the infrastructure China is planning and building through the BRI has cascading risk potential [for the environment]."
  - Ewing,, Jackson, "Making the Belt and Road Environmentally Sustainable: 'Greening' the BRI is a two-way street that starts in Beijing," *The Diplomat*, May 3, 2019.









# **Pros and Cons**





#### **Pros and Cons of BRI**



#### Pros

- These countries are poor and need infrastructure to develop
- Assistance from rich countries and World Bank comes with strings
- Gives China an outlet for its excess production

#### Cons

- Debt to China may be hard to manage
- If countries default, China may take ownership
- China uses mostly its own firms and workers to build









# Implications for US







### Implications of BRI for US



#### Implications for US

- Direct effects: few
- US benefits from infrastructure built by China

#### • But...

- Chinese-built infrastructure may give China access and control
- China expands its sphere of influence
- China will "make the rules" of the future world economy
- It marginalizes the US geostrategic influence in Asia, Africa, and perhaps Europe









# Thank you! Any Questions?

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