



Harmonizing Investment and Financing Standards towards Sustainable Development along the Belt and Road

Economic Development along the Belt and Road (2019)

China Development Bank

United Nations Development Programme

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Foreword

Under the cooperative framework of jointly building the Belt and Road, the United Nations Development Programme (UNDP) and China Development Bank (CDB) jointly conducted research and developed this report on *Harmonizing Investment and Financing Standards towards Sustainable Development along the Belt and Road*. The report summarizes the investment and financing practices of all parties involved in jointly building the Belt and Road from an objective and rational perspective, and proposes forward-looking policy recommendations. It is an important measure to implement the outcome of the 2nd Belt and Road Forum for International Cooperation; it is not only the result of a useful process of professional knowledge and experience sharing in international investment and financing cooperation, but also a positive exploration for both sides to contribute to the high-quality development of Belt and Road. I believe that the publication of this report will further enhance society's understanding of the joint pursuit of the Belt and Road, while providing useful guidance to all parties jointly working towards the implementation of the Belt and Road.

In the fall of 2013, Chinese President Xi Jinping announced the Belt and Road Initiative (BRI), which is designed to mobilize more resources, strengthen connectivity links, leverage potential growth drivers, and connect the markets with a view to integrating more countries and regions into economic globalization and achieving shared prosperity through mutually beneficial cooperation. Although the BRI originated in China, it belongs to the world. It opens up new space for global economic growth, produces new platforms for international trade and investment and offers new ways for improving global economic governance. Indeed, this initiative has helped improve people's lives in countries involved and created more opportunities for common prosperity.

Aligning the BRI with the UN 2030 Agenda for Sustainable Development adds to the momentum of achieving inclusive development and sustainable growth. The Initiative's goals, principles, and implementation plans are highly consistent with those of the United Nations 2030 Agenda for Sustainable Development. The BRI has received the positive response and broad support of the international community. It has become an important driving force for promoting global economic recovery, a key carrier for all countries

to share development opportunities and accomplishments, and a crucial platform for building a community of shared future for mankind. The report found that the BRI's vision is to fully respect and align with the development strategies and practical needs and concerns of participating countries; improve the quality of investment; promote sustainable job creation and environmental sustainability; and introduce new models of cooperation for sustainable development of the global economy.

The BRI adheres to the principle of achieving shared growth through dialogue and collaboration, and provides opportunities for countries and international organizations around the world to carry out practical cooperation. So far, China has signed 197 cooperation agreements with 137 countries and 30 international organizations, including more than ten UN agencies. The BRI and its core concepts have been incorporated into many important documents of the UN and other international organizations. Over the past six years, total imports and exports between China and other nations along the Belt and Road has exceeded USD 6 trillion. A general connectivity framework consisting of six corridors, six connectivity routes and multiple countries and ports has been put in place. A large number of infrastructure and cooperation projects have been launched. These efforts have stimulated local economies, improved people's livelihood, and created a path of win-win cooperation.

Also promoting "soft connectivity", the BRI attaches great importance to connectivity-related standards and regulations, and contributes to strengthening the global governance system. The Chinese government has issued the Action Plan on the Belt and Road Standard Connectivity and signed more than 80 standardization cooperation framework documents with about 50 countries and regions. It has also issued the *Guiding Principles on Financing the Development of the Belt and Road* and the *Debt Sustainability Framework for Participating Countries of the Belt and Road Initiative* to provide long-term, stable, sustainable and risk-controllable financing support for the building of the BRI. China has always been a participant, builder and contributor to the existing international system. It adheres to its solemn commitment to the purposes and principles of the United Nations Charter and resolutely safeguards the current international system with the UN as its core. The international community will give us credit for that.

At present, in advancing the Belt and Road Initiative, like architects refining the blueprint, we should enter a phase of high-quality development. We are willing to continue to gather consensus among all parties, outline a vision for cooperation, and further opening up to the outside world. We will strengthen communication, consultation and cooperation with UN agencies, adhere to the concepts of openness, greenness, and integrity, adhere to a

vision for development that is people-centered, and actively align with universally accepted international standards and regulations. We will strive to maintain high standards, benefit people's livelihood and achieve sustainability and make unremitting efforts to build a community of shared future for mankind.

Ning Jizhe

Vice Chairman, National Development and Reform Commission.

October, 2019

Foreword

It is a great pleasure to present this analytical report developed in cooperation between UNDP and the China Development Bank (CDB).

The 2030 Sustainable Development Agenda, with its 17 Sustainable Development Goals (SDGs), has created the framework for an unprecedented global effort to eliminate poverty, protect our environment, and create a peaceful and prosperous world for all of humanity. The stakes in this effort could not be higher; the very habitability of the planet that future generations will inherit will be determined by our success.

The SDGs were created as an extension and expansion of the previous eight Millennium Development Goals, or MDGs. China's contribution to the MDGs by the target date of 2015 has been widely noted—most notably the target of halving global poverty incidence (MDG1) by lifting more than 750 million people out of poverty. China's performance in other core MDGs such as health and education also underpinned successful global outcomes.

Having emerged as a global economic power, China has the potential to make an equally important contribution to SDG attainment. In addition to pursuing the SDGs at home, China is becoming a major source of financing and investment to development in other developing countries. A key mechanism in China's cooperation is the Belt and Road Initiative (BRI), with its vision of enhanced global connectivity and facilitation of global flows of finance, trade, innovation, knowledge and cultural exchanges.

Economic growth is very important for sustainable development. However, growth alone is far from all that is needed. Indeed, the wrong kind of growth, i.e., growth that harms the environment or exacerbates gaps between wealthy and poor population groups, risks directly undermining SDG attainment. China's own national agenda and aspiration of pursuing high quality growth and an ecological civilization are a direct response to that risk.

The purpose of this report is to help manage sustainability risks along the Belt and Road through the development and effective implementation of harmonized standards to guide BRI lending and investments. In developing the recommendations on standards that the report puts forward, the expert team was able to draw on China's own increasingly rigorous standards governing domestic and foreign investments as well as best practice standards utilized by financial institutions around the globe including multilateral development banks,

national development banks and other lenders. The recommendations also factor in emerging development challenges such as climate change and suggest inbuilt measures to anticipate and manage their impact. UNDP considers this important because following through on these recommendations would be a significant contribution to closely aligning BRI implementation with the principles of the SDGs.

I would like to thank the leadership of the National Development Reform Commission (NDRC) and CDB for the chance to work with their experts on this report. I hope that this effort will make a contribution to inform the thinking of policymakers in China and in Belt and Road partner countries as they jointly shape their cooperation to bolster support towards the 2030 Agenda.



Valerie Cliff

**Acting Regional Director for Asia & the Pacific,
Deputy Assistant Administrator, UNDP.**

Preface

On the margins of the 71st UN General Assembly session in September 2016, UNDP and the government of the People’s Republic of China signed a Memorandum of Understanding (MoU) on cooperation on the Belt and Road initiative. This was followed by an Action Plan signed in May 2017 during the first Belt and Road Forum. In the meantime, China Development Bank (CDB) was designated as a key implementing partner of the Action Plan and a Joint Statement from May 2017 formalized this cooperation. The partnership with China on the BRI is grounded in UNDP’s firm commitment to facilitating sustainable development across BRI partner countries and putting the 2030 Agenda into action.

In December 2017, UNDP and CDB published their first joint report on *The Economic Development along the Belt and Road*. It surveyed the economic landscape of countries and regions along the Belt and Road, and highlighted the initiative’s prospects and challenges. Drawing on the latest available economic data on trade, investment, industrial cooperation, and financial integration, the report reviewed the role of the BRI in promoting the integration of global value chains, the opportunities this Initiative would create for investors, and the untapped potential of people-to-people exchanges along the Belt and Road. The report also analysed opportunities as well as challenges that have arisen across BRI partner countries and regions since the launch of the initiative, providing stakeholders with references for policy- and decision-making on prospective engagement with the initiative.

The main highlight of the 2017 *Economic Development along the Belt and Road* report was to propose the “double circulation model”¹ as the theoretical basis for the economic development of the BRI and analyse the role of the Initiative in the global value chain. The BRI has promoted trade connectivity, increased trade volume and allowed countries to attract increasing amounts of foreign direct investment (FDI). The cooperation of industrial value chains in various countries has gradually deepened, financial integration has been continuously strengthened, and cooperation in capacity building and education has also

1 The global value chain is gradually shifting from a “centre-periphery” single circulation model centred around developed countries to a double circulation model placing emerging economies at its core, and linking emerging economies with developed countries, and emerging economies with developing countries in Asia, Africa and Latin America.

reached a new level.

Following the 2017 report, this study, *Harmonizing Investment and Financing Standards towards Sustainable Development along the Belt and Road*, is another important outcome of the UNDP-CDB strategic partnership. Specific areas of this partnership include: (1) deepening joint research on strategic issues such as economic development analysis of Belt and Road partner countries, BRI's role in sustainable development, sustainable financial instruments, inclusive economic growth and poverty alleviation; (2) advancing joint efforts toward the development of a network of sustainable investment promotion facilities; and (3) implementing projects with sustainable development outcomes, accumulating best practices, and enhancing sustainable development dividends for BRI partner countries.

For this present report, we considered issues that are key for promoting sustainable investment and financing activities and sustainable development in BRI partner countries and globally. This determined the research scope of the report on investment and financing rules. The report focuses on environmental and social frameworks, debt, procurement, risk assessment, and post-project evaluation that are directly related to the sustainability of BRI investment and financing activities and their ability to contribute to the attainment of the SDGs.

The definition of countries and projects falling under the “Belt and Road” umbrella is elusive. The present report employs the definition of “BRI partner country” or “BRI participating country” —countries that have signed BRI cooperation agreements/MoUs with China—contained in China's official documents and media portals, particularly the Belt and Road Portal. According to the portal, by end-August 2019, China has signed cooperation agreements/MoUs with 166 partner countries and international organizations. The definition of “BRI projects” herewith employed refers to projects implemented by BRI partner countries/institutions under the initiative's key cooperation principles or cooperation framework. These include connectivity-enhancing infrastructure, such as roads, ports, railways, networks and telecommunications; energy infrastructure, such as power grids and power plants; as well as projects designed to promote industrialization, trade facilitation, and economic and trade cooperation.

The report is presented in both English and Chinese versions. The two versions are identical in terms of data, logic, and substantive content. However, to respect the language environment of readers from different language backgrounds and the traditions in official presentation of analytical results, there are slight deviations from verbatim translation in the two texts.

Abbreviations and acronyms

ABC	Agricultural Bank of China
ADB	Asian Development Bank
AfDB	African Development Bank
AIIB	Asian Infrastructure Investment Bank
ASEAN	Association of Southeast Asian Nations
BOC	Bank of China
BMZ	German Federal Ministry for Economic Cooperation and Development
BRF	Belt and Road Forum
BRI	Belt and Road Initiative
BRICS	Brazil, Russian Federation, India, China and South Africa
CaDB	Caribbean Development Bank
CAF	Development Bank of Latin America
CBIRC	China Banking and Insurance Regulatory Commission
CCB	China Construction Bank
CDB	China Development Bank
CIC	China Investment Corporation
CIPS	Cross-border Interbank Payment System
CIRC	China Insurance Regulatory Commission
CIS	Commonwealth of Independent States
CMB	China Merchants Bank
CPI	Consumer Price Index
CRBC	China Road and Bridge Corporation
CSRC	China Securities Regulatory Commission
DBS	Development Bank of Singapore
DBSA	Development Bank of Southern Africa
DMRB	Design Manual for Roads and Bridges
DOE	Department of Environment
DSA/DSF	Debt Sustainability Analysis / Framework
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECA	Export Credit Agency
EDCF	Economic Development Cooperation Fund

EDI	Energy Development Index
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EIU	The Economist Intelligence Unit
EMP	Environmental Management Plan
EP	Equator Principles
EPC	Engineering, Procurement and Construction
EPFI	Equator Principles Financial Institution
ESA	Environmental and Social Assessment
ESCP	Environmental and Social Commitment Plan
ESDD	Environmental and Social Due Diligence
ESF	Environmental and Social Frameworks
ESG	Environmental, Social and Governance
ESIA	Environmental and Social Impact Assessment
ESMP/ESMS	Environmental and Social Management Plan/System
ESP	Environmental and Social Policies
ESRM	Environmental and Social Risk Management
ESRP	Environmental and Social Review Procedures
ESS	Environmental and Social Standards
EU	European Union
EXIM	Export-Import
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FI	Financial Intermediary
FTSE	Financial Times Stock Exchange
GDP	Gross Domestic Product
GE	General Electric
GEF	Global Environment Facility
GFC	Green Finance Committee
GFI	Green Finance Initiative
GHG	Green House Gas
GNI	Gross National Income
GPA	Government Procurement Agreement
GRI	Global Reporting Initiative
HIPC	Heavily Indebted Poor Countries
HSBC	Hong Kong and Shanghai Banking Corporation
IB	Industrial Bank
IBRD	International Bank for Reconstruction and Development
ICBC	Industrial and Commercial Bank of China

ICMA	International Capital Market Association
ICSID	International Centre for Settlement of Investment Disputes
IDA	International Development Association
IDB	Inter-American Development Bank
IDFC	International Development Finance Club
IE	International Enterprise
IEG	Independent Evaluation Group
IFC	International Finance Corporation
ILO	International Labour Organization
IMF	International Monetary Fund
ING	Internationale Nederlanden Groep (International Netherlands Group)
IPO	Initial Public Offering
IPP	Indigenous People's plan
IRIR	Islamic Republic of Iran (Islamic Republic of) Railways
IT	Information Technology
IsDB	Islamic Development Bank
ISO	International Organization for Standardization
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
KfW	Kreditanstalt für Wiederaufbau (German Development Bank)
LAC	Latin America and the Caribbean
LCOE	Levelized Cost of Energy
LDC	Least-Developed Country
LGBT	Lesbian, Gay, Bisexual, Transgender
LIBOR	London Interbank Offered Rate
LIC	Low-income Countries
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MAC	Market Access Countries
M&A	Mergers and Acquisitions
M&E	Monitoring and Evaluation
MDB	Multilateral Development Banks
MDRI	Multilateral Debt Relief Initiative
MEE	Ministry of Ecology and Environment
MEP	Ministry of Environmental Protection
MFA	Ministry of Foreign Affairs
MIGA	Multilateral Investment Guarantee Agency
MIIT	Ministry of Industry and Information Technology
MOF	Ministry of Finance
MOFCOM	Ministry of Commerce

MOHURD	Ministry of Housing and Urban-Rural Development
MoU	Memorandum of Understanding
MPA	Macro Prudential Assessment
NDB	New Development Bank
NDC	Nationally Determined Contributions
NDRC	National Development and Reform Commission
NGO	Non-Governmental Organization
NSSF	National Social Security Fund
OCBC	Overseas Chinese Banking Corporation
ODA	Official Development Assistance
ODI	Overseas Direct Investment
OECD	Organization for Economic Cooperation and Development
OHSMS	Occupational Health and Safety Management System
PBOC	People's Bank of China
PDB	Power Development Board
PPA	Power Purchase Agreement
PPM	Project-affected People's Mechanism
PPP	Public Private Partnership
PRI	Principles for Responsible Investment
PRSP	Poverty Reduction Strategy Paper
RBC	Responsible Business Practices
R&D	Research & Development
RMB	Renminbi (Chinese currency)
SAC	Standardization Administration of China
SAFE	State Administration of Foreign Exchange
SASAC	State-owned Assets Supervision and Administration Commission
SASB	Standards Association Standards Board
SCO	Shanghai Cooperation Organization
SDG	Sustainable Development Goals
SEA	South East Asia
SEPA	State Environment Protection Administration
SFA	State Forestry and Grassland Administration
SGR	Standard Gauge Railway
SIA	Social Impact Assessment
SIAC	Singapore International Arbitration Centre
SINOSURE	China Export and Credit Insurance Corporation
SME	Small and Medium Enterprise
SMI	Sarana Multi Infrastruktur
SPDB	Shanghai Pudong Development Bank
SRF	Silk Road Fund

SRI	Socially Responsible Investment
SSCAF	South-South Cooperation Assistance Fund
TDB	Trade and Development Bank
TMT	Technology, Media and Telecommunications
UAE	United Arab Emirates
UEP	United Energy Pakistan
UK	United Kingdom
UKEF	United Kingdom Export Finance
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNE	United Nations Environment
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
USD	US Dollar
VEB	Vnesheconombank (Russian Development Bank)
WB	World Bank
WBG	World Bank Group
WRI	World Resources Institute
WTO	World Trade Organization
WWF	World Wildlife Fund

Table of Contents

Executive Summary	1
Chapter 1 Overview of the landscape of BRI financing and investment	1
1.1 Linkages between the BRI and the 2030 Agenda	1
1.2 Financing and investment trends along the Belt and Road (2013-2018)	3
1.3 Investment and financing environment along the Belt and Road	10
1.4 Opportunities and challenges for investment and financing along the Belt and Road	20
1.5 The role of harmonized standards in the BRI as a way forward	27
Chapter 2 BRI participating institutions, major financing and investment mechanisms	30
2.1 Main participating institutions in BRI financing	30
2.1.1 Chinese financial institutions	30
2.1.2 Non-Chinese financial institutions	37
2.1.3 Collaboration between Chinese and international financial institutions	40
2.2 Major financing and investment mechanisms along the Belt and Road	44
2.2.1 Loans	44
2.2.2 Bonds	46
2.2.3 Equity	48
2.2.4 Grant-based funds	51
2.2.5 Public-Private Partnerships (PPPs)	52
2.3 Main investment and financing practices along the Belt and Road in comparison with global practices	54
Chapter 3 Analysis of investment and financing in Southeast Asia	58
3.1 Investment and financing trends, background context in Southeast Asia	58
3.1.1 FDI in Southeast Asia	58
3.1.2 Economic, social, and legal environment in Southeast Asia	61
3.1.3 Social, political and legal environment in Southeast Asia	65
3.2 Challenges and risks of investment and financing in Southeast Asia	66
3.2.1 Banking sector openness	67

3.2.2	Guarantee system	68
3.2.3	Dispute resolution and arbitration	68
3.2.4	Foreign exchange control regulations	69
3.3	Best practice of sustainable investment and financing in Southeast Asia	70
3.3.1	Sultan Abdul Halim Muadzam Shah Bridge (Second Penang Bridge)	70
3.3.2	Nam Ou River Cascade Hydropower Project	72
Chapter 4	Analysis of infrastructure investment along the Belt and Road	75
4.1	Linkages between the SDGs and infrastructure financing along the Belt and Road	75
4.2	Major trends in infrastructure investment along the Belt and Road	78
4.2.1	Energy	80
4.2.2	Transport	81
4.2.3	Industrial parks	82
4.3	Major financing mechanisms for BRI infrastructure investment	83
4.4	Cases studies of BRI infrastructure investment projects	86
4.4.1	Mombasa-Nairobi Standard Gauge Railway (SGR)	86
4.4.2	Karot Hydropower Project, Pakistan	88
Chapter 5	Global investment and financing standards towards sustainability	91
5.1	Environmental and social frameworks	92
5.1.1	Environmental and social frameworks of multilateral institutions	92
5.1.2	Environmental and social frameworks of NDBs and other financial institutions	100
5.1.3	ESF monitoring and evaluation mechanisms	108
5.2	Debt sustainability frameworks	110
5.2.1	UNCTAD Principles for responsible sovereign lending and borrowing	110
5.2.2	World Bank-International Monetary Fund Debt Sustainability Framework (DSF)	112
5.2.3	Debt restructuring: The Paris Club	114
5.3	Main global procurement principles	115
5.3.1	World Trade Organization (WTO) Government Procurement Agreement (GPA)	115
5.3.2	World Bank procurement rules	116
5.3.3	European Union public procurement	116
5.3.4	The Swiss challenge system	117
5.4	Alignment with national priorities and systems	117

5.5	Sustainable risk assessment and management frameworks	118
5.5.1	The Economist Intelligence Unit risk identification system	119
5.5.2	The Multilateral Insurance Agency (MIGA) political risk insurance	120
5.6	Implementation of global standards and best practices	120
5.6.1	MDBs best practices	120
5.6.2	NDBs and other financial institutions' best practices	124
Chapter 6 Chinese investment and financing standards for sustainable development along the Belt and Road		127
6.1	Sustainable investment development in China	128
6.1.1	Guidelines and best practices in China	130
6.1.2	Green bond development in China	134
6.2	Chinese sustainable investment and financing along the Belt and Road	136
6.2.1	China's fundamental laws and regulations on overseas investment and financing	137
6.2.2	China's special policies, principles, and standards for investment and financing along the Belt and Road	138
6.3	Chinese best practice in sustainable investment	143
6.3.1	Industrial and Commercial Bank of China	143
6.3.2	China Development Bank	145
6.4	Opportunities and challenges for Chinese investors for harmonizing investment and financing standards along the BRI	147
6.4.1	Opportunities for Chinese financial institutions	147
6.4.2	Challenges faced by Chinese financial institutions	148
Chapter 7 Toward harmonized standards for the BRI		151
7.1	Taking stock of common norms for investment and financing	151
7.2	The benefits of harmonizing standards for financing and investment practices along the Belt and Road	157
7.3	Potential challenges ahead in harmonizing standards	161
7.3.1	Case study: Bangladesh	163
7.4	Fundamental considerations for the harmonization of standards along the Belt and Road, and the Capability Enhancement approach	169
7.4.1	Fundamental considerations	169
7.4.2	Practice in harmonizing standards: the Capability Enhancement approach	172

Chapter 8	Summary and key recommendations for formulating the framework of investment and financing standards along the Belt and Road	176
Annex 1	Summary and Mapping of Environmental and Social Frameworks of Multilateral Institutions	191
Annex 2	Environmental and Social Frameworks of Selected National Development Banks	206
Annex 3	International Debt Sustainability Frameworks	209
Annex 4	BRI investment risk questionnaire, 2018	212
Annex 5	Financing the 2030 Agenda: The Addis Ababa Action Agenda	214
Annex 6	SINOSURE 2018 Handbook of Country Risk	215
Annex 7	China’s Outbound Mergers and Acquisitions (M&A) and Grant-based Funds	216
Annex 8	International conventions, agreements and principles relevant to the BRI	220
References		222

Figures

Figure 1.1	Linkages between the SDGs and the BRI	2
Figure 1.2	Accomplishments along the Belt and Road, 2013-2018	3
Figure 1.3	Number of train trips between Europe and China, 2011-2018	4
Figure 1.4	Main destination countries along the Belt and Road (by train trips)	5
Figure 1.5	Tourism and cultural achievements	5
Figure 1.6	China’s foreign trade along the Belt and Road, 2013-2018	6
Figure 1.7	China’s non-financial ODI along the Belt and Road, 2015-2018, in billion USD	7
Figure 1.8	Construction contracts signed by China along the Belt and Road, 2015-2018	7
Figure 1.9	Chinese investment along the Belt and Road by sector, 2017	8
Figure 1.10	Top 5 developing country destinations of Chinese outward FDI, 2018 (in countries with which China has a signed MoU on the BRI, in billion USD)	9
Figure 1.11	Selected countries with advanced financial partnerships with China	9
Figure 2.1	Chinese investments abroad in equity	49
Figure 3.1	FDI flows in Southeast Asia, 1990-2018	59
Figure 3.2	Southeast Asia FDI stock from China in USD million, 2013-2017	60
Figure 3.3	Southeast Asia FDI flow from China in USD million, 2013-2017	60
Figure 3.4	2019 Ease of Doing Business Index Rankings for non-Mekong SEA Countries	61
Figure 3.5	2019 Ease of Doing Business Index for Mekong countries of SEA	62
Figure 3.6	Southeast Asian countries governance indicators (percentile ranks)	66
Figure 4.1	Linkages between sustainable infrastructure and the SDGs	76
Figure 4.2	Baseline estimates for infrastructure investment needs in Asia-Pacific in billion USD by sector, 2016-2030 (USD billion in 2015 prices)	78
Figure 4.3	Chinese investments and construction projects along the Belt and Road, by sector, 2013-2018	80
Figure 4.4	BRI energy investments and construction contracts by energy source, 2013-2018	81
Figure 4.5	BRI investments and construction contracts in transport, 2013-2018	82

Figure 5.1	ESS commonalities over all MDBs	97
Figure 5.2	Change in LCOE for Solar PV/Coal, 2009-2018	121
Figure 5.3	Carbon prices used by development banks compared to High-Level Commission recommendations	122
Figure 5.4	Number of GRI sustainability reports from 1999-2016	126
Figure I	AIIB ESF elements	196
Figure II	KfW Development Bank's sustainability framework	206
Figure III	DBSA's Environmental, social and institutional appraisal process	208
Figure IV	China's outbound M&A by sector in million USD, 2017	217
Figure V	China's outbound M&A by sector in million USD, 2005-2010	217

Tables

Table 1.1	Key economic and social indicators of countries along the Belt and Road (2018 or most recent year available)	11
Table 1.2	The income level of selected countries along the Belt and Road, 2019-2020	15
Table 1.3	Infrastructure risk rating of countries along the Belt and Road	15
Table 1.4	National security indicator scores of countries along the Belt and Road	16
Table 1.5	Additional economic and social indicators of countries along the Belt and Road (2018 or most recent year available)	17
Table 2.1	Chinese financial institutions in the BRI	31
Table 2.2	Development funds China initiated or participated in	35
Table 3.1	Key economic and development indicators for Southeast Asian countries (2018 or most recent year available)	63
Table 3.2	Key financial and debt indicators in SEA (2018 or most recent year available)	64
Table 4.1	Top 5 sectors attracting Chinese outward FDI in selected regions through 2017	79
Table 4.2	Selected industrial park projects under the BRI	83
Table 4.3	Major financing mechanisms for BRI infrastructure investment	84
Table 5.1	Environmental and Social Framework objectives	93
Table 5.2	Summary of MDBs' environmental and social standards	94
Table 5.3	Specific areas in each ESS covered by all MDBs	97

Table 5.4	MDB coverage of the 10 ESS	99
Table 5.5	Largest National Development Banks in the world economy	101
Table 5.6	Summary of National Development Banks’ environmental and social standards	103
Table 5.7	MDB M&E frameworks	109
Table 5.8	Common procedures for common standards	109
Table 6.1	Policies for sustainable investment and financing in China	128
Table 6.2	Best practices of Chinese financial institutions for sustainable investment	133
Table 6.3	Regulations on overseas investment and financing	137
Table 7.1	MDB and NDB norms in international development finance and investment	152
Table 7.2	Chinese norms and regulations linked to ESS	154
Table 7.3	Benefits of harmonizing standards along the Belt and Road	158
Table I	Extracts from ADB’s key safeguard areas and principles	193
Table II	Environmental and social impacts	200
Table III	Labour and employment	201
Table IV	Pollution prevention	202
Table V	Health and safety	202
Table VI	Land use and resettlement	203
Table VII	Biodiversity conservation and natural resource management	203
Table VIII	Indigenous communities	204
Table IX	Cultural heritage	204
Table X	Financial intermediaries	204
Table XI	Stakeholder engagement	205
Table XII	DSF debt burden thresholds and benchmarks	209
Table XIII	Main risks and obstacles along the Belt and Road identified in the survey	213
Table XIV	Country risk rankings in the SINOSURE 2018 Handbook	215

Boxes

Box 1.1	BRI’s Pivotal Role in Attaining the Paris Agreement Goals	28
Box 5.1	Environmental, Social and Governance (ESG) Assessment Framework	91
Box 5.2	AIIB: Multilateral Development Finance with Common Standards	96
Box 5.3	IMF-WB Debt Sustainability Analysis (DSA)	113

Box 6.1	China Banking Industry Joint Commitment to Green Credit	132
Box 6.2	Guiding Principles on Financing the Development of the Belt and Road	139
Box 6.3	Green Investment Principles for the Belt and Road	141
Box 6.4	Debt Sustainability Analysis Framework for the Belt and Road	142
Box 7.1	CaDB's Approach to Applying Loan Standards	173

Executive Summary

Coverage of the Report and Research Context

This report, jointly developed by China Development Bank (CDB) and the United Nations Development Programme (UNDP), reviews global practices in finance and investment flows and ways to align financing associated with the Belt and Road Initiative (BRI) with sustainable development principles. It proposes pragmatic recommendations for devising harmonized standards along the Belt and Road to further promote the Initiative’s aspiration of creating win-win partnerships for inclusive development, while advancing SDG attainment.

The recommendations rely on a core set of components as potential building blocks, which are identified in the report. These components are the global 2030 Agenda, the practices of China, of BRI partner countries and of multilateral and bilateral development institutions, as well as UN Conventions and Agreements. They also include forward-looking elements to safeguard the provision of global and regional public goods in areas where current practices could lead to significant new risks in the future. This is particularly important for infrastructure projects that are investments with an inevitably long horizon.

The BRI has reached global dimensions since its inception in 2013 by supporting the economic and social development of countries across four continents through enhanced infrastructure connectivity, policy coordination, trade flows, financial integration, and people-to-people exchanges. The long-term horizon and broad underlying objectives of the BRI have many synergies with the 2030 Agenda for Sustainable Development and China can play a potentially major role in global efforts to attain the SDGs.

The BRI has, however, also faced some issues, particularly regarding the economic, environmental and social sustainability of its projects—e.g., pertaining to carbon intensity, local job creation, and debt sustainability. These issues partly reflect the initiative’s complex nature, its high level of ambition, and the broad diversity of BRI partner countries. Unbalanced investment outcomes and several risks that have materialized could, however, have been mitigated if harmonized, transparent, SDG-conforming financing and investment standards and regulations had been in place to guide BRI implementation.

Both China and international partners are thus calling for the establishment of

harmonized, BRI-wide standards for financing and investment. Such standards have the potential to become an effective coordination mechanism for China and BRI partner countries to take coordinated collective action to realize shared development objectives along the Belt and Road as well as the global SDGs. These include reducing poverty and inequality, curbing carbon intensity to mitigate climate change, and strengthening the rules-based system of international trade and investment.

Local communities would also benefit from harmonized, SDG-conforming standards applied effectively and consistently. Such standards can reduce the vulnerability of communities to environmental and social risks—including conflict—while enhancing the ability of local communities to voice their needs and concerns and improving local livelihoods as well as the living environment. Overall, they can greatly enhance local communities’ ownership of projects.

In addition, harmonized Belt and Road investment and financing standards could increase the investment of international multilateral institutions, investment banks and commercial banks, promote the participation of private capital in the international market, and provide more valuable and substantial sources of funding for BRI projects.

Attaining standards along the Belt and Road as described in the report will take time and require a wide-ranging process, for which the report offers some key building blocks. The process would need to build on existing standards and regulations of each partner country, and on the identified needs for improvement to bring them to a level that aligns with best-practice standards. These best practice standards can be defined pragmatically depending on country context but would need to conform to the main guiding principles identified in the report. The report also recommends that China works with BRI participating countries as equal partners, reaching consensus through an iterative process to effectively assist them in strengthening their institutional and human resource capabilities to enable adopting, monitoring, and implementing these standards as part and parcel of BRI implementation. As the process gains ground, a globally significant group of countries adopting standards conducive to sustainable development and in conformity with worldwide best practice would emerge—which could substantially contribute to the attainment of SDGs at national, regional and global levels.

Structure of the Report and Research Methodology

This report has three main parts:

- A **review** of key aspects of the evolving development sustainability situation along the Belt and Road; of participating regions and selected industry sectors; and an in-depth

analysis of BRI financing and investment trends since 2013.

- A **comparative mapping** of the financing and investment standards adopted by Multilateral Development Banks (MDBs), National Development Banks (NDBs) and Chinese financial institutions—illustrating how harmonized standards can enhance the overall quality of BRI projects and contribute towards greater provision of global public goods.

- A **systematic framework** for financing and investment standards along the Belt and Road, putting forward eight main principles—each with specific recommendations for introducing BRI-wide standards.

To ensure the quality of the report, the research team maintained a pragmatic and global perspective. We circulated a questionnaire that surveyed more than 50 Chinese companies involved in BRI projects to gain an insight on their views regarding key challenges and risks for their investments. The UK Treasury’s Belt and Road Expert Board assisted the research team in distributing questionnaires and provided opinions and recommendations from international financial institutions as well as consulting and engineering firms based in London. We prepared several case studies, reviewed the international literature on the BRI, and conducted field research and consultations at the Industrial and Commercial Bank of China and at the China-Africa Development Fund to strengthen the empirical foundations of the report. We also organized a high-level discussion with Ministry of Finance officials to better understand the key challenges related to debt sustainability faced by both China and BRI partner countries.

To form a comprehensive picture of the BRI investment and financing landscape, we performed a trend analysis of the political, economic and social context in a large sample of BRI participating countries using key indicators (e.g., the Ease of Doing Business index, Political Stability Risk index, Debt/GNI ratios, etc.) from multiple publicly available sources from international (e.g., World Bank, International Monetary Fund, United Nations Conference on Trade and Development) and Chinese institutions (Ministry of Commerce, Ministry of Foreign Affairs, and CDB).

We also conducted an in-depth analysis of a specific region (South-East Asia) and of specific industrial sectors (e.g., infrastructure) based on investments during the past 5 years, with key financing indicators and several case studies. These help provide a deeper understanding of BRI financing and investment.

To study investment and financing standards at the global level, we mapped the rules and standards that major MDBs, leading NDBs and Chinese institutions have established and employed to make finance and investment practices economically, socially, and environmentally sustainable. We refer to the overlapping components of these as the “common

core”. As a further useful reference for harmonizing standards along the Belt and Road, the team also pointed to the role that relevant UN Conventions and Agreements could play, taking into account existing standards in BRI partner countries.

The recommendations emphasize the need to consider debt sustainability issues, carry out transparent and open procurement processes that ensure the equal and fair treatment of all suppliers, establish comprehensive risk management frameworks, and aim for the transfer of best-in-class technology in BRI projects. These elements, along with granting all stakeholders open access to information regarding projects and their financing, are central components of project sustainability and will contribute to aligning the BRI with the SDGs.

Next Steps

UNDP and CDB consider this report to be a first step in working towards harmonized standards for BRI investments and projects that support SDG attainment. Based on the ideas presented in the report and in consultation with stakeholders, developing concrete policy guidelines and an Industrial Practice Manual for investment and financing standards along the Belt and Road could be the next step towards harmonized standards.

Another important next step will be to complete needs assessments in BRI partner countries to identify gaps in institutional and professional human capacities that require bridging.

The guidelines and manuals can serve as practical guidance documents for the process of adoption and consistent implementation of harmonized standards along the Belt and Road. The process needs to be backed by appropriate funding as well as programs targeting country-specific capability-enhancing support plans that derive from the results of needs assessments.

Chapter 1 Overview of the landscape of BRI financing and investment

Announced by the Chinese government in 2013, the “Belt and Road Initiative” (BRI) is an engine for trade and investment growth as well as infrastructure development across Asia, Europe, and Africa. Explicitly positioned as an open and inclusive platform for international development cooperation, the initiative welcomes countries and organizations beyond the BRI’s geographic scope to participate in efforts to enhance growth and connectivity. By the end of August 2019, China signed a total of 195 MoUs or cooperation agreements with 166 foreign governments and international organizations, creating a basis for cross-regional economic, cultural, and scientific cooperation and exchange.² The BRI has five major pillars: policy coordination, infrastructure connectivity, unimpeded trade, financial integration, and people-to-people bonds.

1.1 Linkages between the BRI and the 2030 Agenda

The year 2015 has been regarded as a milestone in the global shift toward sustainable development: a principle embodied in the UN 2030 Agenda for Sustainable Development, the Addis Ababa Action Agenda on Financing for Development (Box 1 in Annex 5), and the Paris Agreement on Climate Change.

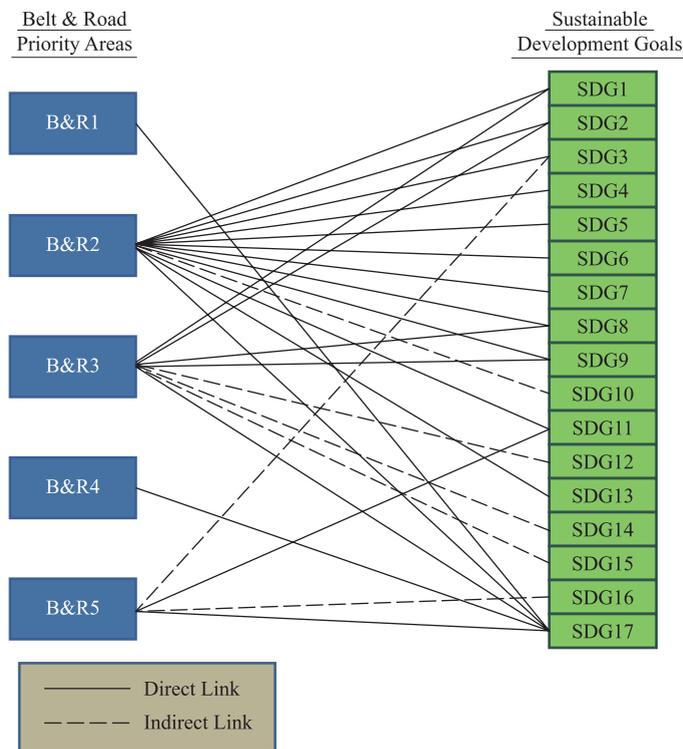
Within the 2030 Agenda, the 17 Sustainable Development Goals (SDGs) were adopted by all 193 UN member states. The SDGs are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. Achieving the SDGs means delivering durable poverty reduction, economic growth, and social and environmental sustainability. All stakeholders, including governments, citizens and businesses, need to act to bring about the changes necessary for SDG attainment.

Although the Belt and Road Initiative and the 2030 Agenda are different in nature and scope, they both present long-term visions that offer ample room for synergies. The five BRI priority areas highlighted by the Chinese government and the 17 SDGs proposed by the 2030 Agenda are closely related, sharing similar long-term visions and objectives. Figure 1.1

² Belt and Road Portal (2019, September 9). The picture of the six years of Belt and Road Initiative (link in Chinese, see references).

illustrates the relationship between them by highlighting the existing linkages between each BRI pillar and one or more SDGs. Thus, there is great potential for the BRI and the SDGs to mutually reinforce each other.

Figure 1.1 Linkages between the SDGs and the BRI³



Source: Hong, P. (2016)⁴

The first Belt and Road Forum for International Cooperation held in Beijing in May 2017 attracted global interest and was met with high expectations. Yet, it also witnessed the voicing of some concerns over what would be the potential impact of an unprecedented scale of investments and finance flowing from China. 144 countries were represented, including 29 heads of State.

3 The five priority areas of the BRI are: policy coordination, infrastructure connectivity, trade flows, financial integration, and people-to-people exchanges. The 17 SDGs are: Goal 1: no poverty; Goal 2: zero hunger; Goal 3: good health and well-being; Goal 4: quality education; Goal 5: gender equality; Goal 6: clean water and sanitation; Goal 7: affordable and clean energy; Goal 8: decent work and economic growth; Goal 9: industry, innovation and infrastructure; Goal 10: reduced inequality; Goal 11: sustainable cities and communities; Goal 12: responsible consumption and production; Goal 13: climate action; Goal 14: life below water; Goal 15: life on land; Goal 16: peace, justice and strong institutions; and Goal 17: partnerships to achieve the goals.

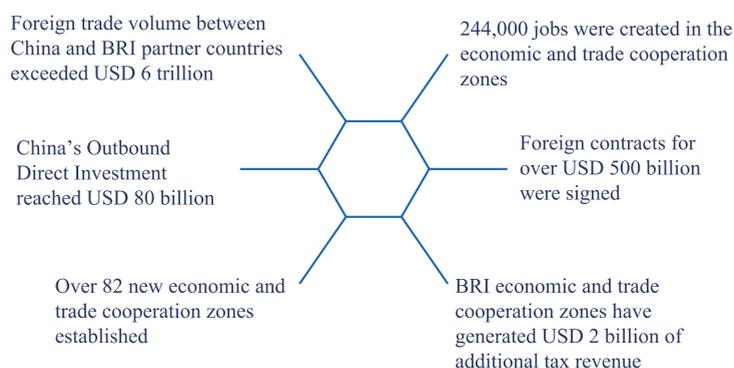
4 Hong, P. (2016). Jointly building the “Belt and Road” towards the Sustainable Development Goals, 14.

Over 70 international organizations, including UN Agencies, were also represented. The Forum confirmed the Belt and Road as a sustainable development-oriented Initiative, formally aligning it with the 2030 Agenda. The core concepts of “jointly building the Belt and Road Initiative” and “contributing to shared sustainable growth through enhanced connectivity, discussion and collaboration” were met with broad acceptance at the Forum and beyond.

1.2 Financing and investment trends along the Belt and Road (2013-2018)

From 2013 to 2018, total trade (two-way) between China and the countries along the Belt and Road⁵ exceeded USD 6 trillion, with a growth rate higher than China’s overall trade growth. China has directly invested more than USD 80 billion in BRI participating countries and these investments have grown at an average annual rate of 7.2%. The establishment of over 82 overseas economic and trade cooperation zones, with a total of more than USD 28.9 billion invested, has created over 244,000 jobs and USD 2 billion of additional tax revenue.⁶ Investment in BRI partner countries is expected to rise further with the continued implementation of infrastructure projects, growing trade due to improved connectivity, and the relocation of manufacturing enterprises driven by the transformation of global value chains.

Figure 1.2 Accomplishments along the Belt and Road, 2013-2018



Source: Belt and Road Portal (2018)⁷

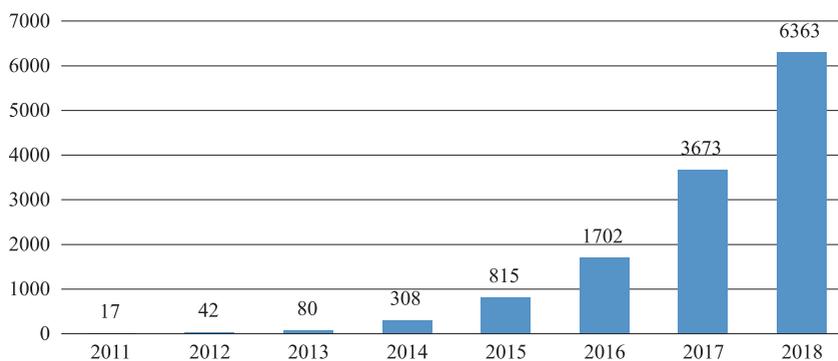
⁵ This expression is herewith inserted as equivalent to “BRI partner countries”/ “BRI participating countries”. For a full definition of this term, please refer to the Preface.

⁶ Xinhua (2018, August 28). Trade volume along the Belt and Road exceeds the value of USD 5 trillion (link in Chinese, see references).

⁷ Belt and Road Portal (2018, October 6). Five years of Belt and Road Initiative: interconnectedness and interoperability paint a bright picture (link in Chinese, see references).

In the past six years, China and other countries along the Belt and Road have been modernizing and developing their infrastructure through cooperative efforts in areas such as ports, railways, highways, electric power, aviation, digital connectivity and e-infrastructure. Achievements in railway construction are particularly noteworthy. While only 17 trains travelled between China and Europe in 2011, carrying goods worth just USD 0.6 billion, by 2018 more than 6,000 train trips had been made between China and Europe with the value of goods transported reaching USD 16 billion.

Figure 1.3 Number of train trips between Europe and China, 2011-2018



Source: Belt and Road Portal (2019)⁸

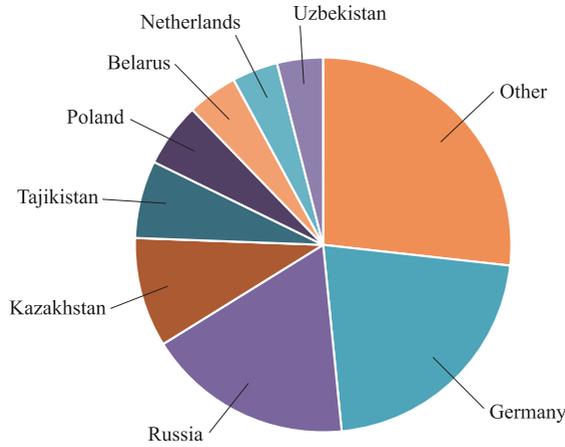
Train routes connect 108 cities in 16 countries across Eurasia. The main destinations are Germany, Russian Federation, Kazakhstan, Tajikistan, Poland and Belarus, with increased train activity driven primarily by China's increasing bilateral trade ties.⁹ Initially, the goods that travelled on these routes were only electronics, such as laptops and cell phones. Over time, a far greater variety of goods, ranging from items of clothing, wine, and vehicles have been transported along these routes.

In addition to the growing financial ties between China and countries along the Belt and Road, Chinese cities and regions have established partnerships with 1023 sister cities in 61 countries between 2013 and 2018. This represents more than 40% of the total number of sister-city relationships set up by Chinese cities. The number of people visiting China during this period increased by 2.3 times, and the number of people travelling abroad from China grew 2.6 times, reaching 60 million in 2018. China has concluded visa-free or landing visa agreements with 29 partner countries along the Belt and Road.

⁸ Belt and Road Portal (2019, September 9). The picture of the six years of Belt and Road Initiative (link in Chinese, see references).

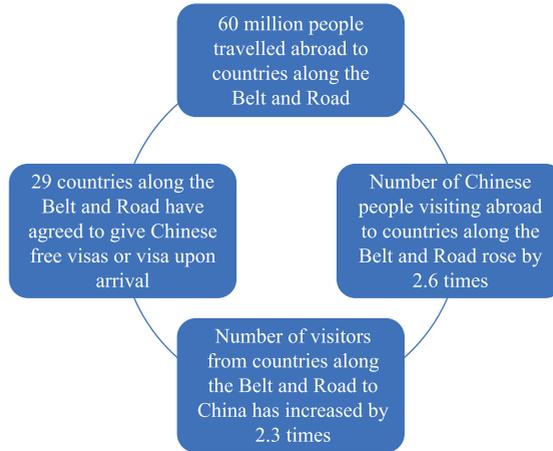
⁹ The figures cited may include some intra-CIS (Commonwealth of Independent States) trade on trains originally departing from/destined for China.

Figure 1.4 Main destination countries along the Belt and Road (by train trips)



Source: Belt and Road Portal (2018)¹⁰

Figure 1.5 Tourism and cultural achievements



Source: Belt and Road Portal (2018)¹¹

The majority of investments along the Belt and Road have so far been in hard infrastructure, but areas of e-infrastructure and digital connectivity are becoming increasingly important. Ambitious goals for trade, investment, inclusiveness, and cooperation are being set and achieved. But challenges remain in the investment environment, such as inconsistent

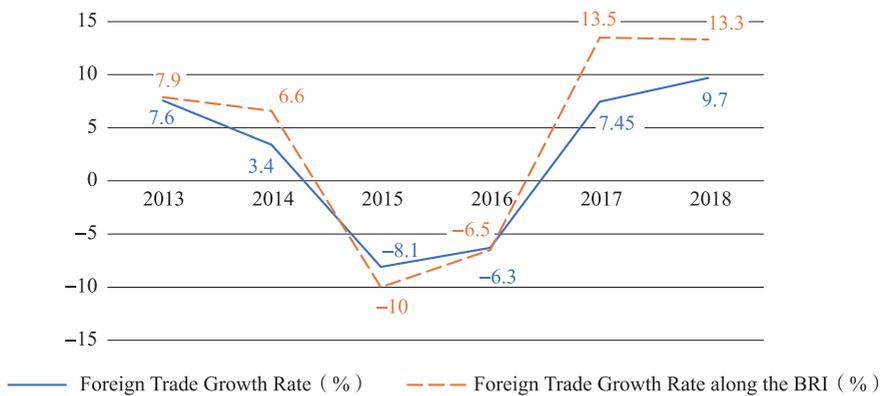
¹⁰ Belt and Road Portal (2018, October 6). Five years of Belt and Road Initiative: interconnectedness and interoperability paint a bright picture (link in Chinese, see references).

¹¹ Ibid.

legal, political, environmental, and social conditions found across the BRI region. Through policy and regulatory innovation and harmonization of financing and investment standards, new avenues can be opened for eliminating barriers impeding the coordination of BRI-related investment and aligning it with SDGs.

The growth rates of global trade volumes and foreign direct investment along the Belt and Road have fluctuated significantly in recent years. According to UNCTAD,¹² global foreign direct investment flows in 2017 were equivalent to USD 1.3 trillion, with China being the world's second largest foreign investor. Although China's outbound foreign direct investment declined in both 2018 and the year before, its level at USD 130 billion (10% of global FDI) is still high and reflects an overall rising trend compared to the USD 101 billion level reached in 2013, the year the BRI was launched.

Figure 1.6 China's foreign trade along the Belt and Road, 2013-2018

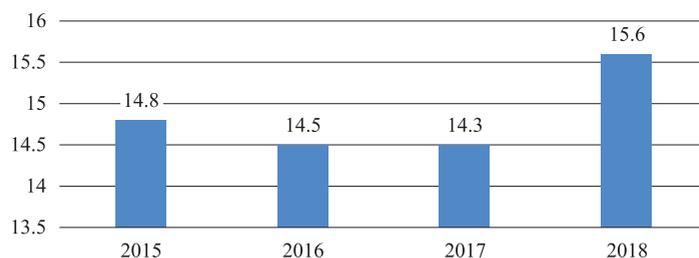
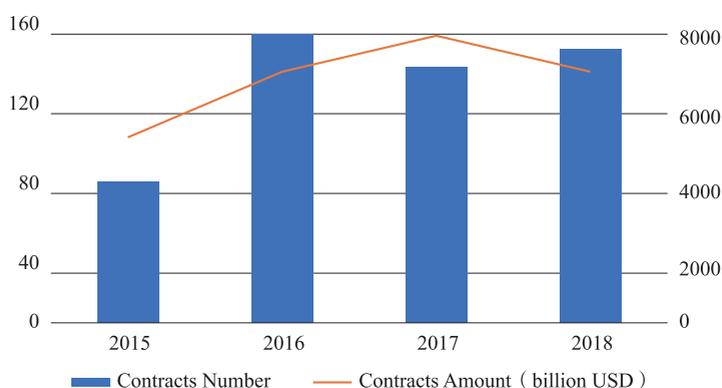


Source: Belt and Road Portal, MOFCOM¹³

Data from the Chinese Ministry of Commerce (MOFCOM) indicates that the total value of newly signed construction contracts under the BRI reached USD 144 billion in 2018, which provides a solid base for further growth. Realized revenue from the projects along the Belt and Road has continued to grow since 2014 at a steady pace, although recent declines (caused by multiple factors) in non-financial investment require attention. A lack of harmonized investment and financing standards, which raises transaction costs, seems to be part of the problem.

12 United Nations Conference on Trade and Development (2019). World Investment Report 2019.

13 Belt and Road Portal (2018, October 6). Five years of Belt and Road Initiative: interconnectedness and interoperability paint a bright picture (link in Chinese, see references); Ministry of Commerce of the People's Republic of China (MOFCOM) (2019). Report on the status of China's foreign trade, spring 2019 (link in Chinese, see references).

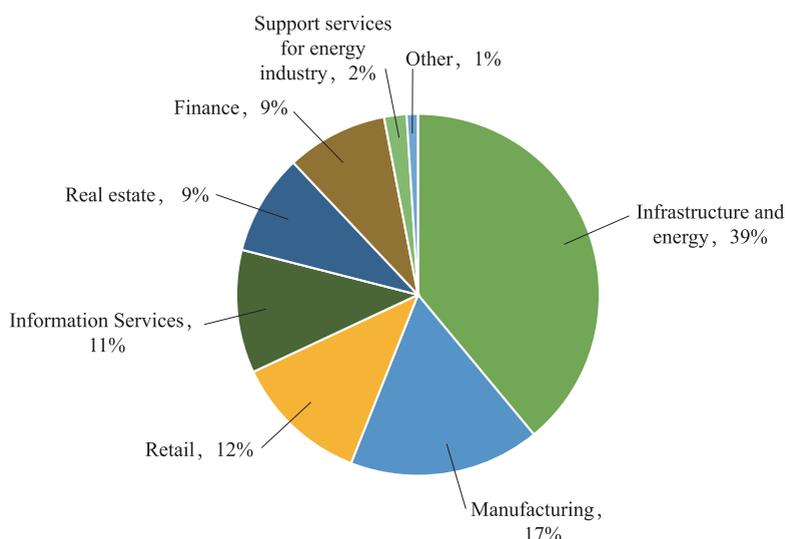
Figure 1.7 China's non-financial ODI along the Belt and Road, 2015-2018, in billion USDSource: MOFCOM¹⁴**Figure 1.8 Construction contracts signed by China along the Belt and Road, 2015-2018**Source: MOFCOM¹⁵

14 Ministry of Commerce of the People's Republic of China (2016, January 15). The head of the cooperation department of the Ministry of Commerce talks about China's foreign investment cooperation in 2015 (link in Chinese, see references); Ministry of Commerce of the People's Republic of China (2017, January 19). Investment and cooperation in the countries along the «Belt and Road» in 2016 (link in Chinese, see references); Ministry of Commerce of the People's Republic of China (2018, January 16). China's investment and cooperation with countries along the «Belt and Road» in 2017 (link in Chinese, see references); Ministry of Commerce of the People's Republic of China, Department of Outward Investment and Economic Cooperation (2019, January 22). From January to December 2018, China's investment cooperation with countries along the Belt and Road Initiative (link in Chinese, see references).

15 Ministry of Commerce of the People's Republic of China, Department of Outward Investment and Economic Cooperation (2016, January 15). The head of the cooperation department of the Ministry of Commerce talks about China's foreign investment cooperation in 2015 (link in Chinese, see references); Ministry of Commerce of the People's Republic of China (2017, January 19). Investment and cooperation in the countries along the Belt and Road in 2016 (link in Chinese, see references); Ministry of Commerce of the People's Republic of China (2018, January 16). China's investment and cooperation with countries along the Belt and Road in 2017 (link in Chinese, see references); Ministry of Commerce of the People's Republic of China, Department of Outward Investment and Economic Cooperation (2019, January 22). From January to December 2018, China's investment cooperation with countries along the Belt and Road Initiative (link in Chinese, see references).

The sectoral distribution of investment in 2017 indicates that infrastructure and energy are the largest sectors by project number, accounting for 39% of all Chinese investments along the Belt and Road in 2017, followed by manufacturing, retail, and information services (Figure 1.9). This represents a decline in the level of concentration of BRI projects in these sectors compared to the 2013-2016 period, during which 70% of all BRI projects were in infrastructure and energy.¹⁶ This reflects the important role of infrastructure and energy supply in developing manufacturing and trade, also highlighting the significance of infrastructure sustainability and financing for the BRI. Importantly, the benefits brought by infrastructure construction projects generally exceed the profit they generate directly, due to the enabling effect of improved infrastructure on overall economic efficiency, productivity and competitiveness along the Belt and Road and beyond.

Figure 1.9 Chinese investment along the Belt and Road by sector, 2017



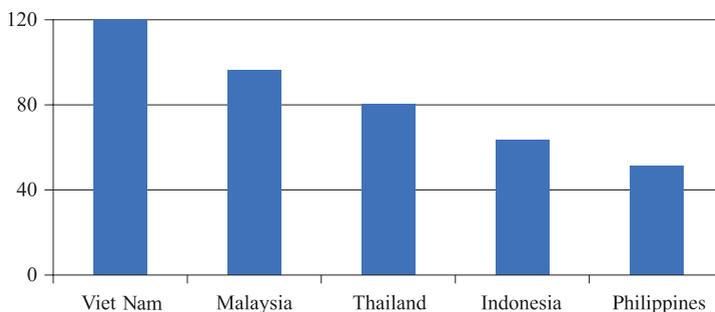
Source: Zhou, Y. *et al.*, (2018)¹⁷

Southeast Asia is a highly popular region for Chinese outbound investment. Over the past few years, of the 11 countries of Southeast Asia along the Belt and Road, 7 have been listed as top investment destinations in China's official statements, with Singapore and Indonesia being consistently ranked among the top-tier investment destinations. In 2017, data released by MOFCOM showed Viet Nam and Malaysia as the leading destinations of BRI investment, thereby confirming the importance of the region in the development of the BRI.

¹⁶ Zhou, Y. *et al.* (2018, March). The Belt and Road Initiative: an inclusive and symbiotic approach to shared global prosperity. The Boston Consulting Group and China Development and Research Foundation, 4.

¹⁷ Ibid.

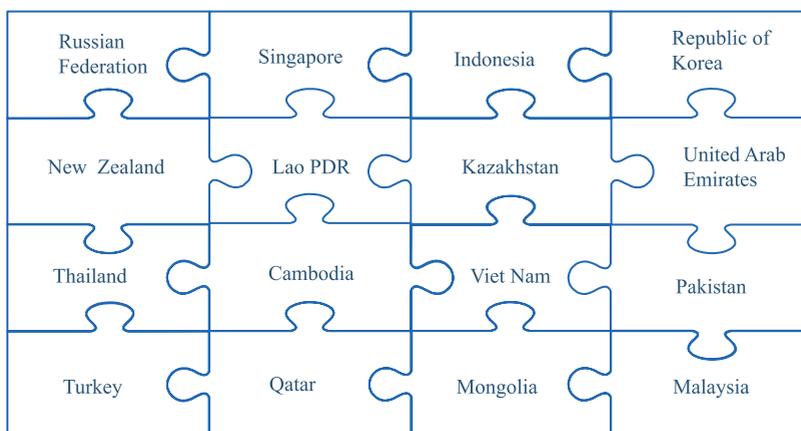
Figure 1.10 Top 5 developing country destinations of Chinese outward FDI, 2018 (in countries with which China has a signed MoU on the BRI, in billion USD)



Source: Belt and Road Portal (2018)¹⁸

Financial partnerships between China and a number of countries along the Belt and Road have been increasing, most notably with Pakistan, Malaysia, and Russian Federation. The modernization and diversification of China’s financial system have lent themselves to enhanced financial integration with a growing number of BRI partner countries.

Figure 1.11 Selected countries with advanced financial partnerships with China¹⁹



Source: Belt and Road Portal (2018)²⁰

18 Belt and Road Portal (2018, October 6). Five years of Belt and Road Initiative: interconnectedness and interoperability paint a bright picture (link in Chinese, see references).

19 Selected countries (out of 60) where the Cross-border Interbank Payment System (CIPS) was introduced for businesses to trade in RMB, and where UnionPay is widely accepted.

20 Belt and Road Portal (2018, October 6). Five years of Belt and Road Initiative: interconnectedness and interoperability paint a bright picture (link in Chinese, see references).

1.3 Investment and financing environment along the Belt and Road

The steadily growing number of BRI partner countries has made any comprehensive analysis of the trends and impact of investment and financing activities along the Belt and Road more complex. Due to data availability issues, this section carefully selected, in consultation with the Chinese authorities, a large number of BRI partner countries that are representative of their respective regions, and presents data on them from various sources. While the analysis does not cover the full list of countries currently participating in the BRI, it does capture the highly diverse range of legal, economic, and investment conditions which can be found in countries along the Belt and Road.

Business environment along the Belt and Road

The strikingly diverse conditions of the broad range of BRI partner countries, as reflected in Tables 1.1 through 1.5 below, has important implications for the entire range of BRI-related lending and investments, as well as for the standards harmonization effort set out in this report. Some BRI partner countries are advanced upper-income countries with investment conditions and environmental and social standards that are among the most advanced in the world. Some are low-income or lower middle-income countries the investment environment of which still faces numerous challenges, and the environmental and social standards of which are still rudimentary, often evolving, or not consistently applied. The legal systems under which BRI projects are implemented also vary considerably. Macroeconomic conditions in many countries are stable and conducive to rapid implementation of new infrastructure investments. Yet there are also several BRI partner countries that are moderately or heavily indebted and need to exercise caution in undertaking new borrowing.

This diversity of conditions poses challenges to the BRI agenda, but is inevitable in an initiative that seeks to strengthen global connectivity and support global sustainable development. Through agreement on a core set of underlying environmental and social sustainability principles framed in consistency with the SDGs, including the incorporation of Paris Agreement goals, Nationally Determined Contributions (NDCs), and exploration of mechanisms for embodying them in the BRI agenda, the BRI can unleash its potential and contribute to global development.

Table 1.1 Key economic and social indicators of countries along the Belt and Road (2018 or most recent year available)

Country	GDP per capita ²¹	FDI net inflow ²²	Inflation, consumer prices ²³	External debt stock ²⁴	Logistics performance index ²⁵	Ease of doing business index ²⁶
Southeast Asia						
Brunei	31,628	0.5	0.2	N/A	2.7	55
Cambodia	1,512	3.1	2.4	66.9	2.6	138
Indonesia	3,893	20.0	3.2	36.6	3.2	73
Lao PDR	2,568	1.3	2.0	90.2	2.7	154
Malaysia	11,239	8.6	0.9	69.4	3.2	15
Myanmar	1,326	1.3	6.9	21.5	2.3	171
Philippines	3,103	9.8	5.2	19.9	2.9	124
Singapore	64,582	82.0	0.4	416.5	4.0	2
Thailand	7,274	13.2	1.1	35.1	3.4	27
Timor-Leste	2,036	0.5	2.3	6.7	N/A	178
Viet Nam	2,564	15.5	3.5	46.7	3.3	69
South Asia						
Afghanistan	521	0.1	0.6	13.4	2.0	167
Bangladesh	1,698	2.9	5.5	18.2	2.6	176
Bhutan	8,259	0	2.7	109.2	2.2	81
Maldives	10,224	0.6	-0.1	48.0	2.7	139
Nepal	1,026	0.2	4.1	18.9	2.5	110

21 Current USD.

22 Billion current USD.

23 Annual change in %.

24 As % of GNI, World Bank Data. External debt stock for Malaysia, Iran (Islamic Republic of), Iraq, Israel, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, South Africa, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia, Slovakia, New Zealand and Panama is calculated as % of GDP, Executive Board of the IMF, List of recent Article IV consultations. External debt (% of GDP) for Singapore retrieved from CEIC Data.

25 Overall score 1=low; 5=high.

26 Rank; 1=most business friendly.

Table 1.1 (Continued)

Country	GDP per capita ²¹	FDI net inflow ²²	Inflation, consumer prices ²³	External debt stock ²⁴	Logistics performance index ²⁵	Ease of doing business index ²⁶
Pakistan	1,473	3.0	5.1	27.6	2.4	136
Sri Lanka	4,102	1.6	2.1	60.8	2.6	100
East Asia						
Mongolia	4,104	2.2	6.8	253.9	2.4	74
Central Asia						
Kazakhstan	9,331	0.2	6.0	105.7	2.8	28
Kyrgyzstan	1,281	0.5	1.5	103.0	2.6	70
Tajikistan	827	0.2	3.8	67.7	2.3	126
Turkmenistan	6,967	1.9	13.6	1.7	2.4	N/A
Uzbekistan	1,532	0.6	17.9	33.9	2.6	76
West Asia						
Armenia	4,212	0.3	2.5	87.5	2.6	41
Azerbaijan	4,721	1.4	1.9	36.4	N/A	25
Bahrain	24,051	2.6	2.1	N/A	2.9	62
Georgia	4,345	1.2	2.6	110.6	2.4	6
Iran (Islamic Republic of)	N/A	3.5	31.2	2.0	2.9	128
Iraq	5,878	-4.9	0.4	35.6	2.2	171
Israel	41,614	21.8	0.8	25.4	3.3	49
Jordan	4,248	N/A	4.5	76.1	2.7	104
Lebanon	8,570	N/A	6.1	145.1	2.7	142
Kuwait	32,244	-0.0	0.7	N/A	2.9	97
Oman	16,419	2.9	0.9	-15.2	3.2	78
Qatar	69,026	N/A	N/A	99.6	3.5	83
Saudi Arabia	23,219	2.8	2.5	34.8	3.0	92

Table 1.1 (Continued)

Country	GDP per capita ²¹	FDI net inflow ²²	Inflation, consumer prices ²³	External debt stock ²⁴	Logistics performance index ²⁵	Ease of doing business index ²⁶
Syrian Arab Republic	N/A	N/A	N/A	N/A	2.3	179
Turkey	9,311	13.0	16.3	59.0	3.2	43
United Arab Emirates	43,005	10.4	3.1	73.5	4.0	11
Yemen	944	-0.3	41.8	26.1	2.3	187
Africa						
Egypt	2,413	7.4	29.5	35.9	2.8	120
South Africa	6,160	2.3	6.3	52.0	3.6	82
Morocco	3,237	3.6	1.9	42.2	2.5	60
Madagascar	461	0.6	7.3	31.8	2.4	161
Ethiopia	772	3.3	13.8	33.4	2.4	159
Europe						
Albania	5,234	1.2	2.0	67.2	2.7	63
Bosnia and Herzegovina	5,254	0.5	1.4	80.4	2.8	89
Croatia	14,869	1.3	1.5	81.8	3.1	58
Belarus	5,762	1.5	4.9	67.7	2.6	37
Bulgaria	9,272	2.6	2.8	60.3	3.0	59
Czech Republic	22,973	8.5	2.1	83.0	3.7	35
Estonia	22,927	1.0	3.4	83.5	3.3	16
Hungary	15,839	-72.8	2.9	84.6	3.4	53
Latvia	18,089	0.4	2.5	121.0	2.8	19
Lithuania	19,090	0.9	2.7	78.5	3.0	14
North Macedonia	6,084	0.7	1.5	72.0	2.7	10

Table 1.1 (Continued)

Country	GDP per capita ²¹	FDI net inflow ²²	Inflation, consumer prices ²³	External debt stock ²⁴	Logistics performance index ²⁵	Ease of doing business index ²⁶
Republic of Moldova	3,189	0.2	3.0	61.3	2.5	47
Montenegro	8,761	0.5	2.6	142.4	2.8	50
Poland	15,424	11.3	1.8	72.1	3.5	33
Romania	12,301	6.9	4.6	48.0	3.1	52
Russian Federation	11,289	8.8	2.9	28.1	2.8	31
Serbia	7,234	4.1	2.0	71.7	2.8	48
Slovenia	26,234	1.5	1.7	100.3	3.3	40
Slovakia	19,547	2.6	2.5	111.0	3.0	42
Ukraine	3,095	2.5	11.0	89.6	2.8	71
Oceania						
New Zealand	41,996	1.6	1.6	101.6	3.9	1
America						
Panama	15,575	6.6	0.8	143.7	3.3	79

Sources: World Bank, Executive Board of the IMF, CEIC Data

Most upper-middle income BRI partner countries are located in Western Asia and Central and Eastern Europe. They also rank toward the top on Foreign Direct Investment (FDI) inflows, macroeconomic stability as measured by Consumer Price Index (CPI) inflation, and on logistics performance. Similarly, there is considerable variation in terms of business environment, as demonstrated by the Doing Business Index. Almost all of the countries that rank low in the index have less developed hard infrastructure and less supportive or effective regulatory regimes. In addition, countries in Africa and the Middle East also tend to be troubled by political instability and security risks, factors that particularly concern international investors along the Belt and Road.

Table 1.2 The income level of selected countries along the Belt and Road, 2019-2020

Income Level	Countries
Low Income	Nepal, Afghanistan, Yemen, Tajikistan, Syrian Arab Republic
Lower-middle Income	Bhutan, Timor-Leste, Ukraine, Uzbekistan, India, Indonesia, Kyrgyzstan, Bangladesh, Pakistan, Republic of Moldova, Cambodia, Myanmar, Lao PDR, Philippines, Mongolia, Viet Nam, Egypt
Upper-middle Income	Armenia, Iraq, Iran (Islamic Republic of), Russian Federation, Bulgaria, Kazakhstan, Turkmenistan, Turkey, Serbia, Sri Lanka, Bosnia and Herzegovina, Thailand, Belarus, Azerbaijan, Albania, Malaysia, Maldives, Lebanon, Montenegro, Georgia, Jordan, Oman, Romania
High Income	Israel, Hungary, Qatar, Bahrain, Greece, Latvia, Czech Republic, Brunei, Slovenia, Slovakia, Singapore, Saudi Arabia, Poland, Estonia, Kuwait, Lithuania, United Arab Emirates, Croatia

Source: World Bank

Infrastructure-related factors have clear impacts on the development of a country's tourism, industry, and overall attractiveness to foreign investment. Tables 1.3, 1.4 and 1.5 together indicate that stability in the national security, legal and political environment correlates positively with low infrastructure risk rating. Rather, it is likely that there is causation from per capita income levels towards these.

Table 1.3 Infrastructure risk rating of countries along the Belt and Road²⁷

Rating	Countries
1	Israel, Qatar, Singapore, United Arab Emirates
2	Bahrain, Brunei, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, Malaysia, Oman, Poland, Russian Federation, Saudi Arabia, Slovakia, Slovenia, Turkey
3	Albania, Azerbaijan, Belarus, Georgia, Greece, Indonesia, Iran (Islamic Republic of), Jordan, Kuwait, Lebanon, Montenegro, Philippines, Serbia, Sri Lanka, Thailand, Ukraine, Viet Nam
4	Bangladesh, Jordan, Bosnia and Herzegovina, Cambodia, Kyrgyzstan, Republic of Moldova, Mongolia, Myanmar, Nepal, Pakistan, Syrian Arab Republic, Turkmenistan, Uzbekistan
5	Afghanistan, Timor-Leste, Egypt, Iraq, Lao PDR, Tajikistan, Yemen

Source: Ji and Liang (2018)²⁸

²⁷ 1=lowest risk; 5=highest risk.

²⁸ Ji, J. and Liang, H. (2018). Annual report on investment security of China's "the Belt and Road" construction. Blue Book of Investment Security of "the Belt and Road" Construction No. 2. Beijing: Social Sciences Academic Press (China).

According to the “Annual report on investment security of China’s Belt and Road construction”, high levels of global political risk and the slowing pace of global economic recovery have resulted in a slight decrease in the BRI’s 2019 national infrastructure development index. At the same time, governments from various countries have introduced measures to promote infrastructure development by attracting relevant investments to stimulate economic growth, smoothen business cycle fluctuations, optimize industrial structures among other development goals, thus supporting a wide variety of investment opportunities.

Table 1.4 National security indicator scores of countries along the Belt and Road

Score	Countries
<10	Brunei
10~20	Slovenia, Bhutan, Oman, Singapore, Croatia, Slovakia, United Arab Emirates
20~30	Czech Republic, Hungary, Kuwait, Lithuania, Romania, Mongolia, Bulgaria, Qatar
30~40	Kazakhstan, Lao PDR, Poland, Serbia, Sri Lanka, Viet Nam, Azerbaijan, Estonia, Israel, Latvia, Malaysia, Saudi Arabia, Bahrain, Belarus, Greece, Iran (Islamic Republic of), Jordan, Uzbekistan, Armenia
40~50	Albania, Bangladesh, Timor-Leste, Georgia, India, Republic of Moldova, Turkmenistan, Bosnia and Herzegovina, Montenegro, Indonesia, Nepal, Myanmar, Tajikistan, Thailand
50~90	Cambodia, Turkey, Russian Federation, Ukraine, Lebanon, Pakistan, Philippines, Afghanistan
>90	Syrian Arab Republic, Yemen, Iraq

Source: Ji and Liang (2018)²⁹

Corruption and political instability affect many countries along the Belt and Road and pose challenges to foreign business entities operating there, or trying to enter their markets. These two factors create significant uncertainties in a company’s operations and expansion, thus impeding investors from planning and engaging in long-term business activities that can bring sustainable economic and social benefits. For instance, procurement is one of the areas in which both factors, particularly corruption, pose significant challenges to a country’s attractiveness to foreign investment. Logistics performance is another pivotal component, as it strongly determines a country’s role and competitiveness in international trade. There remains enormous room for improvement in the logistics of the Belt and Road region.

29 Ji, J. and Liang, H. (2018). Annual report on investment security of China’s “the Belt and Road” construction. Blue Book of Investment Security of “the Belt and Road” Construction No. 2. Beijing: Social Sciences Academic Press (China).

This presents challenges for investors to participate in and take advantage of the global production network. It however also creates opportunities for investments in transportation infrastructure to help improve trade competitiveness and generate sustainable and inclusive growth.

Table 1.5 Additional economic and social indicators of countries along the Belt and Road (2018 or most recent year available)³⁰

Country	Legal system	Employment to population ratio ³¹	Logistics performance index ³²	Political stability risk ³³
Southeast Asia				
Brunei	Mixed Law	N/A	2.7	45
Cambodia	Civil Law	80.3	2.6	65
Indonesia	Civil Law	64.2	3.2	40
Lao PDR	Civil Law	77.7	2.7	50
Malaysia	Mixed Law	62.4	3.2	30
Myanmar	Common Law	61.1	2.3	60
Philippines	Mixed Law	58.3	2.9	40
Singapore	Common Law	65.7	4.0	20
Thailand	Civil Law	67.1	3.4	45
Timor-Leste	Civil Law	37.8	N/A	50
Viet Nam	Civil Law	76.0	3.3	50
South Asia				
Afghanistan	Mixed Law	64.9	2.0	85
Bangladesh	Mixed Law	56.2	2.6	50
Bhutan	Civil Law	65.5	2.2	20

30 For control of corruption data, see World Bank Worldwide Governance Indicators (2017). Retrieved from <https://tcdata360.worldbank.org/indicators/hc153e067?country=BRA&indicator=364&viz=choropleth&years=2017>.

31 Among those aged 15 years or over, in %.

32 Overall score 1=low; 5=high.

33 100 corresponding to most risky.

Table 1.5 (Continued)

Country	Legal system	Employment to population ratio ³¹	Logistics performance index ³²	Political stability risk ³³
Maldives	Religious Law	61.4	N/A	N/A
Nepal	Common Law	81.9	2.5	35
Pakistan	Common Law	51.7	2.4	60
Sri Lanka	Mixed Law	50.2	2.6	55
East Asia				
Mongolia	Civil Law	56.1	2.4	35
Central Asia				
Kazakhstan	Civil Law	67.3	2.8	65
Kyrgyzstan	Civil Law	57.2	2.6	45
Tajikistan	Civil Law	38.9	2.3	75
Turkmenistan	Civil Law	62.7	2.4	60
Uzbekistan	Civil Law	62.1	2.6	60
West Asia				
Armenia	Civil Law	48.4	2.6	55
Azerbaijan	Civil Law	62.9	N/A	70
Bahrain	Mixed Law	72.1	2.9	70
Georgia	Civil Law	58.0	2.4	50
Iran (Islamic Republic of)	Religious Law	38.8	2.9	85
Iraq	Mixed Law	39.2	2.2	75
Israel	Mixed Law	61.5	3.3	40
Jordan	Mixed Law	33.4	2.7	65
Lebanon	Mixed Law	44.3	2.7	80
Kuwait	Mixed Law	72.4	2.9	60
Oman	Mixed Law	69.4	3.2	60

Table 1.5 (Continued)

Country	Legal system	Employment to population ratio ³¹	Logistics performance index ³²	Political stability risk ³³
Qatar	Mixed Law	86.7	3.5	55
Saudi Arabia	Religious Law	53.2	3.0	55
Syrian Arab Republic	Civil Law	37.8	2.3	80
Turkey	Civil Law	46.8	3.2	75
United Arab Emirates	Mixed Law	80.9	4.0	50
Yemen	Mixed Law	33.5	2.3	90
Africa				
Egypt	Mixed Law	42.6	2.8	55
South Africa	Mixed Law	40.6	3.4	35
Morocco	Mixed Law	41.3	2.5	60
Madagascar	Civil Law	85.0	2.4	40
Ethiopia	Civil Law	78.9	2.4	70
Europe				
Albania	Civil Law	48.3	2.7	50
Bosnia and Herzegovina	Civil Law	37.1	2.8	65
Croatia	Civil Law	47.1	3.1	35
Belarus	Civil Law	60.0	2.6	60
Bulgaria	Civil Law	52.4	3	35
Czech Republic	Civil Law	58.8	3.7	30
Estonia	Civil Law	59.9	3.3	35
Hungary	Civil Law	54.1	3.4	25
Latvia	Civil Law	56.2	2.8	35
Lithuania	Civil Law	57.3	3.0	30
North Macedonia	Civil Law	43.2	2.7	55

Table 1.5 (Continued)

Country	Legal system	Employment to population ratio ³¹	Logistics performance index ³²	Political stability risk ³³
Republic of Moldova	Civil Law	40.6	2.5	65
Montenegro	Civil Law	42.8	2.8	45
Poland	Civil Law	54.8	3.5	40
Romania	Civil Law	52.1	3.1	25
Russian Federation	Civil Law	59.1	2.8	55
Serbia	Civil Law	46.9	2,8	45
Slovenia	Civil Law	54.8	3.3	20
Slovakia	Civil Law	55.7	3.0	35
Ukraine	Civil Law	48.9	2.8	75
Oceania				
New Zealand	Common Law	66.8	3.9	15
America				
Panama	Civil Law	63.8	3.3	45

Source: MOFCOM Global Laws and Regulations Database, World Bank, The Economist Intelligence Unit

1.4 Opportunities and challenges for investment and financing along the Belt and Road

The many opportunities of the BRI have been envisaged and widely discussed by both the public and private sectors since the launch of the Initiative, which aims to promote the economic and social development of countries along its routes and help improve their self-sustainability and governance. With trillions of dollars committed to development projects along the Belt and Road by China in the coming decade, and with the private sector actively seeking markets and business opportunities in countries participating in the Initiative, there is a great promise of increases in trade, upgrades in logistics and transportation

infrastructure, and closer economic and social ties between BRI partner countries. Private firms are likely to enjoy a larger and more integrated market, improved production networks, better professional services, and possibly easier access to financing. Overall, it is up to China and other governments to come up with coordinated and harmonized policies and rules, in close consultation with all other local, national, and international stakeholders, for the multi-dimensional opportunities of the BRI to materialize.

Remarkable achievements made and valuable experiences gained in the past six years under the BRI have laid a solid foundation for the Initiative's further transformation into a driving force for sustainable development. The First Belt and Road Forum for International Cooperation covered communication and connectivity in policy, facilities, trade, finance and people, surveying hundreds of specific achievements, all of which materialized as originally envisaged. The BRI has gradually established a new regional and international economic cooperation mechanism driven by major infrastructure and energy projects.

While the BRI presents considerable opportunities and has enormous potential for sustainable development, there is a need to take into account the potential risks stemming from financing and investment along the Belt and Road, including whether these activities promote welfare, inclusive growth, and economic, environmental and social sustainability, while at the same time developing mitigation and management strategies through which to minimize them. Along with the successful achievements outlined earlier, some BRI projects including large infrastructure projects are inevitably facing difficulties. These are due to a variety of reasons, including but not limited to: public opposition to projects, objections over labour policies, performance delays, and concerns over national security.³⁴

Chinese construction and engineering corporations have proved that the experience they gained in China equipped them with the technical knowledge and implementation capacity necessary to complete large-scale infrastructure projects. However, the wide scope of the BRI and its large number of projects make it almost unavoidable for it to be fraught with difficulties which may lead to cancellations, renegotiations, or cost-overruns in projects. The introduction of preventive measures can go a long way in averting failures that could negatively impact the development of the BRI.

Similarly, there is also a need for measures to meet the sustainable development needs of BRI partner countries, both during the investment period (via enhanced domestic employment, greater use of domestic suppliers, as well as broader and more effective skills transfer), and after (by establishing deep domestic backward and forward production linkages,

34 Financial Times (2018, July 29). China's Belt and Road Initiative is falling short. The FT View.

achieving beneficial socioeconomic and environmental impacts, and through participation in Chinese and foreign supply and value chains).

Potential risks arise in at least six areas that cover the main aspects of the lending and investment process:

I. Economic risks. Lenders look for repayment of their loans with interest, while investors look for clear property rights over their assets and returns, and the ability to reinvest or repatriate those returns. A predictable legal, regulatory and tax system, a reliable central bank, a stable price level, lower labour costs, competent budget management, and other favourable factors in the economic background contribute to creating an attractive investment environment. BRI partner countries, being at varied levels of development, often face challenges in one or more of these contexts. According to a study from Moody's, 50% of the countries along the Belt and Road fall into the category that is subject to substantial (or greater) credit risk.³⁵ On a separate note, insufficient transparency about the terms of financing and insufficient use of local contractors, skills and labour in projects have caused some tension in BRI projects.

II. Legal and political risks. The complexity of each political and legal environment is hard to measure but its consequences can be significant. Changes in national government can result in changes in the approach to foreign loans or direct investment. Geopolitical factors influence the level of trust among countries along the Belt and Road. The quality of governance and the local investment climate vary widely. For example, it takes more than 50 days to comply with all the procedures for importing goods in Asia, compared with less than 10 days in G7 countries.³⁶ The legal environment can also be complex. Countries along the Belt and Road have different legal systems such as civil law, common law and religious law (Table 1.5), and the ability to uphold contracts and property rights also differs from country to country. Such differences can cause difficulties in implementing projects across countries.³⁷ According to a survey of 300 Chinese companies by the Center for China and Globalization³⁸ published in November 2016, 71% of Chinese companies cited “policy changes”, “political

35 He, L. (2017, Sept. 19). Moody's highlights fears over Belt and Road's credit risks. South China Morning Post.

36 Ruta, M. (2018, May 4). Three opportunities and three risks of the BRI. World Bank, Trade Post Blog.

37 Weinland, D. (2017, January 26). China warned of risk to banks from One Belt, One Road initiative. Financial Times.

38 The Center for China and Globalization is an independent think tank based in Beijing.

unrest” and “government expropriation” as their top concerns.³⁹ These findings were consistent with an earlier 2016 Deloitte survey of Chinese state companies in which these identified “risk control” as one of their top three challenges in investing overseas.⁴⁰ In 2018, SINOSURE published a country risk report, which takes into account the 65 countries along the Belt and Road. It covered political, economic, business environment, and legal aspects, and ranked Syrian Arab Republic and Afghanistan as the highest risk countries for Chinese investment. A summary of countries’ risk levels is presented in Annex 6.

III . Cultural risks. The BRI is a cross-continental initiative covering a large number of countries with very different cultures, religious beliefs, and historical backgrounds. Cultural differences can pose obstacles to management systems spanning countries and to investors adapting to local market conditions, local business practices, or accessing new opportunities. People-to-people exchanges help bridge differences of education and cultural background—and can help identify potential synergies.

IV . Conflict risks. Host countries faced with social or economic instability are much less attractive to investors and lenders along the Belt and Road. Conflict sensitivity in project design is critical in these countries for facilitating investments with a longer time horizon, the typical type of investment in BRI projects, thus bringing substantial sustainable development gains to BRI partner countries. It is also an important element in ensuring local support for BRI projects.

V . Debt sustainability risks. Debt sustainability issues in BRI participating countries have become a concern of themselves, China, and the international community. There is a need for systematic understanding, analysis, alleviation, and management of debt sustainability risks by taking into account of the historical and systemic causes of these risks from a national and global development point of view. This will require seeking a balance between the financing need for development and debt sustainability, a comprehensive evaluation of the repayment responsibility, debt structure, and expected financial return for BRI participating countries’ from contracting or guaranteeing sovereign debt.

The political environment, economic climate, debt situation and resource endowment of BRI partner countries, however, have to a large extent been formed over decades before 2013. Many countries had low sovereign credit ratings and low investment levels before the Initiative was launched. While some risks may have become more prominent as BRI-related

39 Shi, T. (2017, May 23). Chinese firms wary of political risks on Xi’s Belt and Road. Bloomberg News.

40 Deloitte China (2016). The new journey of “Internet+”. Deloitte Perspective, Volume V.

activities intensified, there are many factors behind the evolution of these risks. It is thus important to evaluate the debt situation of BRI partner countries since 2013 in a balanced way. Using debt data available from the World Bank and the IMF,⁴¹ the research team of the report found that the external debt stock and debt-to-GDP ratio of most countries along the Belt and Road has not changed substantially after 2013. Neither has the ability of these countries to undertake new loans or repay loans. While the BRI's scope and influence is increasing, China remains an emerging investor in most countries of the world. Developed countries such as Japan, South Korea, and those in America and Europe with more active investment in many countries along the Belt and Road remain the leading source of the stock of investment in most BRI countries. However, for some, China has gained prominence—without, in most cases, becoming a source of debt difficulties, and providing much-needed financing for infrastructure investment. Ethiopia, one of the most active BRI partner countries in Africa, has received about USD 12.1 billion in loans from China over the past 2 decades. The rest of the country's total debt of USD 29 billion, however, come mostly from the Middle East, the World Bank, and other creditors.⁴² In a handful of cases, adding further debt—from any source—involves significant risks given the already high level of debt already reached, calling for enhanced management of debt sustainability risks.

Management of BRI-related debt risks will benefit from better coordination among BRI partner countries, developed countries and international institutions to improve their debt management ability, and from effective monitoring of potential or rising debt risks. The suggested harmonized BRI-wide standards could help enable this by reporting the terms and conditions of loans without breaking national laws and commercial confidentiality, and by facilitating debt sustainability analyses (also covering contingent budgetary liabilities stemming from government guarantees) before the signing of loan agreements.

VI. Environmental and Social risks. Large infrastructure projects are prone to creating negative effects on the environment. Importantly, a Project Syndicate⁴³ article contains a scenario demonstrating that Belt and Road investments, if they were to proceed on a *business as usual* path without adjustment, would render the Paris Agreement goals unattainable regardless of what individual countries pledged to do through their Nationally Determined Contributions (NDCs). BRI projects face particular challenges in the energy

41 World Bank. (2018 November). International Debt Statistics 2019.

42 Eom, J., Brautigam, D., and Benabdallah, L. (2018, August). The Path Ahead: The 7th Forum on China-Africa Cooperation. Working Paper No. 2018/1. China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC.

43 Ma J. and Zadek, S. (2019, March 28). A Low-carbon Belt & Road. Project Syndicate.

and in the transport sectors, which constitute the bulk of BRI investments. A considerable part of Chinese energy investment is in coal and hydropower. In order to reduce emissions to a minimum in the context of a financially viable project, coal plants require the latest available technologies (ultra-supercritical technology and/or carbon capture and storage) that can operate at a cost that remains competitive with alternative energy sources in the period the asset is expected to operate. A recent study by the World Resources Institute (WRI) and Boston University concludes that most such projects are still tied to traditional technologies and are not closely aligned with the low-carbon priorities of BRI partner countries.⁴⁴

The social effects of large hydropower dams on local communities is another major factor that affects the public reputation as well as the perceived socio-economic value of those investments. Relocation and compensation of local communities in the case of large dams is a recurring issue that needs to be dealt with in the early planning stages of hydropower projects.

Most large-scale infrastructure projects, particularly in the transport sector, have negative effects on biodiversity. Recently, the World Wildlife Fund (WWF) carried out an initial spatial analysis of the overlap between the proposed BRI land corridors and important areas for biodiversity and natural resources.⁴⁵ It found significant risk areas with potential negative impacts on biodiversity conservation and on the provision of social and economic benefits to people. It recommended that careful and detailed spatial analyses be done of the regions where projects are to be completed before taking decisions on large infrastructure development.

The authors of this report found no impact studies on the environmental and social risks of large BRI projects. The *Belt and Road Ecological and Environmental Cooperation Plan* of the Chinese Ministry of Ecology and Environment (MEE) published in May 2017 goes a long way toward recognizing the issue of transparency and information sharing with regard to environmental issues.

Future risk considerations

Vigilant policymakers are critical to guard not only against risks that have materialized in the past, but also against those looming on the horizon—some of which are unprecedented.

44 Zhou, L., *et al.* (2018, November) Moving the green Belt and Road Initiative: from words to actions. World Resources Institute and Boston University Global Development Policy Center Working Paper.

45 World Wildlife Fund (2017, May). The Belt and Road Initiative: WWF recommendations and spatial analysis. WWF Briefing Paper.

Where the avoidance or mitigation of these risks necessitate proscriptive strategy, policymakers will need to consider and employ risk management measures, also introducing new standards to avoid harm and to reinforce sustainable development along the Belt and Road. Considering the broader global significance of the BRI, the framework for BRI standards presented herein has the potential to significantly change the path of development toward sustainability of the BRI region and (through first-mover and demonstration effects) beyond.

A number of risks worth insuring BRI projects against fall into this category, as they come at an uncertain but potentially very large cost. These risks include systemic, global ones, such as those ensuing from global climate change, economic and financial crises, pandemics (Zika, Ebola), or emerging antimicrobial resistance. Thus, exposure in BRI partner countries to health-related risks—e.g., a rapid spread of existing or new diseases—as a result of increased connectivity, is an important consideration.

However, reliance on the insurance industry will not be sufficient to manage or mitigate these risks, several of which are uninsurable (e.g., because there is no accepted actuarial probability distribution of possible outcomes—the cornerstone of business-based insurance). Moreover, several of the critical future risks—most notably global climate change—stem from global market failures.

These future risks, added to the already existing ones seen above, call for internationally coordinated standards and policies, aiming for effective surveillance and monitoring systems underpinned by a compilation of timely, policy-relevant data and information, enhanced international governance arrangements and effective new multilateral coordination mechanisms. Moreover, the insurance industry and stakeholders performing risk assessment and due diligence need additional means and tools for managing risks that can help with responding to local conditions and changes in the business environment. This need is particularly acute in the case of private investment or public-private partnerships (PPPs) in BRI projects.

Considering the large number, scale and variety of BRI projects, and the multiple dimensions and broad range of risks which could ensue from them, disputes are inevitable and likely to remain an issue over time. Further, dispute settlements are not always covered by many insurers. It would be wise to prepare for the need to respond to more cases of dispute management and settlement in BRI projects. Harmonized standards could ensure that a dispute resolution clause is included into all BRI contracts, alongside an *a priori* agreement on the place for dispute resolution, and institutional support to provide the BRI with a multilateral dispute settlement agency. China, Hong Kong SAR, Singapore, and their legal

and insurance sectors, are stepping forward to offer themselves as places for the resolution of BRI disputes.

In order to have a clearer insight into the investment and financing challenges that could emerge along the Belt and Road, UNDP and CDB jointly developed a survey questionnaire that was filled by 50 Chinese companies with an average capital size of USD 227 million. The survey has found that disputes with host countries on standard-related issues, macroeconomic uncertainty and high cost of local employees are among the top risks and challenges faced by Chinese companies investing along the Belt and Road. The survey results confirm other observations on the complexity of the business and social environment in BRI partner countries, and highlights the importance for investors to conduct thorough risk analysis and prevention to guard against potential risks (for further information about this survey, see Annex 5).

1.5 The role of harmonized standards in the BRI as a way forward

Harmonized standards could be a key component of the policy package needed to successfully face the complex web of risks and challenges discussed above, and to create a coordinated approach for lending and investing along the Belt and Road. They would help avoid inconsistency in standards across BRI partner countries, and reduce compliance costs for them by devising coordinated approaches. At the same time, making BRI financing and investment activities fully compatible with each of the three pillars of sustainability—environmental, economic and social—would unleash the BRI’s great potential to contribute to SDG attainment in all countries.

Chinese stakeholders, BRI partner countries, and the international community at large would greatly welcome substantial progress in this direction. As the BRI plays an increasingly important role in global investment flows, harmonized BRI-wide standards on financing and investment could represent a decisive step toward reaching a critical mass for the acceptance of harmonized standards, beyond which all other countries may find it optimal to adopt these standards, leading to globally coordinated action.

The main responsibility for implementing transformative action to achieve national development goals and the associated SDGs rests with the governments and societies of the countries along the Belt and Road. However, particularly in countries with less developed economies and weak institutions, where foreign assistance, financing and investment play a major role in development, international actors also have the responsibility to ensure that their

actions positively contribute to the attainment of the SDGs. A further reason for collective action along the Belt and Road is the decisive role BRI investments can play in determining the success or failure of efforts to limit the effects of global climate change (Box 1.1) and in increasing the gains from the rules-based international system of trade and investment.

Box 1.1 BRI's Pivotal Role in Attaining the Paris Agreement Goals

The carbon footprint of BRI investments is an important factor for the Paris Agreement's goal of limiting the rise in global average temperatures to "well below 2°C" and of pursuing efforts to limit the temperature increase even further to 1.5°C.

Owing to its scale and scope, rapidly lowering the carbon intensity of BRI investments by optimizing their composition and reducing financing for new carbon-intensive infrastructure along the Belt and Road will make a critical contribution to the success of global efforts to combat climate change. China is already implementing such policies domestically to great effect. The implementation of harmonized BRI standards conforming to the SDGs—would act on effect routes to decarbonization identified in an influential recent Energy Transitions Commission Report: improving energy efficiency; reducing demand for carbon-intensive products and services; and deploying decarbonization technologies across all sectors.⁴⁶

This can be done by changing the composition of economic growth—which does not mean impeding it. It would require securing enhanced technology transfers or investment support for the users of outdated technology; and reduced investments in carbon-heavy production and consumption technologies and patterns.

This responsibility of external actors, particularly of financial institutions and commercial enterprises, has been reflected for several decades in a number of international guidelines and standards for finance and investment that are presented in the following chapters. Covering a wide spectrum of areas including environment, infrastructure, trade, labour and society, procurement, dispute settlement, etc. these guidelines and standards have undergone further revisions in order to reflect the multiple dimensions of the SDGs. Adopted almost universally, these are standards that both underpin international investment and financing activities and represent the baseline commitments of the international community to making the activities sustainable.

⁴⁶ The Energy Transitions Commission (2018, November): Mission possible: reaching net-zero carbon emission from harder-to-abate sectors by mid-century.

In addition, private enterprises and financial institutions have joined a wave of “green”, “social” and “Environmental and Social Governance (ESG)” standard-setting which is increasingly influencing decision making in capital markets. China has actively contributed to this debate and has developed several guidelines and standards, particularly in the environmental sphere, which are relevant for Chinese enterprises and financial institutions (see Chapter 6).

Later sections of this report present how harmonized investment and financing standards can help realize national development goals and SDGs relevant to them, thereby bringing benefits to all countries along the Belt and Road and, given the scale of the Initiative, to the rest of the world. They also illustrate how harmonized standards can help foster cooperation among governments, enterprises and financial institutions, while facilitating the use of “country systems” (with all stakeholders relying on domestic standards and policies for sustainable development, rather than on case-by-case assessments of compliance to often disparate external standards and rules). The reduction in compliance costs to such harmonized standards in all BRI partner countries would be an added bonus.

Chapter 2 BRI participating institutions, major financing and investment mechanisms

Although the vast majority of BRI-related investment since 2013 has been in infrastructure, the manufacturing, retail, and information services sectors are emerging as increasingly important under the BRI umbrella. As BRI opportunities diversify, the demand for a wider variety of financing mechanisms is also growing. Harmonising standards can help lower risk and financing costs to open up opportunities for a wider variety of firms and banks to participate in the BRI, while also ensuring that investment and borrowing align with national and international sustainable development priorities. This chapter provides an overview of the types of financial institutions and investment and financing mechanisms the BRI involves, followed by a brief discussion about their characteristics compared with global practices.

2.1 Main participating institutions in BRI financing

2.1.1 Chinese financial institutions

Since the BRI's launch five years ago, projects along the Belt and Road have mainly been financed by Chinese bilateral development finance institutions. The two largest among them are China Development Bank (CDB) and the Export-Import Bank of China (EximBank). These banks have evolved into globally competitive financial institutions, which offer preferential or market-based long-term development finance for infrastructure projects all over the Global South, aiming at generating economic and social benefits for the recipients. Based on available information, a study has recently estimated that CDB and EximBank “together provide more international development finance than the World Bank, the Asian Development Bank and the Inter-American Development Bank combined”.⁴⁷

Chinese financial institutions participating in the BRI are presented in Table 2.1 and in further detail below:

⁴⁷ Wragg, E. (2018, December 17). Analysis: from Belt and Road to stars and stripes. Global Trade Review.

Table 2.1 Chinese financial institutions in the BRI

Type of institution	Name	Key financial instruments	Main sectors
Policy Banks	China Development Bank	<ul style="list-style-type: none"> – Medium- and long-term credit – Equity investment in China-Africa Fund, etc. – Bonds 	Infrastructure, agriculture, industry
	Export-Import Bank of China (EximBank)	<ul style="list-style-type: none"> – Concessional loans – Export buyer's credit – Guarantees 	Infrastructure and industrial equipment
Commercial Banks	Agricultural Bank of China (ABC)	<ul style="list-style-type: none"> – M&A – Loans – Export credit 	Agriculture, energy and power
	Bank of China (BOC)	<ul style="list-style-type: none"> – Corporate loans – Bonds – Guarantees 	Infrastructure, energy
	China Construction Bank (CCB)	<ul style="list-style-type: none"> – Export credit – M&A – Bonds⁴⁸ 	Infrastructure, Transportation, Energy ⁴⁹
	China CITIC Bank	<ul style="list-style-type: none"> – Loans – Equity – Export credit – Bond 	Infrastructure, energy, transportation
	China Merchants Bank (CMB) ⁵⁰	<ul style="list-style-type: none"> – Guarantee – Credit – Loan – Swap – Bonds 	Energy, manufacturing, transportation, health, culture and tourism
	Industrial Bank (IB)	<ul style="list-style-type: none"> – Credit – Loans 	Green development, agriculture, infrastructure ⁵¹

48 China Construction Bank (2017, May 15). China Business: China Construction Bank gives the most financial support to the Belt and Road Initiative (link in Chinese, see references).

49 Ministry of Commerce of the People's Republic of China, China Association of International Engineering Consultants (2017, September 7). China Construction Bank provides USD 9.8 billion in financial support to 50 major Belt and Road Projects abroad (link in Chinese, see references).

50 China Merchants Bank. Cross-border finance (link in Chinese, see references).

51 Xinhua (2017, May 15). The service differentiation of industrial banks bolsters up the Belt and Road's financial flows (link in Chinese, see references).

Table 2.1 (Continued)

Type of institution	Name	Key financial instruments	Main sectors
Commercial Banks	Industrial and Commercial Bank of China (ICBC)	– Loans – Bonds ⁵²	Infrastructure, agriculture, industry
	Shanghai Pudong Development Bank (SPDB)	– Credit – Loans	E-commerce, Infrastructure ⁵³
Investment Fund	Silk Road Fund ⁵⁴	– Equity – Loans	Infrastructure, energy, industry
State-funded export credit insurance company	China Export and Credit Insurance Corporation (SINOSURE)	– Export credit insurance – Credit guarantee	Infrastructure, industrial equipment

Source: UNDP and China Center for International Economic Exchanges (2017)

Domestic policy financial institutions

China Development Bank (CDB)

CDB owns the only Development Financing license in China, with its overseas financing terms largely on commercial terms. According to CDB, it is the world’s largest development finance institution, and the largest Chinese bank for foreign investment, financing cooperation, long-term lending and bond issuance. CDB’s overseas lines of credit to Chinese companies are rising in support of China’s “Go Global” strategy to secure investment opportunities abroad. CDB also offers financial support to foreign governments and companies to promote investment from Chinese companies. CDB by the end of 2018 had a total outstanding BRI loan exposure of USD 105.9 billion. Over USD 190 billion has been cumulatively provided for a total of more than 600 BRI projects.⁵⁵ An example of this is the China-Africa Development Fund of which CDB is the largest shareholder. Launched in 2007, it is the first Chinese equity investment fund dedicated to support Chinese investment in Africa. By the end of 2018, the total amount of investment made or planned by the China-

52 HKTDC Belt and Road (2018, May 17). Industrial and Commercial Bank of China-the Chinese investment bank the financial services of which cover the largest part of the Belt and Road region (link in Chinese, see references).

53 SPD Bank (2017, May 16). Servicing the Belt and Road promotes cross-border financing innovation for the Dalian banking industry (link in Chinese, see references).

54 City of London. Greater China. Business Asia Programme.

55 China Development Bank (2017). Annual Report.

Africa Development Fund has reached nearly USD 5 billion.

Export-Import Bank of China (EximBank)

EximBank is China's designated state-owned policy bank for administering Official Development Assistance (ODA) and other loans to foreign governments to support China's foreign aid, investment and international economic cooperation. Its preferential facilities include government concessional loans and preferential export buyer's credit to foreign governments with a sovereign guarantee—an important source of financing for large BRI infrastructure projects, for which private investor appetite is often limited. China's Ministry of Finance subsidizes concessional EximBank loans. Preferential export buyer's credit is not considered official assistance and is therefore not subsidized by the government. EximBank also offers commercial-rate export buyer's and seller's credit, non-concessional loans and credit lines, overseas investment loans, and mixed finance packages. EximBank has extended USD 100 billion through mid-2017, supporting some 1200 BRI construction projects in over 50 countries.⁵⁶ EximBank also owns the China-Africa Industrial Cooperation Fund, another experienced and high-profile Chinese investment fund for Africa.

Commercial financial institutions

The main advantages of commercial banks are their extensive overseas branch networks and global experience. As of April 2019, a total of 8 commercial banks had established 63 first-tier branches in countries and regions along the Belt and Road, with the highest concentration of them in Southeast Asia.⁵⁷ Commercial banks mainly focus on transport and energy infrastructure, communication, construction and trade.

Three state-owned commercial banks, presented below, are important players in the BRI investment and financing landscape. Among them, the Bank of China and the Industrial and Commercial Bank of China play a major role in the financing of the Belt and Road. Commercial banks mainly use bank credit, international syndicated loans and overseas issuance of bonds. These banks are also gradually introducing diversified cross-border financial services, such as investment banking, overseas insurance, financial consulting services, and risk management for investor companies.

Bank of China (BOC)

In response to the BRI, the Bank of China proposed a “BRI strategic financial artery”

⁵⁶ The State Council Information Office of the People's Republic of China (2017, May 11). EximBank supporting over 1200 BRI projects (link in Chinese, see references).

⁵⁷ China Minsheng bank (2019, April 3). Strategic analysis of the construction of the Belt and Road served by banking under the support of financial technology. Minsheng Think Tank (in Chinese, see references).

plan. By March 2019, the bank had over 600 overseas branches in 57 countries and regions, with 24 countries along the Belt and Road. Credit lines of approximately USD 130 billion in total were extended in the countries along the Belt and Road for over 600 projects.

At present, the Bank of China's financial services modalities for the BRI include credit, overseas bonds, overseas insurance, and bilateral/multilateral cooperation with other financial institutions.

Industrial and Commercial Bank (ICBC)

By the end of 2018, ICBC had established 426 branches in 47 countries and regions, and indirectly covered 20 countries in Africa through partnership with the Standard Bank Group. It has also established agency relationships with 1545 overseas banks in 143 countries and regions. Among them, 131 branches in 21 countries are along the Belt and Road. In the Association of Southeast Asian Nations (ASEAN) region, ICBC has 60 branches in countries including Thailand, Viet Nam, Lao PDR, Cambodia, Myanmar, Indonesia, Malaysia and Singapore.

ICBC initiated the Belt and Road Inter-bank Regular Cooperation Mechanism during the first Belt and Road Forum. The "Mechanism" now has 85 member institutions in 45 countries, providing a total of over USD 40 billion for 59 projects.

Agricultural Bank of China (ABC) had established 22 overseas institutions in 17 countries and regions by the end of 2018, covering Asia, Europe, North America and Oceania. Its overseas assets totalled over USD 120 billion, which represented an increase of 11.8% from the previous year.

ABC has launched a series of "Go Global" financial products such as cross-border M&A loans, export credits, overseas bond issuance, industrial funds, etc., providing Chinese enterprises with integrated domestic and overseas financing services.⁵⁸

Investment/development funds

Investment funds have long been part of the international financing landscape, and they are a common type of collaboration between Chinese and foreign financial entities. Today most of the private investment funds are open-ended, with diversified financial services, high fund yields, large volumes, and mature legal supervision systems. Since the inception of the BRI, investment funds have been an important channel for BRI projects, and their role is set to increase. There are a number of development funds jointly established by Chinese and international institutions that operate along the Belt and Road. Table 2.2 provides a list of such funds.

58 Polaris Power Grid (2017, May 15). Belt and Road financial mechanism fully organized (link in Chinese, see references).

Table 2.2 Development funds China initiated or participated in

Development Fund	Amount pledged to the fund ⁵⁹ (billion USD)
Asia	
Silk Road Fund	55
The Green Silk Road Fund	30
Silk Road Gold Fund	16
China-United Arab Emirates Joint Investment Fund	4
China-ASEAN Investment Cooperation Fund	1
Eurasia	
Sino-CEE Fund (ICBC-led)	11
Russian Federation-China Investment Fund	5
The China-Kazakhstan Production Capacity Cooperation Fund	2
China-Russian Federation Regional Development Investment Fund	1.5
China-Central and Eastern Europe Investment Cooperation Fund (EximBank-led)	1
Regional China-Russian Federation RMB Fund	1
Sino-Russian Innovation Investment Fund	1
Latin America and Caribbean	
China-Brazil Investment Fund	20
China-LAC Cooperation Fund	10
China-LAC Industrial Cooperation Investment Fund	10
China Co-financing Fund for Latin America and the Caribbean	2
China-Mexico Fund	1
Sino-Mexico Energy Fund	1
Africa	
China-Africa Development Fund	10
China-Africa Fund for Industrial Cooperation	10
Africa Growing Together Fund (with AfDB)	2
China-Portuguese Speaking Countries Cooperation Fund	1
Global South	
South-South Climate Fund	3
South-South Cooperation Fund	3

Source: Gallagher *et al.*, (2018)⁶⁰

The Silk Road Fund (SRF) is a medium- and long-term development investment

59 As of the end of 2017.

60 Gallagher, K. P., *et al.* (2018, November). Energizing development finance? The benefits and risks of China's development finance in the global energy sector. *Energy Policy*, 122, 313-321.

fund that mainly provides financing for economic and trade cooperation and multilateral interconnection. A financing organization tailored for the BRI, the SRF was established in December 2014 with an initial capital of USD 40 billion. In May 2017, the Chinese government provided an additional RMB 100 billion to the SRF. It is jointly funded by China Development Bank, China EximBank, China Investment Corporation and foreign exchange reserves (through Wutongshu Investment Platform Co., Ltd.).⁶¹ By the end of 2018, the SRF has promised USD 11 billion worth of investments, with USD 7.7 billion already realized and USD 2 billion provided for setting up the China-Kazakhstan Production Capacity Cooperation Fund. In addition, the SRF and the European Investment Fund have together contributed EUR 500 million to set up a China-EU Co-investment Fund, which started operation in July, 2018.

In addition to providing financing through equity investment and loans, the SRF also collaborates with international development agencies and domestic and foreign financial institutions to establish joint investment funds, asset management companies, and other types of investment entities. By 2017, the SRF's investment projects covered Pakistan, Kazakhstan, Russian Federation, United Arab Emirates, Egypt, and other countries along the Belt and Road.⁶²

The Silk Road Gold Fund is a USD 15 billion multilateral investment fund run and supervised by the Shanghai Gold Exchange. The fund invests in mining engineering projects and chemical processing infrastructure, aiming to develop gold deposits of developing countries and share profits between the host country and investors.⁶³

The China-Central and Eastern Europe Investment Cooperation Fund provides funding for high-tech and clean energy enterprises in Eastern Europe, with a particular focus on innovative industries. It has participated in a wind farm project in Poland, a solar power project in the Czech Republic, and an electric and hybrid auto project in Bulgaria. The Fund uses multiple investment tools, including equity investments, mezzanine debt, and hybrid financial products.

Additionally, foreign private investment funds offer investors a variety of innovative and traditional fund options, providing more choice to investors. For example, the hedge fund "MAN" is known for its higher returns when there is greater volatility in the stock market.

61 Gallagher, K. P., *et al.* (2018, November). Energizing development finance? The benefits and risks of China's development finance in the global energy sector. *Energy Policy*, 122, 313-321.

62 For a case study on the Pakistan Karot Hydropower Project, please refer to Section 4.4.

63 Devonshire-Ellis, C. (2017, September 21). Who is financing the New Economic Silk Road? Silk Road Briefing, Dezan Shira Associates.

Export credit insurance agency

China Export Credit Insurance Corporation (SINOSURE) is the only policy-oriented, state-owned insurance company in China that is in the export credit insurance business. The state budget allocates funds to promote domestic exports and the development of foreign trade and investment. Since 2013, SINOSURE has insured over USD 712 billion worth of trade and investment along the Belt and Road.⁶⁴

China Credit Insurance provides services such as export credit insurance and reinsurance, overseas investment insurance, domestic credit insurance, credit guarantees, accounts receivable management and other export credit insurance services. Among them, short-term export credit insurance is the most frequent, followed by overseas investment guarantee and medium and long-term export credit insurance business.⁶⁵

Because of its BRI focus, insurance coverage is mainly concentrated in infrastructure and energy construction, which need to be protected through insurance due to the long project time periods, large volume, large capital demand, and the unstable investment environment in some partner countries. The high risk of the insured exports necessitates government backing for Chinese export insurance credit.

2.1.2 Non-Chinese financial institutions

A number of non-Chinese financial institutions are engaged in funding infrastructure projects in countries along the Belt and Road. These institutions range from bilateral and multilateral development institutions to commercial banks. Some of the main institutions and the financing they provide are detailed below:

Multilateral Development Banks (MDBs)

MDBs mostly provide long-term loans for infrastructure projects to countries along the Belt and Road with a degree of concessionality contingent on the level of economic development of the borrowing country: the World Bank (WB), European Bank for Reconstruction and Development (EBRD), African Development Bank (AfDB), Asian Development Bank (ADB), European Investment Bank (EIB), Islamic Development Bank (IsDB), New Development Bank (NDB) and Asian Infrastructure Investment Bank (AIIB) are some examples.

⁶⁴ Belt and Road Portal (2019, April 9). SINOSURE has covered more than USD 700 billion for the joint construction of the “Belt and Road” (link in Chinese, see references).

⁶⁵ Ibid.

Among these, we can distinguish between traditional and emerging MDBs:

Traditional Multilateral Development Banks

The World Bank Group (WBG) and the Asian Development Bank (ADB) are the main participating traditional MDBs in the BRI.

In 2018, the WBG provided loans, grants, equity investments and guarantees to member countries and private companies totalling USD 66.9 billion. The BRI region accounted for 60% of this amount.

The WBG includes the International Bank for Reconstruction and Development (IBRD), which provides loans, guarantees, risk management products, and advisory services to middle-income and creditworthy low-income countries; the International Development Association (IDA) that extends credit and grants to boost economic growth, reduce inequalities, and improve livelihoods in low-income countries; the International Finance Corporation (IFC) focuses exclusively on the private sector in developing countries; the Multilateral Investment Guarantee Agency (MIGA) provides investment with guarantees for developing countries; and the International Centre for Settlement of Investment Disputes (ICSID), a forum for investor-State dispute settlement.

The IBRD accounts for about half of the WBG's lending for energy and mining, transportation, water supply, sanitation and flood control projects. "The International Development Association (IDA) provides interest-free loans for health care and other social services in low-income countries. It now has a significant presence across BRI participating countries.

ADB supports its members in infrastructure, energy, environment, education and health through loans, co-financing guarantees, technical assistance and grants. As a regional development organization, ADB can collaborate with domestic commercial banks and provide joint guarantee financing to reduce financing costs.

Emerging Multilateral Development Banks

The AIIB and the New Development Bank (NDB) are the main emerging MDBs engaged in the BRI.

AIIB launched operations in January 2016 and now has 100 member countries, almost two-thirds of which are partners in the BRI. In 2016, AIIB provided loans of USD 1.73 billion for nine projects, covering energy, transportation and urban infrastructure to help improve local people's livelihoods. In 2017, AIIB lent USD 2.4 billion for 15 projects in new areas such as communications. Importantly, 16 of the 24 AIIB projects are in cooperation with multilateral development banks such as the WB, ADB and EBRD. AIIB projects include:

- Andhra Pradesh Urban Water Supply and Septage Management Improvement Project

in India:⁶⁶ a USD 570 million project co-financed by AIIB and the Government of Andhra Pradesh (70% and 30%, respectively) to improve water supply and sanitation service delivery.

○ Turkey Gas Storage Expansion Project:⁶⁷ a USD 2.74 billion project co-financed by the AIIB and the WB, each providing a USD 600 million loan, the Islamic Development Bank (IsDB) which is providing USD 350 million in loans, USD 450 million of commercial loans, and the Turkish Petroleum Pipeline Company (BOTAS) who have a USD 735 million equity stake in the project.

○ Mandalika Urban and Tourism Infrastructure Project in Indonesia:⁶⁸ a USD 317 million project co-financed by AIIB and the Government of Indonesia to provide sustainable core infrastructure for tourism in the Mandalika region.

By the end of 2018, the AIIB had approved a total of USD 7.5 billion in loans, leveraging nearly USD 40 billion worth of investments. 35 projects already approved are located across 13 countries including Indonesia, Pakistan, Tajikistan, Azerbaijan, Oman, Turkey, and Egypt.

NDB was formally established in 2015. It successfully issued its first green bond in Shanghai with a total value of RMB 3 billion and a term of five years. NDB has funded 30 projects through loans totaling USD 8 billion, a third of them to China.⁶⁹ The first batch of NDB loans was issued in April 2016, totaling USD 811 million for renewable energy projects in Brazil, China, India and South Africa. In October 2016, the first NDB project in the Russian Federation was launched: the Baishitan Hydropower Station.

Bilateral development institutions

Bilateral financial institutions provide concessional loans in the framework of bilateral ODA to developing and emerging countries along the Belt and Road. Some examples are the Japan International Cooperation Agency (JICA) of Japan, Kreditanstalt für Wiederaufbau (KfW) of Germany, the Economic Development Cooperation Fund (EDCF) of Korea, Agence Française de Développement (AFD) of France. JICA is planning to co-finance with IFC up to USD 1.5 billion in private sector projects in emerging BRI partner countries over the next five years. A 414-megawatt dual-fuel combined-cycle power plant project in Bangladesh co-

66 Asian Infrastructure Investment Bank (2018). Project Summary Information: Andhra Pradesh urban water supply & septage management improvement project.

67 Asian Infrastructure Investment Bank (2018, June 24). Turkey: Tuz Golu gas storage expansion project.

68 Asian Infrastructure Investment Bank (2018, December 7). Indonesia: Mandalika urban and tourism infrastructure.

69 New Development Bank. List of all projects.

funded by JICA and IFC was completed in early 2017.⁷⁰

Export financial institutions and export credit insurance agencies

Export credit agencies exist in most countries that engage in large volumes of foreign trade. They provide or facilitate loans to countries along the Belt and Road on a commercial or concessional basis, depending on the partner country and the type of project (e.g., Japan—Japan Bank for International Cooperation (JBIC), Germany—Hermes, Korea—EximBank, US—EximBank). These loans and guarantees tend to have a short- to medium-term maturity.

BRI partner national development banks and public financial institutions

These financial institutions provide long-term loans for infrastructure projects (e.g. PT Sarana Multi Infrastruktur/SMI in Indonesia). The Palembang-Indralaya Toll Road in South Sumatra, Indonesia, is an example of a PT SMI financed project.

Commercial banks, infrastructure funds and other commercial financial institutions

These institutions finance infrastructure through syndicated loans, equity stakes, and other instruments. Prime examples include HSBC, Standard Chartered, DBS, Overseas Chinese Banking Corporation (OCBC), Maybank, Citibank, Bank of America, all of which are active financial institutions in China. However, these sources usually do not provide long-term financing for greenfield infrastructure projects, and primarily focus on advanced BRI partner countries such as Singapore.

The lending concessionality of bilateral and multilateral public financial institutions is generally higher than that of export financing agencies and commercial lenders.

2.1.3 Collaboration between Chinese and international financial institutions

Each country along the Belt and Road draws from various sources for its infrastructure funding, including domestic funds from the national and sub-national budgets. As the BRI has developed, funding structures have become more complex, with Chinese financial institutions being a growing and significant force.⁷¹ In countries such as Sri Lanka, Cambodia and Lao PDR,⁷² Chinese financial institutions are the dominant source in the funding landscape.

70 Daily FT (2017, May 17). IFC and JICA to support \$1.5 b in projects to modernize infrastructure in emerging markets.

71 Inclusive Development International (2016). Making inroads: Chinese infrastructure investment in ASEAN and beyond.

72 Var, V. and Po, S. (2017, March 18). Cambodia, Sri Lanka and the China debt trap. East Asia Forum.

However, Chinese financial institutions are not the sole or even the main sources of financing and investment in countries with relatively large volumes of BRI projects, notably Viet Nam, Indonesia, Thailand and Malaysia, where non-Chinese funding sources play a larger role. With a wide scope of non-Chinese funding sources available along the Belt and Road, Chinese development finance institutions have been active and innovative in collaborating with international financial institutions.

Cooperation takes various forms, including syndicated loans, co-financing, on-lending, credit-line frameworks, risk-sharing mechanisms, share-holding, technical assistance, etc. China's EximBank has also co-financed or provided currency liquidity loans to support export buyer credits in partnership with foreign banks such as Russia's Vnesheconombank (VEB), Netherland's ING, and South Africa's TDB Bank.

Co-financing is a common practice among bilateral and multilateral development banks in large infrastructure projects, and an attractive and frequently used instrument for risk pooling and diversification and for saving costs in project development. AIIB has chosen to co-finance its initial infrastructure projects in countries along the Belt and Road e.g., its Bangladesh Natural Gas Infrastructure and Efficiency Improvement Project with ADB, its Philippines Metro Manila Flood Management Project, and the Azerbaijan Trans Anatolian Natural Gas Pipeline Project with the WB.⁷³ Such collaborative co-financing structures also contribute to capacity building in partner countries and increase the chances of ensuring successful development outcomes.⁷⁴ Moreover, collaborative financing schemes can facilitate the identification of common ground for developing shared financing and investment standards along the Belt and Road.

Chinese financial institutions are also increasingly investing in international investment funds, as discussed earlier, which in turn invest in BRI partner countries. So far, BRI remains a funding priority for Chinese institutions, while other bilateral and multilateral development banks dominate infrastructure funding beyond the BRI. The MDBs typically view their considerable lending to BRI partner countries as driven by their desire to support sustainable development and connectivity, rather than specifically aiming to support the BRI.

Inter-bank associations, which offer platforms for financial cooperation, is another form of collaboration between Chinese and foreign banks. CDB, for example, has been involved in at least six such associations since 2005:

73 Asian Infrastructure Investment Bank. Approved projects overview.

74 Brink Asia (2018, September 3). BRI and the promise of cooperation: an interview with Andrew Caney.

- SCO Interbank Association;
- China-ASEAN Interbank Association;
- China-Arab Countries Interbank Association;
- China-Central and Eastern European Countries Interbank Association;
- China-Africa Interbank Association;
- BRICS Interbank Cooperation Mechanism;
- The Association of China-LAC Development Financial Institutions.

These associations and mechanisms convene member banks during regional summits with these countries and provide platforms for negotiating cooperation documents such as co-financing, joint investment, local currency credit, letters of credit, and personnel exchange and training. Previously established financial facilities are also being integrated into newly established associations.

Despite increasing collaboration between the Chinese and international banking sectors, major differences remain in their roles. International banks tend to focus on offering complementary financial services, like advice on the structuring of projects, currency and interest rate hedging, trade finance services, and assisting clients in issuing bonds on international capital markets.⁷⁵

International commercial banks have already been providing financial services to BRI projects and Chinese banks have been active in initiating cooperation with other banks and financial groups:

- Standard Chartered was involved in over 50 BRI projects in 2017, providing financial services such as lending, transaction banking, capital markets and project finance activities, including 7-year financing for a Ghanaian power plant expansion project and 10-year facility for an LPG storage terminal project in Sri Lanka—and is facilitating access to external finance by providing letters of credit and derivatives to hedge currency risk. By 2020, Standard Chartered plans to have offered USD 20 billion in financing to facilitate BRI projects.⁷⁶ In the Middle East, along with a consortium of Chinese and local banks, Standard Chartered has signed a USD 3 billion project financing facility to fund the green-field construction, operation and maintenance of a power plant—the first coal-fired power generation plant in the Gulf Cooperation Council region. It is also the first transaction of the

75 Hale, T. (2018, September 25). Western banks gather to catch the Chinese investment crumbs. HKTDC Belt and Road.

76 Mutethya, E. (2018, October 17). Standard Chartered Bank pledges continued support to Belt and Road. China Daily.

Silk Road Fund as an equity and debt provider in the Middle East as a part of the BRI.^{77, 78}

- HSBC⁷⁹ has been named Best Overall International Bank for the BRI in the inaugural Asiamoney New Silk Road Finance Awards, reflecting the Bank's commitment to being a leading financial partner to clients engaged in BRI projects.

- China Development Bank and Deutsche Bank agreed in 2017 to work together over the next five years with the aim of supporting projects worth USD 3 billion.⁸⁰

- Citibank signed a memorandum of understanding with the Bank of China and China Merchant Bank to help Chinese companies exploring markets abroad. It has already acted as a global coordinator on bond issues from the Bank of China linked to BRI.⁸¹

- Since 2016 there is a tie-up between CCB and Singapore's government-owned International Enterprise (IE), a trade development board. Under the MoU, CCB will provide USD 30 billion to support local and Chinese companies to invest in BRI projects through Singapore.⁸²

- Digital Bank of Singapore has signed an MoU with the Agriculture Bank of China in 2017.^{83, 84}

- In 2016, China Export Credit Insurance Corporation (SINOSURE) started collaborating with the UK Export Finance department to enhance the risk resilience of Chinese and British investing in infrastructure development in third countries.

- Germany's Commerzbank has signed an agreement with ICBC, committing to lend USD 5 billion for projects along the Belt and Road by 2023.

Export credit agencies have recently expanded their presence along the Belt and Road. SINOSURE, for example, partnered with UK Export Finance (UKEF) in 2016 to increase UK

77 Standard Chartered Bank. One Belt, One Road, One Bank.

78 Mutethya, E. (2018, October 17). Standard Chartered Bank pledges continued support to Belt and Road. China Daily.

79 HSBC (2017, 27 September). HSBC Tops Asiamoney's New Silk Road finance awards.

80 Deutsche Bank (2017, May 31). China Development Bank and Deutsche Bank sign 3 billion US dollar cooperation agreement. DB Media Release.

81 Citigroup. Enabling growth and progress along the Belt and Road. Institutional Clients Group.

82 Hui, C. (2016, April 25). IE Singapore, China Construction Bank sign MoU for infrastructure projects. Channel News Asia.

83 Lee, S. (2017, September 4). China's Belt & Road Initiative-risks and opportunities abound. Global Trade Review, sponsored article by DBS Corporate Banking.

84 Mookerjee, I. (2017, May 16). DBS Bank signs MOU to tap Belt and Road initiative. Citywire Asia.

and Chinese exporters' risk capacity for infrastructure projects in third countries.⁸⁵

Existing funding sources-dominated by China's development/policy banks, China's sovereign wealth fund, newly established multilateral development banks, complemented by funding from regional and international organizations-cannot fully satisfy the capital needs of all BRI projects. Thus, investment from the private sector will be crucial for ensuring the successful implementation of BRI projects. However, the long maturities and high risks associated with large infrastructure projects will require some form of risk-sharing with BRI governments in China.

2.2 Major financing and investment mechanisms along the Belt and Road

Since the announcement of the BRI, China has provided considerable financial support to BRI partner countries through bank loans and equity and bond markets, among others. Loans, mostly provided by state-owned commercial banks and policy banks, have accounted for the largest share of BRI finance. However, funds are also channelled through more than ten state- and privately-held investment funds along the Belt and Road.

2.2.1 Loans

Due to the large financial exposure, long construction and return periods of BRI infrastructure and energy projects, it has been mainly state-owned commercial banks and policy banks who have been able to issue loans.⁸⁶ Loans along the Belt and Road are also provided by MDBs.

Loans from Chinese banks

According to a publication by Boston University,⁸⁷ six Chinese banks participated in USD 36-54 billion of syndicated loans annually in the energy and transportation sectors from 2015 to 2017. That is three times more than from 2012 to 2014. From 2014 to 2017, six Chinese banks participated in syndicated loans worth USD 143 billion for 165 energy and transportation projects in 32 BRI partner countries.

85 City of London Corporation and People's Bank of China (2018, September). Building an investment and financing system for the Belt and Road Initiative. City of London.

86 Yuan, Y. (2018, September 10). Fifth anniversary of the Belt and Road launch special: a variety of forms, brilliant results (link in Chinese, see references). People's Daily.

87 Zhou, L., *et al.* (2018, November). Moving the green Belt and Road Initiative: from words to actions. World Resources Institute and Boston University Global Development Policy Center Working Paper.

CDB issues mainly loans that include capital construction loans, M&A loans, technical assistance loans, foreign exchange fixed asset loans, and foreign exchange working capital loans. They are mostly medium- to long-term loans. In the case of large-scale infrastructure construction projects, loan maturity periods can be extended to over 15 years according to the specific conditions of the industry and project. Market and commercial principles play a crucial role in setting the range of interest rates.

Exim Bank provides foreign and domestic trade, investment and cooperation loans and participates in international and domestic syndicated loans:

- Foreign trade loans include export trade and import trade loans. These are used to support loans for goods, services and technology exchanges between China and foreign countries, as well as Hong Kong SAR, Macao SAR and Taiwan Province of China.

- Foreign investment loans, which include overseas resource development loans and shareholder loans, among others, are provided to Chinese enterprises legally registered in China and abroad and used for overseas financing as well as for financing in Hong Kong SAR, Macao SAR, and Taiwan Province of China.

- Foreign cooperation loans are used for cooperation agreements between China and overseas countries or regional bodies, financial institutions or sovereign guarantee enterprises, as well as to support Chinese enterprises to contract overseas construction projects. These loans include foreign contracted project loans, international sovereign cooperation loans and financial institution cooperation loans.

The Chinese government provides preferential loans to developing countries in order to promote mutually beneficial cooperation. These loans include concessional loans and preferential export buyer credit. Concessional loans have low interest rates (2-3%) and long maturity periods (generally 15-20 years of repayment period including the grace period).

Loans from Multilateral Development Banks

World Bank loans mainly include loans from the IBRD, commonly known as “hard loans” and concessional ones from IDA, commonly known as “soft loans”. The WB’s financing for the Belt and Road is mainly based on hard loans, including project financing and sector financing. Some countries and regions have soft loan opportunities.

The WB has a longer financing period and relatively low interest rates. General terms for China include repayment periods of 20 years, with a grace period of 5 years and a USD interest rate of LIBOR + 1.8% per year. Soft loans have a repayment period of 38 years, the grace period is 6 years, and eligible countries pay interest plus fees of about 1.4% per year on USD loans.

ADB supports its members in infrastructure, energy, environmental, education and

health by providing co-financing guarantees, technical assistance, loans (project loans, planning loans, departmental loans, development financial institution loans, special project implementation assistance loans, and private sector loans) and some grants.

ADB's hard loan interest rate is at a floating rate, which is adjusted on a biannual basis and the maturity period is 10 to 30 years, with 2-7 years grace period. Soft loans are concessional loans and are only available to developing country members who have limited repayment ability. The maturity period of soft loans is 40 years, with a 10-year grace period, no interest and only a 1% management fee.

Indirect loan financing is also provided by other sources, such as the SRF. In October 2018, the SRF entered into a participation agreement with AIIB to provide a senior loan facility to finance the design and construction of the first phase of a national fibre optic broadband network project in Oman.⁸⁸ CDB's special fund for African SMEs initiated in 2001 also has an indirect loan component which extends loans through local on-lending banks. In the past decade, CDB has committed USD 4.2 billion to 32 African countries for the development of SMEs in Africa through a special loan program.⁸⁹ This approach offers an option to finance smaller scale projects utilizing the comparative advantage of local financial institutions' market proximity and provides access to credit for countries and regions where financial markets are under-developed. Such forms of cooperation call for standardization of risk management to facilitate complex risk-sharing among financial institutions.

2.2.2 Bonds

This debt mechanism has so far been used relatively infrequently along the Belt and Road compared with loans, in part because Chinese standards have not been fully consistent with international bond standards (e.g., regarding green bonds). However, national and international bond markets are a potentially important source of funding for BRI investment, and their role is set to increase. Bonds issued by Chinese policy and commercial banks domestically and abroad can provide important funding for the banks to finance BRI projects. In the meantime, both local and overseas companies can also issue BRI bonds in China through the Shanghai and Shenzhen stock exchanges to raise funds directly.

88 Silk Road Fund (2018, November 7). Silk Road Fund entered into a Participation Agreement with Asian Infrastructure Investment Bank (AIIB) for Oman's national fiber optic broadband network project. Company News.

89 Ministry of Commerce of the People's Republic of China (2011, June 18). Introduction to the Special loan for the development of African SMEs. Policy Interpretation.

Bonds issued by Chinese policy and commercial banks

Policy banks are refinancing themselves through national and international bond markets, which includes green bonds issued by the CDB, EximBank and ICBC, all of which have issued BRI-related green bonds in 2017. Not all proceeds go to overseas projects but one of the CDB green bond-sponsored projects is a Pakistan wind project, for example.

The overall scale of Chinese policy and commercial bank bonds issued is limited. Recent developments in this regard include the following:

- In 2014, ABC became the first Chinese-funded institution to issue RMB bonds in the Middle East and continues to issue offshore bonds in Hong Kong SAR and Singapore.

- In 2015, the first “Belt and Road” bond was issued. A group of commercial banking institutions along the Belt and Road, including Abu Dhabi, Hungary, Singapore, Taipei and Hong Kong SAR, acted as the issuers and issued RMB, USD, EUR, SGD and other four currencies.⁹⁰

- In 2017, the ABC Xinjiang branch issued its first BRI bond for the RMB 500 million (USD 74 million) Urumqi International Airport Reconstruction and Expansion project.⁹¹

- In October 2017, ICBC issued green bonds on the Luxembourg Stock Exchange for the first time, raising USD 2.15 billion (approximately RMB 14.3 billion). These green bonds aligned with existing international and Chinese definitions of “green”, and the Center for International Climate Research provided policy advice in this regard. Zhongcai Green Financing has conducted an external review in accordance with Chinese green bond standards and obtained a climate bond standard certification. This was the largest single certified green bond. The three- and five-year ICBC Belt and Road climate bonds can be issued in USD and EUR. These include bonds of EUR 1.1 billion with a three-year variable rate, bonds of USD 450 million with a three-year variable rate, and green bonds of USD 400 million with a five-year fixed interest rate.

- In March 2018, the Chinese government authorized local and foreign private companies and government agencies to issue Belt and Road bonds through the Shanghai Stock Exchange.

- BOC issued USD 3.2 billion of BRI bonds in 2018. Subscribers include the sub-

90 Zhu Z. (2017, March). Belt and Road financial mechanism fully organized (link in Chinese, see references).

91 Cao, Y. (2017, May 22). ABC Xinjiang branch successfully issues its first “Belt and Road” bond (link in Chinese, see references). China Financial News.

branches of BOC in Singapore, Luxembourg, Sydney and New Zealand.^{92, 93}

Bonds issued by private companies and government agencies

In early 2018, the Chinese government authorized local and foreign private companies and government agencies to issue BRI bonds through the Shanghai and Shenzhen stock exchanges.⁹⁴ By March 2019, more than 10 such bonds have been successfully issued, raising a total of over USD 3.5 billion.⁹⁵ UC Rusal, a Russian aluminium producer, was the first foreign company to issue a Belt and Road bond. The bond was worth RMB 1 billion and it was issued at the Shanghai Stock Exchange.⁹⁶ Singapore-based Global Logistics Properties, Asia's largest warehouse operator, also received approval at the beginning of 2018 to issue Belt and Road bonds up to RMB 12 billion in the Shenzhen Stock Exchange.⁹⁷

The Hong Kong Special Administrative Region Government is set to launch an extensive green bond programme aiming to promote and support the BRI and to attract international investors to fund green projects through Hong Kong's capital markets.⁹⁸ This may become a major modality for international financial institutions, funds and private investors to participate in BRI funding. Singapore is expected to follow.

2.2.3 Equity

Overseas direct investment

China's overseas investment has significantly increased in the last five years along the Belt and Road. In 2017, China's outward FDI stock reached USD 1,809 billion, accounting for 5.9% of the global FDI stock. China's outward FDI flow in 2017 was USD 158.3 billion, ranking third in the world and first among the developing countries. China's outward FDI has also grown significantly along the Belt and Road, reaching USD 20.2 billion in 2017 with a 30% increase from the previous year. By the end of 2017, China's FDI stock in BRI partner

92 Bank of China (2018, April 11). Bank of China successfully issues a USD 3.2 billion "Belt and Road" theme bond (link in Chinese, see references).

93 Economic and Commercial Counsellor's Office of the Embassy of the People's Republic of China in Singapore (2018, April 20). Bank of China Singapore branch successfully issues a "Belt and Road" theme bond of USD 1.5 million (link in Chinese, see references).

94 Tan, C. (2018, March 7). China to step up financing for Belt and Road projects. Nikkei Asian Review.

95 Xinhua, (2019, March 2). China's B&R bond issuance increases in 2018.

96 Belt and Road Portal (2018, March 5): Companies allowed to issue B&R bonds.

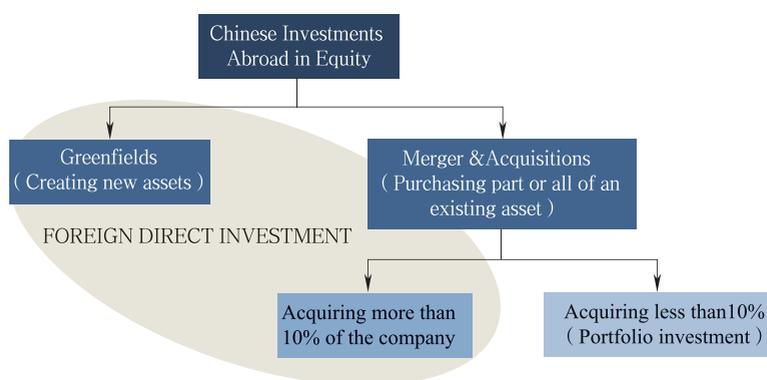
97 Global Times (2018, March 3): China to allow bond issuance to fund Belt & Road projects.

98 HKTDC Belt and Road. (2018, September 20). Expert insights: infrastructure investment trends on the Belt and Road.

countries was USD 154.4 billion, accounting for 8.5% of China's total FDI stock in other countries.

The BRI is an ambitious development blueprint that is expected to provide additional impetus to financing global sustainable development efforts. China is increasingly incentivizing its private sector to go abroad and invest under the Initiative, while international financial institutions such as the AIIB and the NDB are providing some complementary multilateral project lending. An overview of the structure of Chinese overseas investments is presented in Figure 2.1.

Figure 2.1 Chinese investments abroad in equity



Mergers and acquisitions (M&A)

Chinese outbound mergers and acquisitions (M&As) have grown considerably between 2013 and 2018, coinciding with the announcement of the Belt and Road Initiative (BRI), and contrasting with modest growth during 2008-2013. Total Chinese outbound M&A was about USD 47 billion in 2008 and remained at approximately USD 54 billion in 2013. The pace of M&As accelerated quickly between 2014 and 2016, with outbound M&As surpassing USD 200 billion in 2016, before declining sharply to USD 108 billion in 2017 and USD 95 billion in 2018. The total amount for 2013-2018 is still almost double that of the 2008-2013 period.⁹⁹

Chinese acquisitions in BRI partner countries increased exponentially in the years after the Initiative was announced in 2013. The total value of Chinese M&As in the 68 countries officially linked to the BRI totalled USD 48 billion in 2017,¹⁰⁰ an increase of more than 50% year-on-year from 2016's USD 31 billion, and more than three times the 2013 value. Some of the largest deals include a Chinese consortium's USD 11.6 billion buyout of the Singapore-

⁹⁹ White & Case. M&A activity by value Q4 2015-Q4 2018.

¹⁰⁰ Jiang, X. (2018, April 12). M&A deals in Belt & Road economies increase by 81%. China Daily.

based Global Logistics Properties GLPL.SI., and the USD 1.8 billion purchase of an 8% ownership interest in an Abu Dhabi oil company by the state-owned oil giant China National Petroleum Corporation.

Real estate has also experienced a sharp increase in the last few years and represented almost a fifth of M&A operations. Financials and media remain key sectors in this field, and M&A investments in these two sectors have together increased by more than 10%. Consumer products has become one of the four main sectors in BRI M&As, accounting for 14% of these operations in 2017.

Taken together, these trends describe an M&A strategy that maintains a strong presence in critical sectors. In terms of country composition, the largest deals tend to be in more advanced BRI partner countries. Further examples of Chinese overseas M&As are presented in Annex 7.

Portfolio investment and co-investment

The major initial source of equity investments has been the USD 40 billion Silk Road Fund. Until end-2017, the committed investment of the SRF was USD 6 billion, of which equity investment accounted for nearly 80%. Some examples include:

- Purchase of 9.9% of Yamal liquefied natural gas (LNG) project in Sabetta, United Arab Emirates;
- Dubai Hassyan Clean Coal Powerplant, co-invested with Harbin Electric International, China;
- Acquisition of 9.9% of PJSC SIBUR Holdings, a Russian energy company, in 2016.¹⁰¹

In November 2017, the SRF signed a Cooperation Agreement to set up an energy infrastructure co-investment platform with General Electric (GE) Energy Financial Services, a subsidiary of GE. The two companies invest together through this platform in the power, oil and gas, and renewable sectors in different geographic areas, including countries along the Belt and Road.¹⁰² In July 2018, the Silk Road Fund and the European Investment Fund signed a Memorandum of Understanding to implement their first co-investment.¹⁰³

In addition to the Silk Road Fund, Chinese enterprises are another important source of equity investment. They have driven the rapid, albeit volatile increase in China's Overseas Direct Investment (ODI), which has been described above.

In addition, CDB, EximBank, the State Administration of Foreign Exchange (SAFE),

101 The Eurasian Press Agency (2016, 16 December). 10% stake purchase in SIBUR named China's largest investment in Russian Federation in 2016.

102 Silk Road Fund (2017, November 10). Silk Road Fund establishes energy infrastructure co-investment platform with General Electric. News and Press Releases.

103 Chen, J. (2018, July 16). Silk Road Fund, European Investment Fund sign MOU. China Daily.

the People's Bank of China (PBOC), as well as some sovereign investment funds, commercial banks and private investors have set up a series of private equity investment funds with regional or sectoral focuses. Most of these funds operate on a commercial basis, and engage in medium- to long-term investment in key sectors such as energy, resources, infrastructure, manufacturing, agriculture, etc. A list of examples of these investment funds are presented in Table 2.2 in section 2.1.3.

Equity investments are often combined with loans. Some examples are:

USD 5.8 billion China-Lao PDR Railway links Vientiane to the China-Lao PDR border. China and Lao PDR have set up a 70/30 joint venture to finance the railway project. USD 465 million will be borrowed from the EximBank of China at 2.3% interest with a five-year grace period and a 35-year maturity.¹⁰⁴

USD 1.65 billion coal-fired power plant by the port of Payra in Bangladesh is a joint venture between the Chinese CMC and Bangladesh's state-owned North-West Power Generation Co. The project funds are of Chinese origin, but equity will be shared by both countries reflecting in-kind contribution of assets by Bangladesh.¹⁰⁵

2.2.4 Grant-based funds

Grants are derived directly from the government budget and used for purposes of development and of humanitarian relief. Funded by the Chinese government and provided to foreign government agencies, grants function as an essential part of China's foreign assistance, mainly in the form of direct fiscal support, in-kind aid, and services such as scholarships or medical assistance. Grants exclude military-related funds and are mainly used to build hospitals, schools and low-cost housing, and support water-supply or other social welfare projects.

These funds constitute a small share of China's total development finance. An example of a fund through which China provides grants along the Belt and Road is the Chinese South-South Cooperation Assistance Fund (SSCAF). It was set up by the Chinese government in 2015 to facilitate support for humanitarian aid, agriculture and food security, poverty alleviation, education and training, industrialization, climate actions and public health in developing countries. With an initial capital of USD 2 billion, SSCAF was granted an additional USD 1 billion in the 2017 Belt and Road Forum for International Cooperation, to further advance the achievement of the 2030 Agenda in developing countries.

104 Go, Y., and Palma, S. (2018, March 28). Is China's Belt and Road working? A progress report from eight countries. *Nikkei Asian Review*.

105 Ibid.

There are also a number of environmentally focused funds, which provide grants and loans. These funds are not specific to the BRI but do provide grants and sometimes loans to BRI partner countries. Some examples of these funds are presented in Annex 7.

Even though grants account for a small fraction of overall financing flows, they can play a vital role in addressing market failures. They can also have an important leveraging effect when blended with loans in co-financing, providing a greater level of concessionality in the overall financing targeted to LDCs.

2.2.5 Public-Private Partnerships (PPPs)

A PPP is a long-term cooperative arrangement between the government and the private sector, most often used in developing infrastructure or providing a public service. PPPs are set to play an increasingly important complementary role in BRI projects. Their appeal comes from developing country governments' limited ability to fund large infrastructure projects or to take on the debt burden of entirely loan-financed projects. However, private companies are generally reluctant to engage in BRI infrastructure projects owing to their long investment cycle, considerable risks, high financing costs, and low short-term returns. The ability to attract stand-alone private investment is further complicated by the uncertainty of the political and business environment found in BRI partner countries, and their imperfect or incomplete financial markets.

The PPP modality holds the promise of significantly contributing to filling the financing gap while reducing the fiscal burden of governments. In addition, the private sector, with market sensitivity and a comparative advantage in efficient resource use stemming from extensive project implementation experience, can raise the efficiency of BRI investments and help manage and reduce project risks. The government can complement this through political and legal risk-related project guarantees and policy commitments to address remaining concerns of the private sector throughout project implementation.¹⁰⁶ BRI partner countries have already used PPPs as an innovative project modality in several instances. By the end of April 2017, 865 PPP projects had been implemented in 64 countries along the Belt and Road associated with a total investment of USD 509 billion.

Typical PPP projects along the Belt and Road are in transport, renewables, power and the oil and gas sectors, with the emphasis largely determined by the situation and priorities of

106 Wu, Y. *et al.*, (2017, September 10). Risk assessment in straw-based power generation public-private partnership projects in China: a fuzzy synthetic evaluation analysis. *Journal of Cleaner Production*, 161, 977-990.

the BRI partner country. Looking ahead, the PPP pipeline remains strong: many PPP projects along the Belt and Road are in the pre-development or in-development stage.

The sectoral coverage of BRI projects using the PPP modality primarily reflect partner countries' industrial structure, development priorities and policy orientation. Other key factors shaping PPPs along the Belt and Road are partner countries' natural resource endowments, population structure, their legal, regulatory and institutional framework, investment climate and financial markets. The government's policy implementation capacity and credibility can also be a critical constraint. The scale and scope of PPP projects can be expected to expand, given the solid policy support from China and a continued desire to attract infrastructure investment in partner countries.

The public and private sector can work together to maximize the sustainable development impact of large infrastructure investments. The contribution from the private sector through public-private-partnerships can be of particular value given its comparative advantages in sectoral expertise and operational efficiency, among other enabling factors. Yet, there is no consensus on the definition of PPP across the wide spectrum where it is applied. This is because the design tends to be highly project- and context-specific, reflecting a country's level of development, rate of marketization and corporate governance regime.

A common understanding of the space where PPP practices operate needs to be established, as well as what "success looks like". This involves clarity about the legal framework, the division of labour between government and private firms, and ways to identify instances in which a PPP is the best way to serve the long-term development interests of the general public.

Providing timely and analytically relevant data to facilitate, track and link PPP performance appraisal to the SDG monitoring and evaluation framework would be helpful. PPP practices have direct or indirect implications for poverty reduction. The rationale behind employing PPP modalities—compared to traditional, budget-funded approaches—is the promise to deliver "value-for-money". Efficiency gains result from each player being able to focus on their areas of comparative advantage: government focuses on strategic planning, provision of public goods and public services, and ensuring outcomes conducive to social and environmental sustainability; and the private sector focuses on efficient use of resources and delivery of results under hard budget constraints. Effective measurement of PPPs' development impact requires indicators to track economic efficiency, appropriate risk sharing, as well as social and environmental sustainability.

Demand for PPPs is increasing rapidly along the Belt and Road. In addition to the significant investment demand in transport, there is also a high number of PPP projects in

energy, water and communication industries, due to the need for improved infrastructure in developing countries and the shortage of public goods provision. In the future, communication and energy projects launched jointly with the private sector are expected to make critical advances.¹⁰⁷

PPPs can also provide a useful entry point for the domestic private sector in partner countries to participate in BRI infrastructure investment. Some examples of domestic PPPs along the Belt and Road are the Sino-Russian oil and gas pipelines and China-Myanmar oil and gas pipelines, railway projects in Indonesia and Thailand, Moscow's subway projects, Eastern Europe's railway reconstruction projects, and India's high-speed rail projects. The *Karot Hydropower Project* (USD 1.74 billion) as part of the China-Pakistan Economic Corridor¹⁰⁸ is another PPP example along the Belt and Road.

PPPs, defined differently, may have a further important role to play in the BRI context. For example, a Chinese state enterprise could initiate a large infrastructure investment in a BRI partner country, and subsequently sell to private counterparts—either Chinese or from the host country. This sequential transition after the investment has reached an intermediate stage (or has been concluded) helps reduce risks for investors and increase their willingness to invest.

2.3 Main investment and financing practices along the Belt and Road in comparison with global practices

Infrastructure is a long-term, low-return investment that generally requires decades-long financing at low interest rates, because the underlying assets created generally, at least in part, possess public good characteristics, for which revenues are very hard to collect. The fact that infrastructure investments often confer benefits to poor regions or strata of the population can lead to similar difficulties. As a result, the revenue stream generated is often insufficient to cover the debt service for a high-interest rate loan. This urges financiers to consider alternatives to standard market terms, such as long-term and low-interest loans.

Where possible, the high risks of infrastructure projects need to be managed or mitigated to lower the cost of the investment. Environmental, social standards and tight project management coupled with transparency to allow parliamentary oversight are some of

107 Belt and Road Portal (2016, September 23). PPP helps accelerate the development of the Belt and Road (link in Chinese, see references).

108 Chan, R. (2017, May 18). The 21st Century Silk Road - China's Belt & Road Initiative. Lexology.

the instruments that could be considered. In some cases, when the services provided have a significant public good component, concessional loans, or some form of blending grants into the financing mix can help ensure the financial viability of infrastructure projects (and debt sustainability for the borrowing country). If domestic fiscal space exists, contributions from the budget can also help fund the public goods components of infrastructure investments. In some cases, however, the effective interest rates on infrastructure investments along the Belt and Road have been higher than the level consistent with this ideal.

While insurance agencies supporting trade and investment such as Hermes, MIGA and SINOSURE often offer fee-based insurance for some aspects, large uninsurable risks remain, and the insurance fees for insurable ones are often high. The reality is that these risks make investment financed through such loans financially less viable or even unviable.

As outlined in previous sections, loans have, so far, been the main financing mechanism along the Belt and Road for Chinese policy banks and state-owned commercial banks. Equity investments, in contrast, involve higher and longer-term risk exposure and higher transaction costs. The higher exposure stems from having to deal over the lifetime of the asset created by the investment with local laws, regulations, tax system, labour market, supply chains and cultural and social norms, when companies or productive assets work in another country. However, equity investment can give rise to greater returns and a long-term income stream. The lower risk exposure of loans compared to equity stakes, the ability to integrate resources from several parties to finance BRI projects and to strengthen the links between the government and markets are some of the factors that explain the preference for loans among financiers.

Chinese banks, in general, disclose their information via annual reports, strictly in compliance with the laws and regulations of the Chinese government and of Chinese financial supervision authorities. Some Chinese banks also disclose their information according to international financial laws and regulations. However, due to commercial confidentiality considerations, the information disclosed may not meet the expectation of all stakeholders and researchers, which may make it hard for them to accurately assess the value of debts in BRI partner countries or its concessionality.¹⁰⁹ Some specific financing mechanisms used along the Belt and Road are presented below:

109 In a bold and widely applauded break from this approach, the Embassy of China in Pakistan has published a list of Chinese financing for China-Pakistan Economic Corridor projects in December 2018, with a comprehensive, albeit still partial description of the terms of these loans. See: Embassy of the People's Republic of China in the Islamic Republic of Pakistan (2018a, December 29). Financing run down of 22 CPEC projects; Embassy of the People's Republic of China in the Islamic Republic of Pakistan (2018b, December 29). Statement from Chinese Embassy.

- Corporate loans: loans are granted based on the overall company profile, and not on the specific project's expected performance. They can be issued in a relatively efficient way; however, they entail additional risks for the company by guaranteeing an apparently high-risk project. Intra-company guaranteeing gives rise to a variant of corporate loans, where the domestic bank provides a guarantee for an affiliate enterprise abroad registered by the domestic enterprise and the guarantee letter received by an overseas bank facilitates a loan to the overseas affiliate. This relies on the superior information about the underlying economic viability of the project available to the multinational company that obtains the bank guarantee for its foreign affiliate.

- Concessional loans and preferential export buyer credits: These loans carry total repayment obligations that are—in terms of present value—markedly lower than the amount of the loan. This can be the case with long-term and low-interest loans for which the discounted sum of future repayments falls well below the loan amount provided today. When extended to developing countries for development purposes, the use of the loan is determined by the loan agreement signed between the two governments. The private sector is generally not in a position to extend such loans in the absence of enhancements that compensate it for the concessionality, which would result in a commercial loss.

- Syndicated loans: Syndicated loans are led by one or several banks. Banks formed by a number of banks and non-bank financial institutions agree to provide financing to the same borrower. Its advantages are: (i) the larger total funds available and the long term of the loan; (ii) risk pooling - the combination of several banks reduces the risk borne by each one of them. Financial support of China's commercial banks to infrastructure construction is mainly through syndicated loans.

- Credit lines: with local banks that serve smaller scale projects.

- Blended finance: syndicating financial resources of different natures including commercial loans, concessional loans, and grant-based funds to enable sustainable development projects with higher upfront costs and longer payback periods.

- Equity investment: Regional funds sponsored by the Chinese central bank, policy banks, sovereign funds, and commercial banks that aim to develop specific regions and diversify financial instruments.

- Green bonds: that mandate more stringent project evaluation and transparency for green projects.

Overall, there is a range of financing mechanisms for projects in BRI partner countries, each offering a different constellation of risks and returns. Investors make choices based on their available funds, policy goals, and risk appetite. As BRI linkages deepen, there may be

a natural progression towards more sophisticated forms of investment both in terms of the mechanisms used and the channelling of funds. A potential next step is PPPs structured as Build-Operate-Transfer projects. However, this requires considerable capacity on the part of the host government to manage such projects.¹¹⁰

110 Ministry of Commerce Investment Promotion Agency and China Service Outsourcing Research Center (2017). Research on investment promotion along the Belt and Road (link in Chinese, see references).

Chapter 3 Analysis of investment and financing in Southeast Asia

As described in the previous chapter, the BRI has immense implications for intra- and inter-regional economic connectivity and development. While the initiative has mobilized large amounts of capital and resources over the past six years, some regions and countries have been more effective than others in taking advantage of the Initiative to boost trade, investment, and their economic connectivity with other countries. Many regional and national characteristics, including geographical location, quality of infrastructure and governance, and economic conditions help explain not only the unbalanced allocation of funding and the variations in investment attractiveness across different regions and countries, but also the risks associated with investment and financing activities along the Belt and Road. These must be fully understood before countries involved in the BRI start to examine, improve, and eventually harmonize standards and principles that guide BRI financing and investment activities. This chapter will provide an analysis of the investment trends in one region, Southeast Asia, where BRI investment flows have been particularly large, and show the dynamics of investment and financing activities there. This will be followed by an analysis of risks and challenges and the main financing mechanisms deployed in the region.

3.1 Investment and financing trends, background context in Southeast Asia

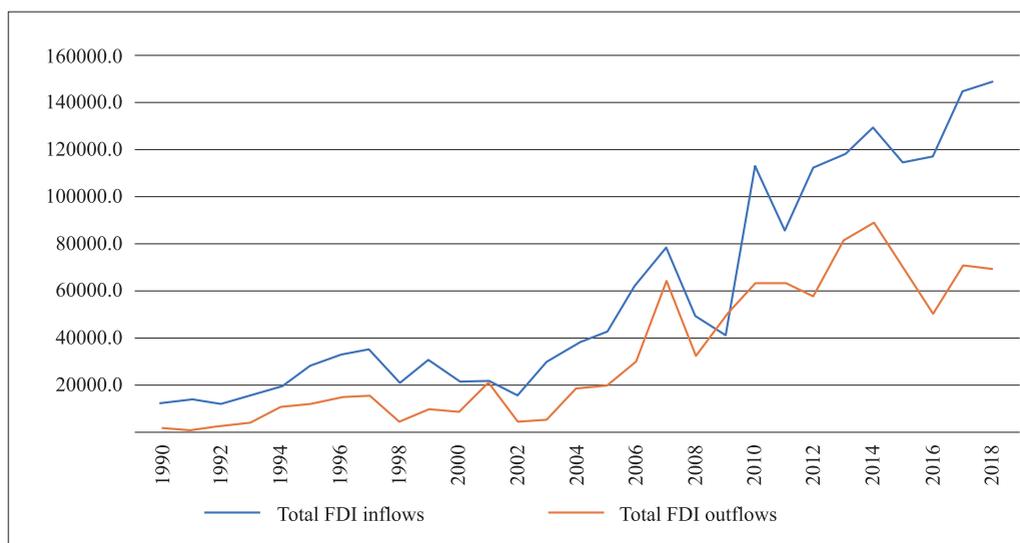
3.1.1 FDI in Southeast Asia

With a population of more than 650 million and a nominal GDP of over USD 2.70 trillion, Southeast Asia (SEA)¹¹¹ is quickly becoming a major economic force in Asia and a driver of global growth. According to J.P. Morgan, at current growth rates, SEA is on its way toward becoming the world's fourth largest market by 2030 following the EU, the US and China, as it is supported by an increasingly well-educated workforce, abundant natural

111 SEA comprises Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam and East Timor.

resources and an overall favourable geographic location. Over the past few years, as one of the world's international investment hot spots, SEA has become the destination of a steadily growing flow of foreign direct investment. Using country-level data from UNCTAD, Figure 3.1 shows how FDI flows into SEA have been fluctuating, but steadily growing, from 1990 to 2017.

Figure 3.1 FDI flows in Southeast Asia, 1990-2018



Source: UNCTAD¹¹²

With the launch of the BRI, Chinese outbound investment in Southeast Asia has increased and is expected to continue to grow. In 2017, although the overall pace of China's total outbound FDI slowed down, China's investment in the 11 Southeast Asian countries expanded. The FDI flows into Southeast Asia reached USD 14.1 billion with a year-on-year increase of 37%, accounting for 8.9% of China's total outbound FDI and 12.8% of China's outbound FDI to Asia.¹¹³ By the end of 2017, China's outward FDI stocks in Southeast Asia had exceeded USD 89 billion, equivalent to 7.8% of China's outward FDI stock in Asia and 4.9% globally (see Figures 3.2 and 3.3).

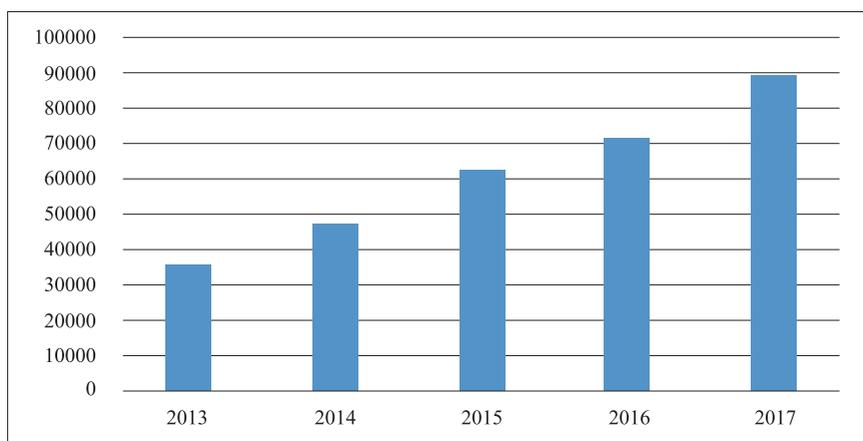
As of the end of 2017, in terms of the industrial structure of the stock of China's outward FDI to Southeast Asia, the leasing and business services sectors ranked first and USD 15.6 billion of the total USD 17.5 billion were concentrated in Singapore (accounting for nearly 90% of the total in that sector). The manufacturing sector received USD 15.5 billion, mostly

112 UNCTAD (2019). Annex table 1, FDI inflows by region and economy, 1990-2018.

113 Statistics on Chinese outward FDI cited in this section were extrapolated from the Statistical Bulletin of China's Outward Foreign Direct Investment 2017 (2018, September), Beijing: China Statistics Press.

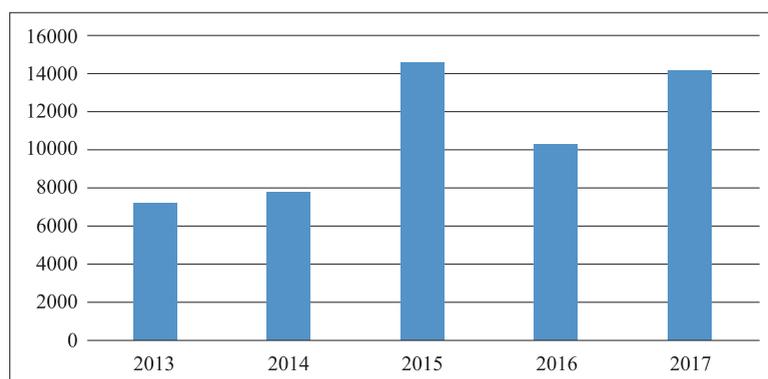
in Indonesia, Thailand, and Viet Nam. In terms of destination for investment flows in 2017, Singapore ranked first and received USD 6.3 billion, twice the amount of the same period during the previous year, accounting for 45% of the total investment outward to Southeast Asia, primarily into wholesale and retail trade, leasing and business services. Malaysia ranked second, and reached USD 1.7 billion, accounting for 12%, mainly in manufacturing, real estate, and construction. Indonesia ranked third with a near-identical investment level and share, mainly in manufacturing, construction, electricity, heat, gas, and water production and supply.¹¹⁴

Figure 3.2 Southeast Asia FDI stock from China in USD million, 2013-2017



Source: Ministry of Commerce of the People's Republic of China, National Bureau of Statistics, and State Administration of Foreign Exchange

Figure 3.3 Southeast Asia FDI flow from China in USD million, 2013-2017



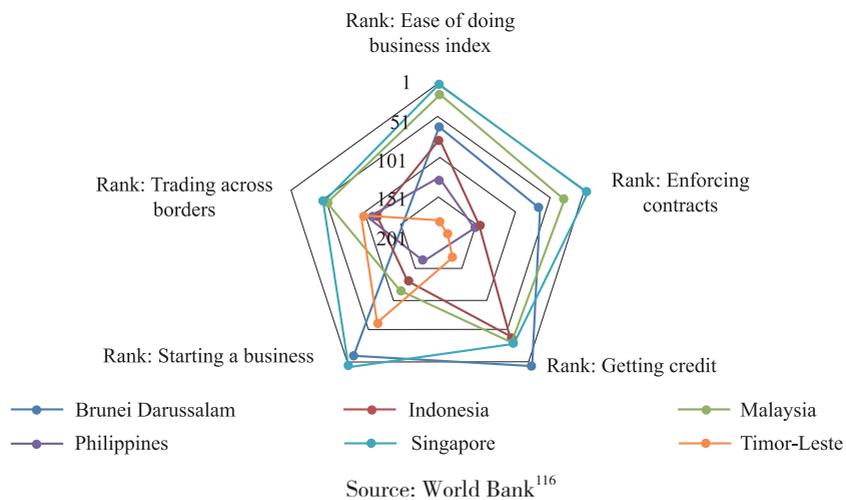
Source: Ministry of Commerce of the People's Republic of China, National Bureau of Statistics, and State Administration of Foreign Exchange

114 Statistics on Chinese outward FDI cited in this section were extrapolated from the Statistical Bulletin of China's Outward Foreign Direct Investment 2017 (2018, September), Beijing: China Statistics Press.

3.1.2 Economic, social, and legal environment in Southeast Asia

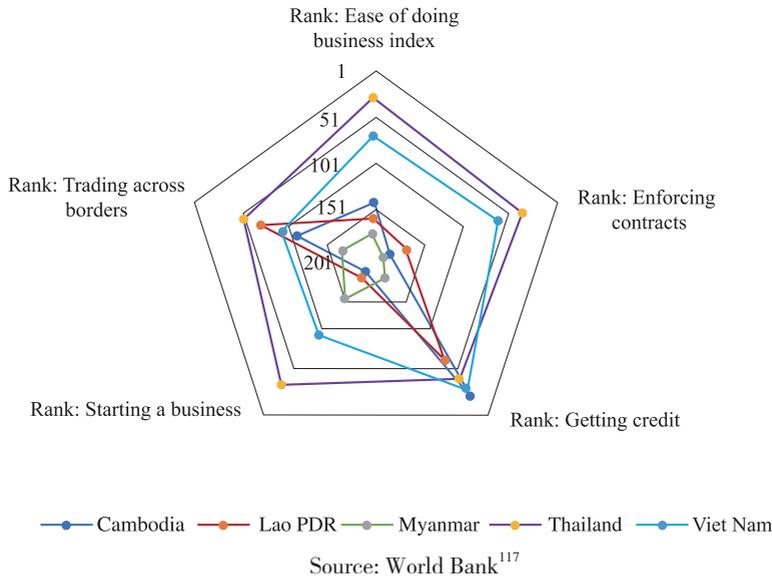
Due to differences in political systems, economic policies, and cultures (there is a total of ten national languages in SEA, and a plethora of local languages and dialects), the business environment of each country in SEA has its own prerogatives. As illustrated in Figures 3.4 and 3.5, using components of the World Bank’s Ease of Doing Business Index,¹¹⁵ Singapore, Malaysia and Thailand ranked high among the 190 countries surveyed, while other countries of the region ranked in the middle or lower tiers, with some interesting cases where countries that generally rank low actually outperformed other countries when specific indicators were examined. Singapore and Malaysia, for instance, have witnessed notable improvements in their infrastructure investment environment. The Singapore government is seeking further infrastructure investment from private institutional investors instead of continuing to rely on public spending. However, investment risks have emerged in Malaysia following a currency depreciation against the USD, and a high-level corruption scandal which has delayed high profile investment projects.

Figure 3.4 2019 Ease of Doing Business Index Rankings for non-Mekong SEA Countries



115 The index measures the overall ranking of the ease of doing business for any evaluated country. Main indicators: Enforcing contracts - Time and cost to resolve a commercial dispute and the quality of judicial processes for men and women; Getting credit - Movable collateral laws and credit information systems; Starting a business - Procedures, time, cost and paid-in minimum capital to start a limited liability company for men and women; Trading across borders - Time and cost to export the product of comparative advantage and import auto parts.

116 World Bank (2019). Doing Business and Measuring Business Regulations, Historical Data.

Figure 3.5 2019 Ease of Doing Business Index for Mekong countries of SEA

According to the China-ASEAN Trade and Investment Index published by Peking University's ASEAN Research Center, with a series of investment promotion efforts and rapid improvement of domestic infrastructure, Thailand has emerged to become one of the region's top investment destinations. Given its electricity shortage and lack of fossil fuel endowments, the Thai government has demonstrated an interest in developing alternative energy sources.¹¹⁸ Indonesia will welcome more investment in roads and ports infrastructure improvement, electricity generation, and telecommunication facilities. The huge investment gap in infrastructure presents great opportunities for foreign investment. China's investment on the Jakarta-Bandung high-speed railway is a promising start. Viet Nam's infrastructure is at a lower level than that of Thailand and Indonesia, especially in the areas of roads, airports, electricity supply and fixed communication. In recent years, the Vietnamese government has started to invest much more, roughly 5.7% of its GDP, in infrastructure, which is the highest among all Southeast Asian countries.¹¹⁹

Tables 3.1 and 3.2 below illustrate the large variations among SEA countries in population and in key economic, financial sector development and debt indicators. In terms of the size of the economies, Indonesia's GDP is 95 times that of Brunei, but Brunei's per capita GDP is 6.42 times that of Indonesia. In terms of industry, major economies like Singapore, Malaysia and Thailand, which are more mature in economic development, are heavy on consumer goods, retail and

117 World Bank (2019). Doing Business and Measuring Business Regulations, Historical Data.

118 Ariffin, E. (2018, October 30) Thailand paves the way for renewables. The ASEAN Post.

119 Asian Development Bank (2017, February). Meeting Asia's infrastructure needs.

services, while Cambodia, Lao PDR, Myanmar and Viet Nam, where economic development is relatively less developed, still focus on agriculture and manufacturing.

Table 3.1 Key economic and development indicators for Southeast Asian countries (2018 or most recent year available)

Country	GDP per capita ¹²⁰	Total trade ¹²¹	FDI net inflows ¹²²	Human Development Index ¹²³	Total population (growth rate)	Life expectancy at birth	Employment to population ratio (%)
Brunei Darussalam	80,778	94	468	30	428,962 (1.1%)	77	59
Cambodia	4,354	125	2,788	143	16,249,798 (1.5%)	69	80
Indonesia	13,057	43	20,510	116	267,663,435 (1.1%)	69	64
Lao PDR	7,441	76	1,599	139	7,061,507 (1.5%)	67	78
Malaysia	31,698	132	9,512	57	31,528,585 (1.4%)	75	62
Myanmar	6,662	N/A	4,002	148	53,708,395 (0.6%)	67	61
Philippines	8,935	76	10,256	113	106,651,922 (1.4%)	69	58
Singapore	101,353	326	94,811	9	5,638,676 (0.47%)	83	66
Thailand	19,018	123	8,046	83	69,428,524 (0.3%)	75	67
Timor-Leste	7,644	N/A	7	132	1,267,972 (2.0%)	69	38
Viet Nam	7,435	188	14,100	116	95,540,395 (1.0%)	76	76

Source: World Bank and UNDP¹²⁴

120 2017, PPP adjusted, in USD.

121 2018, as a percentage of GDP.

122 2017, in current million USD.

123 2018, rank; 1 = highest; 189 = lowest.

124 For Human Development Index data, see: United Nations Development Programme (2016). Human Development Report 2016: Human development for everyone. For data on all other variables, see: World Bank Data.

Some of the countries of Southeast Asia face government debt issues. In particular, as Lao PDR, Malaysia, Cambodia, Viet Nam, and Thailand have continued to emphasize the importance of infrastructure investment, they have been experiencing a gradual increase in their government debt levels. At the same time, inflation has posed problems in some countries in the region in the past decade, partially caused by increases in international food and oil prices as well as inflows of international capital, especially in Thailand, Viet Nam, Indonesia, and the Philippines. This is also a risk for potential foreign investments in Southeast Asian countries in the future.

**Table 3.2 Key financial and debt indicators in SEA
(2018 or most recent year available)**

Country	Bank non-performing loans to total gross loans (%)	Domestic credit provided by financial sector (% of GDP)	Grants, excluding technical cooperation ¹²⁵	Net ODA received per capita ¹²⁶	Inflation, consumer prices (annual %)	External debt stocks, total ¹²⁷	General government gross debt (% GDP)
Brunei Darussalam	3.9	28.3	N/A	N/A	0.2	N/A	2.5
Cambodia	2.0	85.7	6.2	52.7	N/A	15,336	29.4
Indonesia	2.3	47.2	18.5	0.9	3.2	369,840	29.2
Lao PDR	N/A	N/A	10.0	68.5	2.0	15,588	63.0
Malaysia	1.5	143.1	7.3	-0.9	0.9	N/A	56.2
Myanmar	N/A	N/A	22.5	28.9	6.9	14,936	38.2
Philippines	1.7	69.1	18.1	1.5	5.2	78,824	39.6
Singapore	1.3	136.6	N/A	N/A	0.4	N/A	108.3
Thailand	3.1	167.0	12.6	3.6	1.1	169,241	42.1
Timor-Leste	N/A	-10.9	2.9	186.6	N/A	158	5.4
Viet Nam	1.9	141.8	24.3	25.1	3.5	108,096	57.5

Source: World Bank and IMF¹²⁸

125 2017, Balance of payments, current USD million.

126 2017, current USD.

127 2017, Disbursed and outstanding debt, current USD million.

128 For general government gross debt (% of GDP) data, see: International Monetary Fund (2019). General government gross debt as a percentage of GDP. For data on all other variables, see: World Bank Data.

3.1.3 Social, political and legal environment in Southeast Asia

In recent years, SEA has enjoyed increasing legal and political stability, with a strengthened legal environment and stronger protection of property rights due to increased protection from domestic laws and adherence to international investment agreements. In this context, it is important for lenders to ensure that there is broad-based support for their investments, beyond the incumbent political leadership. As of late, notably in Malaysia,¹²⁹ there have been instances whereby new governments have demanded to revise BRI agreements signed by their predecessors due to their perception that these imposed too heavy a debt burden. In the case of the Lao PDR section of the Kunming-Singapore Railway, for instance, the estimated construction cost of the project amounts to nearly 40% of Lao PDR's national GDP.¹³⁰ It is crucial for investments of such scale to receive wide public and political support and to remain consistent with economic, social and environmental sustainability.

BRI projects in Southeast Asian countries may also face policy barriers as well as legal challenges. The World Bank has estimated that it takes about 18 days to comply with all of the importing procedures in SEA, while the same figure for G7 countries is less than 10 days.¹³¹ On the legal front, among the 11 Southeast Asian nations' legal systems, two are based on common law, six on civil law, and the remaining three are hybrid legal systems. Such variations on legal systems can present challenges to connectivity between Southeast Asian countries, especially when a project requires working across jurisdictions.

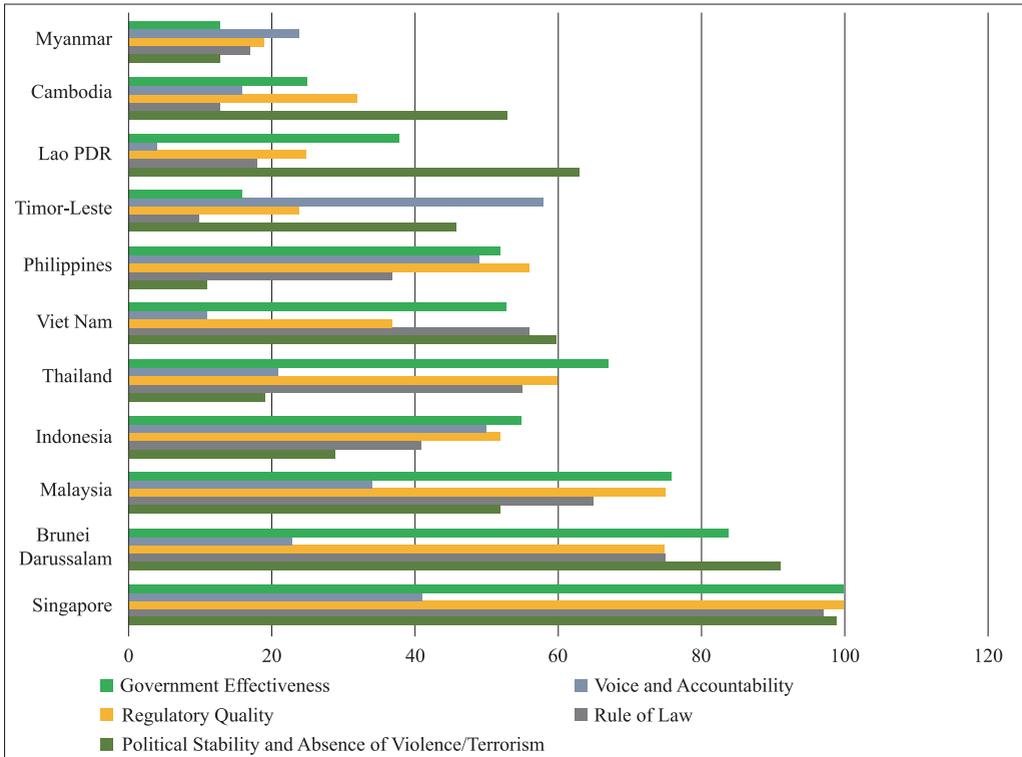
The WBG Indicators, covering four elements-control of corruption, political stability and absence of violence, rule of law, and regulatory quality – provide a practical tool for assessing governance in particular countries and regions. Figure 3.6 shows the World Bank rankings of 11 countries in SEA in this area.

129 Agence France-Press (2018, June 17). Malaysia's regime change puts at risk infrastructure projects involving Chinese firms. South China Morning Post.

130 Ruta, M. (2018, May 4). Three opportunities and three risks of the Belt and Road Initiative. World Bank, Trade Post Blog.

131 Ibid.

Figure 3.6 Southeast Asian countries governance indicators (percentile ranks)



Source: World Bank Worldwide Governance Indicators¹³²

3.2 Challenges and risks of investment and financing in Southeast Asia

Southeast Asian countries differ greatly in aspects of economic development, economic policy coordination, financial market development, infrastructure financing and construction, legislation, and law enforcement. Such diversity may bring risks and challenges to investment and financing activities, especially for inter-connected projects. Based on examples from domestic legislation and regulations in SEA, the present section reviews some challenges and risks that arise in four areas: banking sector openness, guarantee system, dispute resolution and arbitration, and foreign exchange control. The analysis highlights the importance of considering multi-dimensional risks associated with national legal systems, macroeconomic environment, taxation, foreign exchange, etc. for BRI investment and financing activities,

132 World Bank (2017). Worldwide Governance Indicators.

while conducting sufficient and practicable coordination and consultation.

3.2.1 Banking sector openness

Banking sector openness, an important aspect of a country's overall financial openness, is associated not only with financial innovation, regional or global integration, and economic growth, but also with investment and financing risks. While a more open financial market can help increase the efficiency of financial intermediaries and bring down the cost of financing, a closed banking sector tends to negatively affect risk-sharing and the availability of funds, both of which are important to foreign investors.¹³³ Obtaining banking licences is a common prerequisite for banking in most countries of the world. However, banks face several types of challenges in SEA.

First, restrictions on foreign capital exist across several Southeast Asian countries. In Malaysia, foreign capital can account for no more than 40% of the capital of a financial institution (the remaining 60% needs to be domestic) and can only hold up to 49% of a domestic bank's shares through acquisition. There was also a 60% foreign ownership cap on banks in the Philippines until 2014, the year a law removed the ownership cap to help the country deepen its economic integration with other ASEAN economies. Earlier in 1999, Singapore's banking reform lifted the 40% equity restriction on foreign capital in local banks.

Second, regulations governing the scope of business vary across SEA. In Lao PDR, foreign banks can apply to open an agency or representative, but the approved agency or representative offices are only permitted to contact its foreign commercial bank or financial institution clients rather than be involved in any banking or similar business with domestic counterparts. Similarly, in Myanmar, foreign banks granted business licenses need to establish a joint venture with local banks to be able to conduct banking business with local companies. While the Central Bank of Myanmar has issued temporary business licenses to 13 foreign banks including ICBC and Bangkok Bank for opening branches, they are allowed to provide loans only to foreign companies.

Third, investors and banks entering SEA are challenged by different operational restrictions. Foreign banks in Thailand, for example, are limited to setting up 20 branches and 20 ATMs. In Malaysia, the Central Bank requires at least 30% of a foreign bank's employees to be Malaysians.

133 See: Bayraktar, N., and Wang, Y. (2006, October). Banking sector openness and economic growth. World Bank Policy Research Working Paper 4019; Chen, Y., Chou, R. K., Li, J. (2015, August). Financial liberalization via market openness and corporate cash policy.

3.2.2 Guarantee system

Guarantees provide political risk insurance (notably protecting against expropriation, conflicts, currency convertibility) for investments. They help emerging countries attract and retain investment, increase investors' access to financing on improved terms and conditions and, overall, promote FDI.

In Cambodia, infrastructure projects under the *Law on Concessions (Article 16)* can be eligible for sovereign guarantees (i.e. government guaranteed repayments), in special cases, under procedures stipulated by financial supervision. In Thailand, applications for sovereign guarantee are not only subject to the Guarantee Law and relevant procedures, but are also required to be reviewed by the Ministry of Finance of Thailand.

Most Southeast Asian countries are members of the Multilateral Investment Guarantee Agency (MIGA), which helps foreign investors enter the market and protects them from political and non-commercial risks in developing countries. The members take advantage of the transparent and mutually comprehensive knowledge sharing and inclusive insurance coverage of five types of non-commercial risks.

As for collateral, there are restrictive or prohibitive regulations for foreign banks to obtain local security interests. In some special trades and industries, such as important national mineral resources, foreign banks are not allowed to obtain security interests. In addition, there are restrictions on the type of property that can be used as collateral. For example, Viet Nam's *Land Law* and *Law on Investment* stipulates that only Vietnamese banks or branches of foreign banks in Viet Nam with operating licenses are allowed to set mortgages on real estate.

3.2.3 Dispute resolution and arbitration

The New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, also known as the *New York Convention*, was adopted in 1958 at a UN Diplomatic Conference. Widely regarded as the fundamental tool for international arbitration, the New York Convention requires courts in contracting states to enforce private arbitration agreements, and to recognize and enforce arbitral awards made in other contracting states. While almost all Southeast Asian countries have acknowledged and ratified the New York Convention, increases in the importance and complexity of international business, coupled with distinct domestic legal environments in Southeast Asia, have started to pose challenges to effective enforcement of the Convention. Moving forward, how national courts respect and respond to international arbitration rulings on investment and financing disputes will have significant implications for investors and their activities in the region.

In places where the legal system complicates the business environment, enforcement of arbitral awards may be hard and challenged by difficulties from bureaucratic procedures. Indonesia, for example, is a contracting state of the New York Convention. However, foreign arbitral awards made by other contracting states are enforceable in Indonesia only with proper orders from the Central Jakarta District Court. If the Indonesian government is a party of the foreign arbitral award, the enforcement order would need to be issued by the Supreme Court of Indonesia.

There are also domestic arbitration and dispute resolution mechanisms in Southeast Asian countries, which could add another layer of complexity. In Singapore, the domestic Arbitration Law is a supplement to the International Arbitration Law, with the Singapore International Arbitration Centre (SIAC) being the only arbitration institution in Singapore. Thailand's legal system allows parties to have arbitrations outside of court, a method used to resolve civil and commercial disputes parallel to court hearing. Since the parties can choose the applicable rules for arbitration on their own, out-of-court arbitration has become the most common method to resolve disputes.

3.2.4 Foreign exchange control regulations

Foreign exchange controls, which put limitations on the buying or selling of local currency in exchange for foreign currency, can help central banks stabilize the values of their currency. However, such controls pose challenges for financing and investment activities and undermine the benefits of trade and investment by discouraging foreign investors from bringing in capital and domestic investors from seeking investment opportunities abroad.

While Cambodia does not have legal restrictions on the inflows of capital for projects or outflows of principal and interest, all such actions must be executed by authorized agencies, namely permanent banks in Cambodia. In addition, residents are free to possess foreign currency regardless of the form or the deposit place. In Lao PDR, foreign exchange trading and settlement are required to be carried out by designated banks or institutions. Profits of investment projects could be remitted abroad through commercial banks after taxation, but large amounts need to be transferred in batches as approved by the National Bank of Lao PDR. Investors in Viet Nam are not allowed to remit their dividends out of the country if accumulated loss from the previous year remains on their account.

Laws in some Southeast Asian countries allow their governments to temporarily restrict capital outflow. For example, in the event of a foreign currency crisis, the Cambodian Central Bank may suspend residents' right to own foreign exchange for up to three months. The Central Bank of Thailand is also able to limit outbound remittance under unfavourable foreign exchange conditions.

3.3 Best practice of sustainable investment and financing in Southeast Asia

3.3.1 Sultan Abdul Halim Muadzam Shah Bridge (Second Penang Bridge)

The Sultan Abdul Halim Muadzam Shah Bridge of Malaysia, also called the Second Penang Bridge, has set a new record as the longest sea-crossing structure in the region, and was awarded the 2015 Brunel Medal and the 2016 “Luban Prize” (Overseas Project) of China. With a USD 1.5 billion investment, the project adhered to rigorous science and technology innovation standards, which not only improved the project’s profitability but also helped preserve the ecological balance of the construction area.

Economic sustainability

The project employed a number of emerging technologies that played a key role in improving its profitability while reducing overall operating costs. The use of high damping rubber bearings, for instance, has reduced engineering costs by USD 49 million, while at the same time fostering the development of the local rubber industry. Furthermore, materials needed in the project, such as steel and concrete that accounted for 31% of the total procurement, were purchased locally. Contractors cooperated with local enterprises on scientific research, design consultation and construction. This allowed for the further development of the local industries involved, alongside creating numerous employment opportunities for local communities. The Second Penang Bridge project has generated more than USD 17 million in corporate tax and brought relief to the local economy during the financial crisis.

Quality control

The contractors of the project ensured that 30% of the project would be locally managed, and organized more than 30 local training sessions. An Occupational Health and Safety Management System (OHSMS) in compliance with corporate standards was set up for both foreign and local employees. The local quality managers carried out daily quality and safety inspection and supervision. In terms of quality control, the project was developed in accordance with the UK Design Manual for Roads and Bridges (DMRB), while the assembling of the segmental box girder bridge and quality controls for seismic and collision either followed EU Standards covering the structural design of civil engineering projects, or the American National Highway and Transportation Association Standards. To effectively avoid project quality failures, the project department has compiled a “Construction quality failure

directory” and established a targeted prevention system.

Environmental sustainability

Malaysia has over 15 laws and regulations related to environmental protection. To abide by the laws and meet the expectations of both the government and project owners, contractors have implemented a variety of environmental protection programs and supported effective government supervision. In water pollution prevention and quality control, for instance, the project’s general manager set up eighteen water quality monitoring sites around the construction area, four around the mud transportation area, and four around the mud-dumping area in order to monitor the impact of the bridge on the surrounding marine environment. For each monitoring site, an independent environmental protection department took water samples at three different depths, analysed water quality every month and used satellite data to analyse suspended solids twice a year. In addition to hiring local environmental protection engineers to survey local wild species, the project monitors sewage and noise levels on the construction site and conducts dredging operations in designated areas. After nearly four years of consecutive monitoring, pollution levels remain within acceptable ranges and local marine biodiversity was found to have increased.

Governance sustainability

Contractors have made corporate social responsibility and sustainable governance part of their strategic planning and corporate culture. Plans for social responsibility, sustainable development, post-evaluation work, and related executive functions are drafted by the executive board. Members of the board successively decide on a final approval to social responsibility and sustainable governance. In addition, contractors have established an assessment system covering social responsibility and sustainability-related content, incorporating social responsibility and sustainable development into the annual performance appraisal of foreign institutions that are linked to performance. At the same time, in accordance with the requirements of the parent company China Communications Construction, contractors provided materials for the drafting and publication of reports on social responsibility and sustainability.

Emergency management sustainability

The project headquarters have formulated and issued twelve emergency plans, including the “Emergency Media Response and Disposition for Emergencies”, “Emergency Plan for Prevention against Terrorism and Riot”, and “Contingency Plans for Work Safety Incidents”. The overseas agencies and project departments of the Bridge’s contractors drafted their own emergency plans by taking into account both standard emergency plans and the local conditions of the area. In April 2012, an earthquake with a magnitude of 8.6 hit Sumatra,

Indonesia. It strongly affected the development of the Second Penang Bridge, leading to the issuing of a tsunami warning. The Bridge's project department immediately executed the emergency plan by suspending on-site construction, organized the evacuation of construction personnel to safety areas, and closely monitored the tsunami warning.

3.3.2 Nam Ou River Cascade Hydropower Project

Project overview

The Nam Ou River hydropower project is the first case where the government of Lao PDR authorized a foreign corporation to develop a hydropower infrastructure project. The plant was designed to have a total installed capacity of 1.272 million KW. In April 2016, all generators of the first phase were put into operation.

Financing requirements

To support the project, China Development Bank (CDB) adhered to the principles of development financing and used early intervention to create conditions for smooth financing. After participating in the top-level designing of the project, identifying the entry point for the project, visiting the project owners and relevant government authorities, and analysing the current market situation to produce data for policymakers, CDB signed the *Nam Ou River Project Financing Cooperation Agreement* with the project implementing party, Power China, on April 20, 2011.

In addition to having a multi-level risk allocation mechanism for the project's financing, CDB adjusts its risk mitigation measures according to local conditions and characteristics of the 2 phases of the project. Phase I of the project adopts the BOT (build-operate-transfer) model with the borrower being Nam Ou River Basin Hydropower Co., Ltd., as a project company under Power China in Lao PDR. Further in 2016, a consortium of banks led by CDB promised to provide medium- and long-term foreign exchange loans for the project with a loan term of 20 years. This helped integrate the resources of different financial institutions, ensure the supply of large, long-term funds for project construction, and disperse risks across participating banks.

Social and environmental impact

The development of the Nam Ou River hydropower project respected the concepts of "green" and "scientific development",¹³⁴ thereby strengthening the project's socially

134 Li, Y. (2018, August 10). Lao PDR Deputy Prime Minister Bounthong Chitmany pays visit to the Nam Ou river hydropower station, praises the work of PowerChina (link in Chinese, see references). PowerChina.

responsible nature. Those leading its development placed emphasis on their role as “developers of global green clean energy”, “shareholders capable of acting in an economically and socially responsible manner”, and as “promoters of the multicultural integration between China and other countries”. With the aim of establishing a hydropower station of high quality and creating liveable spaces for the communities impacted by the project, the project development team respected the principle of “keeping the resettlement of local residents, the levels of inundation of arable land, and the overall environmental impact of the project to a minimum”.¹³⁵ In compliance with this principle, 23 new villages were built for the relocation of over 2,300 families, and allowed for the resettlement of a total of over 12,600 local residents. Significant work was also carried out to enhance the quality of newly-built infrastructure (from schools to markets, hospitals, temples, 500 km of roads and 20 new bridges) and to kick-start initiatives in support of the livelihoods of local residents. As an example of this, the Nam Ou River Project created a total of over 8,000 jobs, and attracted a workforce in need of enhancing its skills. A number of organizations also supported resettled families. Investment for these initiatives amounted to a total of USD 100 million. While dam construction, if left unchecked, could lead to land and biodiversity loss, the different phases of this particular project hold the promise of meeting Lao PDR’s needs to develop green energy for economic and social development. The project could also support Lao PDR’s growing power demand, enable electricity exports, and bring electricity to some of Lao PDR’s poorest households, thereby setting an example for the completion of other hydropower projects across BRI participating countries.

Innovative and promotable models

The multi-level risk allocation mechanism used for the project allows for adjustments of risk mitigation measures to match the financing structure with project risks, and effectively prevents and controls the market and raw material risks.

The first level of the project’s risk allocation mechanism is called “Take or Pay”. During the negotiation on Concession Agreement and Power Purchase Agreement (PPA), CDB reached an agreement on a “Take or Pay” power purchase terms with Power China and Électricité du Laos (EDL). Accordingly, EDL would purchase all electricity generated and pay for it at an agreed price, forming the first level of the risk allocation mechanism to prevent and control market risks.

135 Li, Y. (2018, August 10). Lao PDR Deputy Prime Minister Bounthong Chitmany pays visit to the Nam Ou river hydropower station, praises the work of PowerChina (link in Chinese, see references). PowerChina.

As the second level of the risk allocation mechanism, a commitment letter from the government of Lao PDR would provide a financial guarantee for EDL's commitments in PPA.

Overseas investment insurance and political insurance provided by SINOSURE serves as the third level. In addition, Phase I and II of the project were also insured against non-performance of terms in CA and PPA, such as price and sale of electricity.

Shareholders' support forms the last level of the risk allocation mechanism. While the project and market risks can be generally controlled by the above risk allocation mechanism, raw material risk and liquidity risk (such as overdue loans caused by a long insurance payout process) still remain. To prevent such risks, CDB obtained support from shareholders and a one-year liquidity support scheme for repayment of principal and interest with dynamic recoverable coverage from Power China.

Implications of the case

Although electric power development projects can in theory generate relatively stable cash flow, for most infrastructure construction projects, the construction cycle is long while revenue and level of marketization are limited. Therefore, financial institutions need to fully analyse market trends and the investment environment of host countries, explore and cultivate high-quality projects, build project promotion mechanisms, improve financing conditions for the projects, and support the long-term economic growth of host countries with high-quality financial resources.

Financial institutions should also actively engage in business negotiations on concession agreements and power purchase agreements in the early stages of project development, while at the same time understanding the rights and interests included in the agreements. By taking into account the content of agreements, financial strength of borrowers, progress on construction, market situations, risk factors, as well as practicality issues, financial institutions can strive to design a systematic credit structure that is realistic, implementable, and effectively prevent risks.

Chapter 4 Analysis of infrastructure investment along the Belt and Road

“Facilities connectivity”, a key for the inclusive and sustainable development of the Belt and Road region, is one of the five pillars of the BRI. At present, however, the capital and resource flows along the Belt and Road have not been able to satisfy the region’s infrastructure investment demand, which, as estimated by the Development Center of the State Council of China, amounts to at least USD 10.6 trillion over the period of 2016-2020. To fully understand how financing and investment activities along the Belt and Road have been transforming the landscape of different sectors and fields, the following chapter provides an analysis of the infrastructure sector, which has been attracting a significant share of BRI-related investments with considerable implications for the sustainable development of our society.

4.1 Linkages between the SDGs and infrastructure financing along the Belt and Road

In 2017, finance ministers from 27 countries jointly issued the *Guiding Principles on Financing the Development of the Belt and Road*. Section Four clearly articulates the importance of infrastructure to sustainable development:

*“We reaffirm the important role of infrastructure in sustainable economic and social development. We encourage countries involved to open public service markets as appropriate, while maintaining a sound and stable legal, policy and regulatory framework and develop public-private partnerships to channel funds and improve the efficiency and quality of infrastructure supply. We encourage the interested parties to establish effective information flow between the private sector and financial institutions which support sustainable development through financing infrastructure investments.”*¹³⁶

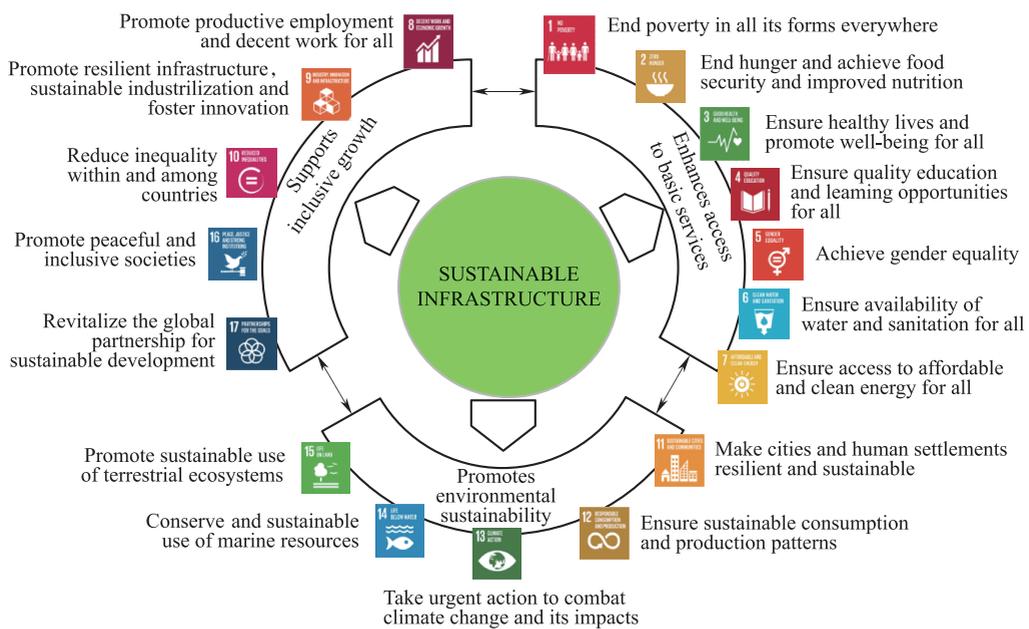
“Sustainable infrastructure” is commonly defined as “*infrastructure projects that are planned, designed, constructed, operated, and decommissioned in a manner that ensures economic and financial, social, environmental (including climate resilience), and institutional*

136 Ministry of Finance of the People’s Republic of China (2017, May 16). Guiding principles on financing the development of the Belt and Road. Belt and Road Portal.

sustainability over the entire life-cycle of the project”¹³⁷ The BRICS-led New Development Bank, of which China is a founding member, has gone so far as to put sustainable infrastructure at the heart of its approach to development lending.¹³⁸ The China International Contractors Association has also developed a framework for public- and privately-financed sustainable infrastructure as well as planning, designing and financing of sustainable assets.¹³⁹ These frameworks are anchored in the following four pillars: Economic and Financial Sustainability, Environmental Sustainability and Climate Resilience, Institutional Sustainability and Social Sustainability.

Sustainable infrastructure can make a vital contribution to achieving the SDGs, as it can bring growth, access, resilience, and poverty alleviation to host countries while providing market opportunities for commercial actors and providing global public goods. Figure 4.1 exhibits the broad array of SDGs, the achievement of which is promoted by properly-designed sustainable infrastructure.

Figure 4.1 Linkages between sustainable infrastructure and the SDGs



Source: Bhattacharya *et al.*, 2016

137 Inter-American Development Bank (2018, May). What is sustainable infrastructure? A framework to guide sustainability across the project cycle.

138 New Development Bank (2016, March). Environment and Social Framework.

139 China International Contractors Association (2017, July 13). Guidelines of sustainable infrastructure for Chinese international contractors.

Sustainable infrastructure can also help achieve the SDGs by linking them to the Nationally Determined Contributions (NDCs) aimed at combating climate change. As an essential component of the Paris Agreement, NDCs are independently developed by each country at the national level. They define the mitigation and adaptation measures each State pledges to take at the domestic level to respond to climate change. The majority of these usually include renewable energy contributions. As a multipurpose instrument, NDCs are the manifestation of the bottom-up, country-led approach to sustainable development which has become one of the pillars of the Paris Agreement. They also grant governments the opportunity to share their climate change mitigation and adaptation plans and priorities with the rest of the international community.¹⁴⁰

NDCs, which include energy projects and targets already identified by host countries, can be essential in providing guidelines for the development of BRI projects. A paper in *China & World Economy*¹⁴¹ estimates the investment opportunity presented by NDCs across the world to be equivalent to over USD 1 trillion. When considering the countries included in China's BRI, a total of 56 NDCs were analysed. 48 of these include renewable energy contributions, and 31 out of 48 are quantifiable. The total renewable energy investment potential of the BRI region plus China is USD 678 billion. This represents 65% of the overall investment potential identified in recent research by Boston University. By regions, South Asia, with 8 NDCs, has the largest renewable energy investment potential in the BRI, estimated at USD 187 billion, although most of this potential comes from India's contributions. The next largest BRI investment potential lies in SEA, with 7 NDCs amounting to USD 94 billion, and from East Asia, with USD 67 billion from the contributions of the Republic of Korea and Mongolia. Europe and Central Asia, with 5 NDCs, stand at USD 51 billion, mostly from Turkey. The Middle East includes 8 NDCs, with a potential of USD 39 billion, and Africa, with 2 NDCs for an investment potential of USD 29 billion.

The harmonization of financing and investment standards along the Belt and Road, which is what the present report calls for, offers the promise of bringing significant benefits. The establishment of harmonized guidelines and standards is a credible way to demonstrate that each country involved shares with the others a sense of responsibility towards the construction of sustainable infrastructure. Guidelines and standards for finance and investment have been developed over time, recognizing the impact external economic actors can have on the economies, communities and local contexts of partner countries. Global experience has proven the central role of standards in ensuring that infrastructure and other

140 As summarized in: Muñoz Cabré, M., Gallagher, K. P. and Li, Z. (2018, November 13). Renewable energy: the trillion-dollar opportunity for Chinese overseas investment. *China & World Economy*, 26 (6), 27-49.

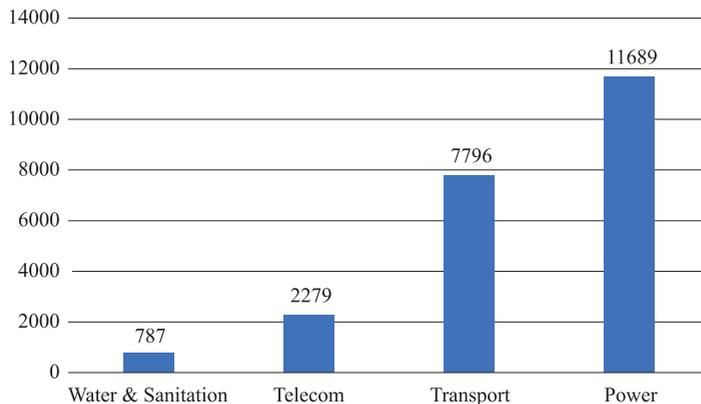
141 Ibid.

projects are consistent with a broader set of environmental and social goals. These standards have evolved steadily over the last decades—a process that is certain to continue over the course of the next few years in the name of the pursuit of the SDGs.

4.2 Major trends in infrastructure investment along the Belt and Road

While a significant share of investment and financing activities along the Belt and Road in the past five years has been centred around building and improving infrastructure, the BRI region still offers ample scope for further improvements. Figure 4.2 presents ADB’s estimates of Asia-Pacific infrastructure needs by sector. Infrastructure financing gaps notwithstanding, there are also significant connectivity disparities across sub-regions and countries in the BRI region. When looking at the quality of infrastructure across BRI sub-regions and individual countries, it becomes apparent how BRI partner economies such as Singapore, the United Arab Emirates, Hong Kong SAR, and China are ranked among the top 20 performers on the World Bank’s Logistics Performance Index, while countries such as Afghanistan, Bhutan, and Iraq remain near the bottom of the ranking.

Figure 4.2 Baseline estimates for infrastructure investment needs in Asia-Pacific in billion USD by sector, 2016-2030 (USD billion in 2015 prices)



Source: Asian Development Bank estimates¹⁴²

China’s overseas investment has been growing rapidly since the early 2000s (USD 2.7 billion in 2002 to USD 196 billion in 2016) before dropping to USD 158 billion in 2017, growing at an average

142 Asian Development Bank (2017, February). Meeting Asia’s infrastructure needs, 45.

annual rate of over 35%.¹⁴³ While Chinese outward FDI covers almost all sectors of economic activity, there are visible sectoral concentrations in different regions of the world. Table 4.1 shows that most Chinese investments in Africa in 2017 went into the mining and construction sectors. Chinese investments in Asia, on the other hand, were geared mostly towards the services sector.

Table 4.1 Top 5 sectors attracting Chinese outward FDI in selected regions through 2017

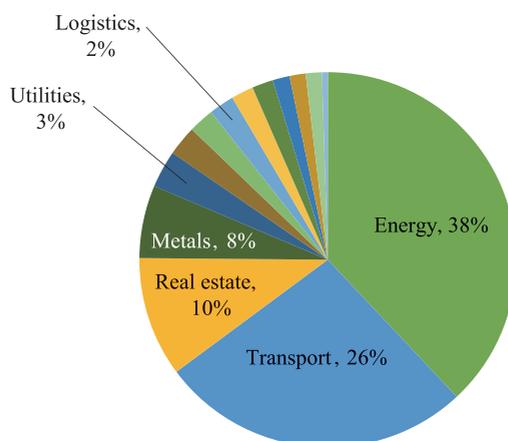
Region	Sector	Stock (USD billion)	Share (%)
Asia	Business services	510.34	45
	Finance	140.39	12
	Wholesale and retail	153.41	14
	Mining	79.52	7
	Industry	73.26	6
Africa	Construction	12.88	30
	Mining	9.76	23
	Finance	6.08	14
	Industry	5.71	13
	Business services	2.31	5
Europe	Industry	34.13	31
	Mining	22.49	20
	Finance	17.72	16
	Business services	10.63	10
	Wholesale and retail	5.17	5
Latin America	Telecom, software, and IT services	186.57	48
	Business services	76.57	20
	Wholesale and retail	59.45	15
	Finance	25.13	7
	Mining	8.77	2
Southeast Asia	Business services	17.48	20
	Manufacturing	15.57	18
	Wholesale and retail	11.88	13
	Mining	10.32	12
	Energy and utilities	9.62	11

Source: Ministry of Commerce of the People's Republic of China, National Bureau of Statistics, and State Administration of Foreign Exchange

143 Ministry of Commerce of the People's Republic of China, National Bureau of Statistics, and State Administration of Foreign Exchange (2018). Statistical Bulletin of China's Outward Foreign Direct Investment 2017. Beijing: China Statistics Press.

China Global Investment Tracker, a BRI projects' database compiled by independent think tanks, suggests that a major proportion of all investments made and construction contracts signed by China have been in infrastructure sectors, including energy, transport, logistics, and utilities.¹⁴⁴ In particular, the energy and transport sectors together have attracted nearly 65% of all investments from and construction contracts signed by China (Figure 4.3).

Figure 4.3 Chinese investments and construction projects along the Belt and Road, by sector, 2013-2018



Source: The American Enterprise Institute and the Heritage Foundation

4.2.1 Energy

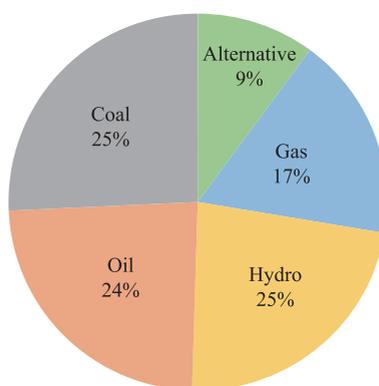
Based on currently available data, China's FDI and loans in the energy sector along the Belt and Road are so far geared primarily towards traditional energy sectors, rather than the development of low-carbon, alternative energy.

There are signs that China's global energy investments may shift away from traditional energy sources towards clean energy and grid optimization. The *Guidelines on Promoting Green Belt and Road*, and the *Belt and Road Ecological Cooperation Plan* demonstrate the Chinese government's commitment to incorporating principles which set the foundations for the construction of a "green economy" into its overseas investment agenda. In response, both official and private sources of financing from China have begun to initiate and fund more projects in the renewable energy sector. As China became a global leader in terms

144 For the definition of BRI projects and data used in the present section, please refer to: American Enterprise Institute. China global investment tracker.

of solar, wind, and hydro energy capacity as well as total investment in renewable energy, it announced an ambitious plan in early 2017 that it would invest USD 360 billion in renewable energy by 2020.¹⁴⁵ Through green energy policies, clean energy financing and experience sharing along the Belt and Road, China can begin to drive the BRI region's transition toward environmental sustainability and ensure that BRI infrastructure investment is fully consistent with global commitments to combat climate change by reducing greenhouse gas emissions.

Figure 4.4 BRI energy investments and construction contracts by energy source, 2013-2018

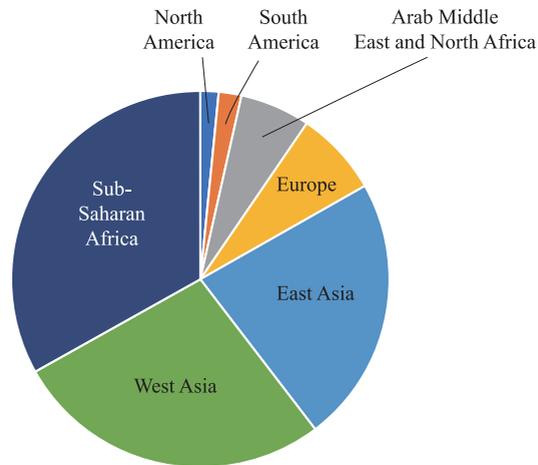


Source: The American Enterprise Institute and the Heritage Foundation

4.2.2 Transport

Transport connectivity is key to promoting international trade and investment, accelerating industrial transformation, and enhancing regional integration and the formation of production networks. Forming the foundation of physical connectivity among BRI partner countries, transport infrastructure has been a main focus of Chinese BRI investment, and a major sector in which construction projects are signed. Transport-related investments are helping to realize China's commitment to enhancing connectivity across Southeast Asia and Africa (Figure 4.5). Indeed, investment activity around transport infrastructure in the BRI regions has grown significantly since the introduction of BRI, in response to the BRI region's less developed transport infrastructure and relatively high trade costs.

¹⁴⁵ Jiang, K. and Woetzel, J. (2017, August 29). How China is leading the renewable energy revolution. World Economic Forum in collaboration with Project Syndicate.

Figure 4.5 BRI investments and construction contracts in transport, 2013-2018

Source: American Enterprise Institute and the Heritage Foundation

In achieving the vision of building stronger connections among BRI partner countries, China has been heavily investing in transport infrastructure overseas without concentrating its investments in a particular BRI subregion. The China Global Investment Tracker database indicates that West Asia, Africa, and South-East Asia have all been substantially involved in the development of transport infrastructure through BRI.

4.2.3 Industrial parks

The construction of industrial zones or parks is another important area of focus backed by BRI investments. China's successful economic development model relied heavily on industrial zones. The important role they played in boosting broad-based economic growth and helping China advance into an industrial economy has generated a high level of interest in planning and building industrial zones in BRI partner countries.

A successful industrial zone not only produces goods and provides employment, but also attracts and integrates international funding and talent, utilizes and educates national human resources, enhances network effects, and contributes to improving the overall investment environment and local economic development. The industrial parks created by BRI investments are therefore not only a designated area for manufacture or export. Building on China's experience, they also serve as an area for the development of interconnected firms with affiliated research institutions. Table 4.2 provides examples of industrial park investments China has made in BRI partner countries.

Table 4.2 Selected industrial park projects under the BRI

Year	Name	Country	Investment (Million USD)	Partners
2015	Malaysia-China Kuantan Industrial Park	Malaysia	3,360 (Malaysia 51%, China 49%)	IJM Land, Kuantan Pahang Holding Sdn. Bhd., Sime Darby Property, Pahang State Government, Guangxi Beibu Gulf International Port Group, etc.
2017	China Economic Industrial Park	Bangladesh	N/A (China 70%, BSEZA 30%)	China Harbour Engineering Company, Bangladesh Special Economic Zone Authority (BSEZA)
2017	Borca Industrial Park	Serbia	257	China Road and Bridge Corporation
2018	Philippines-China International Techno-Industrial Park	Philippines	650	China National Machinery Corp.,
2018	Philippines-China New Clark City Industrial Park	Philippines	2,000	Gezhouba Group International Engineering Co. Ltd.

Source: Bloomberg, MOFCOM, Reuters, BusinessMirror, Belt and Road Portal, Financial Times¹⁴⁶

4.3 Major financing mechanisms for BRI infrastructure investment

Debt financing (direct or indirect) and equity financing are possible financing mechanisms for infrastructure projects along the Belt and Road. Some specific financing models involve a sophisticated combination of bond issuance, sovereign financing, business financing, project financing, public-private partnerships, financial leasing, private equity, IPO financing, etc.

146 Ramasamy, M. (2013, February 5). China, Malaysia plan \$3.4 Billion Industrial Park in Kuantan. Bloomberg; Qadir, S. (2018, April 4). China to develop Bangladesh Industrial Zone as part of South Asia push. Reuters; Rosales, E.F. (2018, November 28). China, PHL eyeing \$8.4-billion Industrial Park Investments. BusinessMirror; Ministry of Commerce of the People's Republic of China (2018, September 18). China Road and Bridge Corporation cooperates with Serbia to build industrial park; Belt and Road Portal, (2018, November 21). Joint statement between the People's Republic of China and the Republic of the Philippines; Ramos, G., and Reed, J. (2018, November 19). Chinese group to invest \$2bn in former US outpost in Philippines. Financial Times.

Table 4.3 Major financing mechanisms for BRI infrastructure investment

Type	Financing mechanism	Definition, characteristics and examples
Direct debt financing	RMB or Dollar bond	Bond instruments can use either RMB or dollars as the settlement unit and interest and principal are paid in the same currency. As of November 2018, 693 overseas institutions have held RMB bonds.
	Green bond	Funds from bond financing for green projects that meet national policy conditions or bond instruments that refinance such green projects. A pioneer in the green bond market, as of April 2018, the World Bank has issued more than 140 green bonds in 19 currencies, totalling USD 11 billion. China is also emerging as a globally significant issuer of green bonds.
	Convertible bond	Bond instrument in which a bondholder can exercise the right to convert the bond into common stock of the company at the price agreed upon at the time of issuance, therefore has the dual characteristics of bond and option.
Indirect debt financing	Business financing	Existing enterprises raise funds and complete project investment construction. No new independent legal entities will appear before and after the completion of the project.
	Sovereign borrowing	Sovereign borrowing refers to debt financing of a sovereign state (central government or central bank). It can also involve other entities that receive a government guarantee on their borrowing. A common mode of the Belt and Road international financing, with a relatively low credit risk from the lender's point of view, but the associated debt service obligations place a direct or contingent burden on future budgets.
	Export credit	A way to support domestic exporters or foreign importers in solving the problem of delayed payment before the imported item is sold domestically (short-term export credits), providing funds for paying big-ticket imported items (medium-term export credits), and contracting large foreign projects (long-term export credits). The Export Credit Agency of the exporting country almost always requires a sovereign guarantee from the importing country, imposing a contingent liability on its future budgets.
	Syndicated loan	One or more banks jointly providing financing to the borrower. The Kalot Hydropower Project in Pakistan, the first large-scale hydropower investment construction project along the Belt and Road, has been supported by a syndicated loan from CDB, the China EximBank, and Silk Road Fund, in a consortium formed by the IFC.
	Project financing	Raising funds to pay for a specific project through a loan for the government or corporation implementing the project, with repayment of debt service envisaged from operational income of the realized project.

Table 4.3 (Continued)

Type	Financing mechanism	Definition, characteristics and examples
Indirect debt financing	M&A loan	A loan issued by a bank to an enterprise to cover the expenses of a merger or acquisition transaction. M&A loans have the advantages of relatively low cost, long maturity, increased control for the enterprise initiating the transaction, and protection of M&A information.
	Public-Private Partnership	PPP financing refers to a cooperation model formed between the government and private organizations to finance a project, operate the resulting asset, accept an agreed share of the associated risks, and distribute the net gains or losses according to the PPP agreement. It is often based on a concession agreement for the construction of infrastructure projects or the provision of public services. It can help release the vitality of social capital and improve investment efficiency and quality.
	Cross-border RMB loan	Cross-border RMB loans refer to loans in RMB issued by qualified foreign institutions. China-funded or other institutions can provide foreign banks with a comprehensive credit scheme for overseas RMB or other currency lending to support business related to the BRI.
	Financial leasing	A Lessor purchases an asset (retaining its ownership) on behalf of its Lessee for the Lessee's use in return for a series of agreed upon payments, which include interest.
Equity financing	Initial Public Offering (IPO) financing	IPOs are the issuance of shares to the public for the first time. This form of financing expands financing channels, can increase companies' net asset value, and improve their reputation and governance structure. Going public requires the disclosure of substantial information about the company and opens it up to greater short-term operating pressures and litigation risks.
	Private equity financing	An important equity financing model, private equity investment funds often offer advantages in five aspects: operating cost, corporate governance, management division of labour, value creation and financial risk prevention. In China, State-owned Equity Funds are operating in the same space, and have by now accumulated many years of experience along the Belt and Road.
Innovative forms of financing	Structured financing	Refers to the process of issuing asset-backed securities based on the future expected cash flow generated by the underlying assets as a repayment support and credit enhancement through structured design. Structured financing can enhance the liquidity of assets, provide low-cost financing for initiators, reduce exposure to risky assets, and facilitate asset-liability management.

Table 4.3 (Continued)

Type	Financing mechanism	Definition, characteristics and examples
Innovative forms of financing	Technical assistance loan	A typical technical assistance loan is for the pre-work development cost of the project, including comprehensive development planning, project planning, project demonstration, technical and market research, and feasibility study report related to project development. Technical assistance loans can also support capacity building or institutional development.
	Hybrid Financing	Two or more types of financing are combined to better meet one or more funding needs of the borrower. It can bring about lower overall financing costs, more efficient use of funds, and more room for covering operational costs—at the expense of added complexity and transactions costs.
	Mezzanine finance	Mezzanine financing creates a debt class with specific risk-return characteristics as part of the overall financing of a project. It refers to a form of financing between priority debt and equity financing in terms of risk and return.

Source: China Development Bank

4.4 Cases studies of BRI infrastructure investment projects

4.4.1 Mombasa-Nairobi Standard Gauge Railway (SGR)

Project overview

The Mombasa-Nairobi Standard Gauge Railway (SGR) is a 472-km Kenyan railway corridor with an annual running capacity of 25 million tons. In almost a year and a half since its launch in May 2017, the SGR has carried over 2 million travellers and reduced transport time by more than a half. China Railway Corporation (CRC) led the construction phase of the SGR and ensured it was compliant with China's National I Class Standards for construction. After completion, the China Road and Bridge Corporation (CRBC) has been responsible for the operation and maintenance of the railway corridor. The total investment for the SGR exceeded USD 3.8 billion.

Environmental sustainability

The field inspection conducted prior to the construction of the SGR fully took into consideration the ecosystem diversity of Kenya. Experts responsible for conducting the inspection integrated environmental protection principles into the project's design, construction, and operation phases by studying the railway's potential impact on its

surrounding environment. Environmental protection and impact assessments were carried out with the rigour required by Kenya's environmental protection laws to ensure the effective protection of the region's natural landscapes, rivers, flora and fauna. The design of the SGR was also intended to reduce the environmental impacts of the railway's construction and operation on the local environment. Bearing in mind wildlife migration needs, for example, engineers and experts from the Kenyan Wildlife Protection Agency spent over three months in Tsavo National Park, tracking the living habits of wildlife.

As a result of taking into account the needs of each species, the innovative design of the railway allows for the transit of wild animals and for the preservation of their original living habits. 14 animal sidewalks, 79 bridges, and over a hundred culvert-type tunnels were built. Each of these passages were built to be over 6.5 meters tall for them to be directly accessible by animals as tall as adult giraffes. The construction design of the SGR also maximized land use, as the majority of the SGR road sections share a traffic corridor with the A109 National Highway.

Economic sustainability

At the peak of construction, the Mombasa-Nairobi SGR required the work of over 30,000 employees, 95% of whom belonged to local communities. It also provided training to over 17,000 employees and 4,000 professional technicians from Kenya. As many as 60 full China Communications Construction scholarships were awarded to outstanding local high school graduates for them to study in Chinese universities. Together with the local government, the China Communications Construction Company also co-organized courses in vocational and technical schools for the training of professionals to help foster Kenya's future development. It is estimated that the construction of the project led to a 1.5% increase in Kenya's GDP and benefitted over 1,200 local enterprises. The resulting increase in connectivity has brought down logistics costs in Kenya by 40%.

Debt sustainability

The Mombasa-Nairobi SGR involved a total investment of USD 3.8 billion, 90% of which was provided by the China Export-Import Bank (EximBank), while the remaining 10% was provided by the Kenyan government. The government also began to levy an additional 1.5% import tax to support the construction of its standard gauge railway network (the repayment of the Chinese loans) as well as other relative activities including land compensation.¹⁴⁷ CRBC, after 5 consecutive years of the running of the SGR, will gradually hand over the operations

147 Article 8: Railway Development Levy of the Miscellaneous Fees and Levies Act 2016 of the Republic of Kenya.

to the Kenyan side and assist the Kenyan government in the training of skilled labour. As the Mombasa-Nairobi SGR continues to contribute to Kenya's economic growth, create jobs for local people, and increase the connectivity of the East African railway network, it is estimated that Kenya can repay the project loan in as few as 4 years.

4.4.2 Karot Hydropower Project, Pakistan

Project overview

The Karot Hydropower Project in Pakistan is a USD 1.74 billion electric power project of the China-Pakistan Economic Corridor. Led by the Three Gorges South Asia Investment Limited and supported by international financial institutions including China Development Bank, China EximBank, Silk Road Fund, and the IFC, the project utilizes a 17-year loan of USD 1.4 billion with a 6-year grace period for its construction. By replacing outdated fossil fuel power stations with a hydropower station, the project will alleviate Pakistan's dependence on foreign exchange-depleting fuel imports, and hence Pakistan's national debt risks. Hydropower technologies are also mature and stable and face less market risk of being replaced over time by superior technologies than traditional energy technologies.

Risk management measures

About 2% of the total project budget is assigned for risk management-related expenditures. In identifying and measuring risks in implementation, the Karot Hydropower Project used due diligence that consists of field visits, interviews with relevant personnel, and collection of written materials. Guarantees for the construction of the project include, but are not limited to, the transferring of CITIC insurance benefits, pledging fixed assets and future rights to electricity charges as collateral. Commercial insurance has been purchased, with the risk of non-completion transferred to the EPC (Engineering, Procurement and Construction) general contractor. As legal protection mechanisms against potential risks in the project, a completion guarantee was signed, and the borrower's corresponding obligations added to the loan agreement, such as accelerated repayment demanded by the lender in case of risk events materializing. In addition, the project signed an account supervision agreement with the Habib Bank of Pakistan, which provides account services and ensures compliance with relevant regulatory obligations related to fund transfers.

There are also risks associated with the host country's policies and political system. Pakistan's large fiscal deficit and government debt combined with insufficient foreign exchange reserves pose potential financial risks. Political risks include possible political instability, conflicts among violent political factions, terrorism, disorderly struggles among

religious and tribal factions, and anti-government attacks.

As for environmental risks, the project brings positive environmental effects and helps reduce greenhouse gas emissions: once built, the hydropower station will likely reduce the use of coal by around 2.1 million tons. It also deploys technical measures to minimize its effects on the water and geological conditions around the project. Meanwhile, the project has formulated environmental and social protection plans according to Pakistani standards, including ensuring the water supply for the environment and irrigation downstream, providing proper settlement compensation, providing more job opportunities for local people with sound community development plans, strengthening the management of sewage, dust, noise, garbage, etc., in the construction area, and formulating effective emergency plans for health protection.

In addition to mitigating business, social, and environmental risks through legal, insurance, and cooperation mechanisms, the Karot Hydropower Project is committed to Pakistan's sustainable development in implementation in close cooperation with the government. The Private Power and Infrastructure Board of Pakistan's Ministry of Energy provided a letter of support to the project, and the National Electric Power Regulatory Authority issued a Generation License and approval of electricity pricing. The government of Pakistan also signed an implementation contract and a power purchase contract with the project.

Economic, social, and environmental implications

The project has been and will be generating significant social, economic, and environmental benefits for Pakistan. It has created over 2200 jobs during the project's construction phase, and will sustain 150-300 employment and professional skills training opportunities each year during the project's operations. With the construction of the project, a large amount of capital is flowing into the local economy, increasing government revenue and employment while boosting the development of local industries such as building materials and services. The project pays about USD 23 million in tax to the government each year and generates 3.2 billion kWh of electricity, which helps relieve the imbalance in electricity supply and demand in Pakistan. Meanwhile, 11 km of roads, 2 reinforced concrete highway bridges, 1 suspension pedestrian bridge, 13 thousand m² of permanent housing, and about 10 public facilities, such as a mosque and a medical clinic, will be built under the project, which will help improve local infrastructure, people's livelihoods and their quality of life.

The project actively supports education and poverty reduction programmes and implements a Pakistan immigration scholarship jointly with Pakistan's Punjab University

and Jiangxi University of Science and Technology. Borrowing from the “targeted poverty reduction” model and built on school-school and school-enterprise partnerships, the scholarship fully funds young people from qualified families to complete undergraduate studies in relevant fields and offers them long-term, stable employment. The initial 18 students have been enrolled in college from November 2017.

Chapter 5 Global investment and financing standards towards sustainability

Sustainability rests on three pillars, each equally indispensable: economic, social, and environmental (Box 5.1). Governments and financial institutions have made the most progress on addressing economic sustainability, although further action is needed in bolstering debt sustainability and addressing escalating inequality. Large gaps remain in the social and environmental pillars, where there is a pressing need for effective sustainability standards and safeguards to ensure that the interests of financiers and investors align with the objective of achieving the SDGs.

Identifying common ground among international institutions and critical gaps across their standards is a necessary step toward harmonizing standards along the Belt and Road. Given the magnitude of BRI-related financing and investment flows and China's key role in global governance, harmonized BRI-wide standards could have a crucial impact on SDG attainment. This chapter provides an overview of global investment and financing standards as defined by multilateral and national development finance institutions. It reviews the Environmental and Social Frameworks these institutions have in place, followed by standards in other relevant areas for financing and investment including debt sustainability, transparent procurement, alignment with national priorities and systems, and risk identification and management.

Box 5.1 Environmental, Social and Governance (ESG) Assessment Framework

ESG factors allow an investment evaluation framework to go beyond narrow financial assessment and to better manage risk for sustainable, long-term investment returns. Jointly supported by the UNEP Finance Initiative and the United Nations Global Compact, the Principles for Responsible Investment (PRI) was founded in 2006 to integrate environment, social and governance issues into finance and investment decisions. Since then, international organizations and investment institutions have continuously deepened the ESG concept, which now encompasses a comprehensive and systematic evaluation method for information disclosure standards and performance in regard to all three aspects of ESG. At the same time, major international investment

companies have launched their own ESG investment products as well. Major international organizations and initiatives, including the ISO 26000, Standards Association Standards Board (SASB), and Global Reporting Initiative (GRI), have also developed guidelines and standards for ESG reporting. Regarding the environmental sustainability pillar, for example, the ESG assessment process of major global agencies and ESG investment guidelines published by international exchanges considered carbon and greenhouse gas emissions, environmental policies, waste pollution and management policies, energy use/consumption, natural resources use and management (especially water resources), biodiversity, etc.

5.1 Environmental and social frameworks

5.1.1 Environmental and social frameworks of multilateral institutions

Ideas on sustainable investment and financing have evolved from the World Bank's social and environmental policies formulated in the 1970s and 1980s.¹⁴⁸ This evolution has reflected a general recognition that sustainable development requires transformative changes in the global financial system and in the investment behaviour of financial institutions.

The Environmental and Social Frameworks (ESF) of MDBs are key instruments to avoid and mitigate negative social and environmental impacts. They assist in identifying risks and impacts during project development, and in establishing measures and processes to effectively manage risks and optimize project outcomes. ESFs are periodically updated and reviewed to incorporate lessons learned, international best practices, and standards of other multilateral institutions. Key objectives of the ESFs of the World Bank (WB), Inter-American Development Bank (IDB), Asian Development Bank (ADB), European Bank of Reconstruction and Development (EBRD), European Investment Bank (EIB) and Asian Infrastructure Investment Bank (AIIB) are summarized in Table 5.1 below.

148 Georgoulis, A., Arrasate, M. I., and Georgoulis, N. (2016). The role of the IDB's safeguard policies in the promotion of sustainable infrastructure: a comparative analysis of the IDB safeguards and the Envision rating system (link in Spanish, see references). Inter-American Development Bank.

Table 5.1 Environmental and Social Framework objectives

<i>World Bank–Environmental and Social Framework (2017)</i>
<ol style="list-style-type: none"> 1. Prevent and mitigate unnecessary harm to people and their environment in the development process; 2. Manage environmental and social project risks, as a set of international standards for the World Bank, its borrowers, and the development community.¹⁴⁹
<i>Inter-American Development Bank–Sustainability Framework (2006)</i>¹⁵⁰
<ol style="list-style-type: none"> 1. Enhance project outcomes promoting environmental and social gains as core aspects; 2. Use safeguards throughout the project’s lifecycle to mitigate risks and minimize negative impacts for people and natural resources.
<i>Asian Development Bank–Safeguard Policy Statement (2009)</i>
<ol style="list-style-type: none"> 1. Avoid adverse impacts of projects on the environment and affected people, where possible; 2. Minimize, mitigate, and/or compensate for such adverse project impacts when avoidance is not possible; 3. Help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.¹⁵¹
<i>European Bank for Reconstruction and Development–Environmental and Social Policy (2014)</i>
<ol style="list-style-type: none"> 1. Define roles and responsibilities of EBRD and its clients in designing, implementing and operating projects in line with EBRD’s Environmental and Social Performance Requirements; 2. Set a strategic goal to promote projects with high environmental and social benefits; 3. Mainstream environmental and social sustainability considerations into all its activities.
<i>European Investment Bank–Statement on Environmental and Social Principles and Standards (2018)</i>
<ol style="list-style-type: none"> 1. Identify and evaluate potential impacts of plans and programs.
<i>Asian Infrastructure Investment Bank–Environmental and Social Framework (2016)</i>
<ol style="list-style-type: none"> 1. Reflect institutional aims to address environmental and social risks and impacts in projects; 2. Support integration and provide a mechanism to address environmental and social risks and impacts in project identification, preparation and implementation, both for AIIB and clients; 3. Provide a framework for public consultation and disclosure of environmental and social information; 4. Improve development effectiveness and impact to increase results on the ground; 5. Support clients, through Bank financing of projects, to implement their obligations under national environmental and social legislation.

Source: policy documents of WB, IDB, ADB, EBRD, EIB, and AIIB.

149 World Bank (2016, August 4). Review and update of the World Bank's safeguard policies. Washington D.C.: World Bank Group, 57–58.

150 Publication date of the Environment and Safeguards Compliance Policy. Sectoral operational policies for gender equality, indigenous peoples, involuntary resettlement, labour and public utilities were published between 2006 and 2016.

151 Asian Development Bank (2009, June) Safeguard Policy Statement.

The WB recently updated its ESF. The WB's new ESF introduces standards in labour protection, working conditions protection and community health and safety measures, which were missing in previous safeguard policies. It also establishes an overarching non-discrimination principle to ensure that marginalized groups including children, people with disabilities, women, ethnic and religious minorities and LGBT people can benefit from development. Considerable improvements in stakeholder engagement and information disclosure have also been reported. A significant change in the new WB ESF is that, in the future, the WB will support a borrowing government to use its own ESF to evaluate and implement projects if the national framework is compatible with the WB's ESF in terms of addressing the risks and impacts of projects. This is referred to as a "country systems" approach.

There has been a gradual shift toward working with borrowing countries to enable them to take more ownership over such policies. A common complaint from WB borrowers has been that ESFs have been strictly imposed on countries with little or no capacity-building components. A WB client noted that: *"The Bank always considers safeguard policies superior to the country's own laws and systems, reflecting lack of trust and undermining client ownership."*¹⁵² With support from the government of Japan, the Multilateral Investment Guarantee Agency (MIGA), part of the WBG, has set up an environmental and social trust fund that helps fund capacity building in Africa for borrowing countries to adapt to the WB's Environmental and Social Risk Management (ESRM) program.¹⁵³ This is part of a relatively new effort to respect national "country systems" for social and environmental protection. While these measures contain significant improvements, some civil society organizations have expressed concerns about the extent of confidence that the new World Bank ESF places in host country governments that may have good laws and regulations on the books but that may not implement those regulations consistently.

As Table 5.2 below shows, standards and principles are covered in similar ways across the different MDBs, with 90% of the standards covered by all of them. Annex 1 presents and compares in more detail the ESFs of the WB, IDB, ADB, EBRD, EIB and AIIB.

Table 5.2 Summary of MDBs' environmental and social standards

Environmental and Social Standards (ESS)	World Bank	IDB	ADB**	EBRD	EIB	AIIB
1. Environmental and social impacts	✓	✓	✓	✓	✓	✓
2. Labour and employment	✓	-	-	✓	✓	✓
3. Pollution prevention	✓	✓	✓	✓	✓	✓
4. Health and safety	✓	✓***	✓	✓	✓	✓

152 World Bank (2010). Safeguards and sustainability policies in a changing world: an independent evaluation of World Bank Group experience. IEG Study Series.

153 Ibid.

Table 5.2 (Continued)

Environmental and Social Standards (ESS)	World Bank	IDB	ADB**	EBRD	EIB	AIB
5. Land use and resettlement	✓	✓	✓	✓	✓	✓
6. Biodiversity conservation and natural resource management	✓	✓	✓	✓	✓	✓
7. Indigenous communities	✓	✓	✓	✓	✓	✓
8. Cultural heritage	✓	✓	✓	✓	✓	✓
9. Financial intermediaries	✓	✓	✓	✓	✓	✓
10. Stakeholder engagement	✓	✓	✓	✓	✓	✓

* Although IDB has an Operational Policy on Labour sector, it does not address labour and employment considerations in the Environment and Safeguards compliance policy for the Bank's operations.

** Labour considerations are included in ADB's Social Protection Strategy (2001), however they are not specific to the Bank's operations.

*** IDB's Health and safety considerations only include exposure to hazardous materials.

Source: MDB policy documents

All MDBs listed above, except for IDB and ADB, cover all aspects of environmental and social standards. The WB, followed by EBRD, has the broadest coverage. They mainly differ in their definition of the *Cultural Heritage* standard, however, as the WB's is the most elaborate of the two. EBRD and EIB have the most similar definitions and standard coverage. The *Financial Intermediary* standard EIB discusses but omits detail on procedures, Monitoring and Evaluation (M&E), or organizational capacity.

Labour standards are not explicitly mentioned by IDB and ADB, although both have overall strategies on labour. IDB has an Operational Policy on Labour sector and ADB's labour considerations are included in its 2001 Social Protection Strategy. However, neither of them refers to the bank's operations or explicitly mention *labour* standards in the bank's safeguards.¹⁵⁴ The only reference is ADB's exclusion of any operations involving forced or child labour, but without a specific mention to labour standards in their safeguards. IDB has an Operational Policy on Labour sector and ADB's labour considerations are included in the 2001 Social Protection Strategy. However, neither of them refers to IDB or ADB's operations. Instead, they reflect their overall strategies on labour.

Gender and disability components, commonly included in multilateral projects, are not explicitly covered in the standards of MDBs with the exception of AIIB. The ESFs do not explicitly

¹⁵⁴ ADB's exclusion of any operations involving forced or child labour is the bank's only reference to labour standards. See Himberg, H. (2015, May). Comparative review of multilateral development bank safeguard systems.

cover these areas in their standards, with the exception of AIIB. In the case of ADB, some stakeholders have raised concerns regarding the lack of policy provisions on labour standards and gender as part of its safeguard policy statement. ADB's Social Protection Strategy indicates that the bank has recognized its need to further elaborate on these considerations.

AIIB's ESF uses the same categories for its assessments as the WB's new ESF.¹⁵⁵ This sends a positive signal, as the WB's definitions are the most elaborate and comprehensive. It was generally expected that the new MDBs (i.e. AIIB and NDB) would improve upon the practices of existing MDBs by striking the right balance between the need for high standards and safeguards in project lending, and the demand for large and rapid loan disbursements. AIIB has the objective to support building sustainable infrastructure and to implement the Paris Agreement. To these ends, it has established a rigorous ESF and risk management system. In light of this, compared to other new MDBs, AIIB strives to embrace a more progressive approach on many issues, such as gender equality and responsiveness, the inclusiveness of people with disabilities, and occupational health and safety. Throughout the process of designing and creating these standards, which blend a harmonized and country system approach, AIIB has been emphasizing transparency as well as extensive and effective consultation. With openness and repeated reference to deferring to host country systems whenever possible, AIIB is one step ahead of other MDBs in terms of helping strengthen the capacities of host countries and simplifying financial procedures and approval processes.

Box 5.2 exhibits how AIIB has attuned its standards and frameworks to the SDGs and NDCs with an environmental and social risk framework and transparency and engagement mechanisms.

Box 5.2 AIIB: Multilateral Development Finance with Common Standards

AIIB Environmental and Social Framework

In February 2016, the Asian Infrastructure Investment Bank (AIIB) adopted its own Environmental and Social Framework (ESF) that defines the bank's vision statement regarding environmental and social sustainability and the role of AIIB in Asia's sustainable development. The document laid out three mandatory Environmental and Social Standards (ESS) setting out detailed requirements; Environmental and Social Assessment and Management, Involuntary Resettlement; and Indigenous Peoples Social Framework.

AIIB Energy Sector Strategy

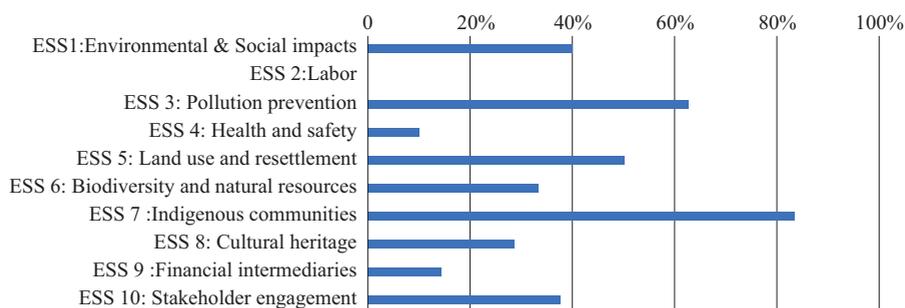
In June 2017, AIIB issued its Energy Sector Strategy named *Sustainable Energy*

155 United Nations Inter-Agency Task Force on Financing for Development. MDB Safeguards.

for Asia. It embraces the principles underpinning the UN’s Sustainable Energy for All (SEforALL), the 2030 Agenda for Sustainable Development, and NDCs under the Paris Agreement. It identified three thematic priorities: sustainable infrastructure, cross-country connectivity, and private capital mobilization. Implementation of the Strategy is to be informed by the strategic and sectoral planning processes of its members at the regional, national and subnational level. Even though the document does not strictly rule out investments in fossil fuel and nuclear power generation, the strategy sets specific conditions for financing these projects, emphasizing support for a transition to sustainability.

Over one third of the 88 specific areas for the 10 ESSs listed in Tables II to XI in Annex 1 are covered by all six MDBs. Figure 5.1 presents the degree of commonality among all MDBs across the 10 ESS and Table 5.3 specifies the common areas to all.

Figure 5.1 ESS commonalities over all MDBs



Source: MDB policy documents

Table 5.3 Specific areas in each ESS covered by all MDBs

ESS1: Environmental & social impacts	<ul style="list-style-type: none"> • Environmental and social assessment; • Environmental and Social Commitment Plan (ESCP); • Project monitoring and reporting; • Organizational capacity and commitment.
ESS 2: Labour	-
ESS 3: Pollution prevention	<ul style="list-style-type: none"> • Resource efficiency; • Pollution prevention and management; • Management of hazardous and non-hazardous wastes; • Management of chemicals and hazardous materials; • Management of pesticides.

Table 5.3 (Continued)

ESS 4: Health and safety	<ul style="list-style-type: none"> • Infrastructure and equipment safety.
ESS 5: Land use and resettlement	<ul style="list-style-type: none"> • Involuntary land resettlement; • Compensation for affected persons; • Community engagement; • Resettlement assistance; • Procedures for economic displacement.
ESS 6: Biodiversity and natural resources	<ul style="list-style-type: none"> • Impact on biodiversity; • Legally protected areas; • Introduction of alien species.
ESS 7: Indigenous communities	<ul style="list-style-type: none"> • Adverse impacts on indigenous people; • Engagement with indigenous people; • Free, prior and informed consent; • Cultural heritage; • Grievance mechanism.
ESS 8: Cultural heritage	<ul style="list-style-type: none"> • Definition of cultural heritage; • Chance find procedures.
ESS 9: Financial intermediaries	<ul style="list-style-type: none"> • Definition of FI category.
ESS 10: Stakeholder engagement	<ul style="list-style-type: none"> • Information disclosure; • Meaningful consultation; • Engagement during implementation & external reporting.

Source: MDB policy documents

Table 5.4 builds on the commonalities presented in Figure 5.1 and Table 5.3 and adds other areas safeguarded by each standard where the level of commonality is lower among the MDBs. The level of coverage is represented with different colours. EIB and AIIB share the largest number of areas covered (both safeguard 64 specific aspects among the 10 standards) although the areas differ. IDB has the weakest coverage, with just over 50% of the indicators covered in its Sustainability Framework. The main differences in coverage are, as mentioned above, in *Labour Standards*; in *Financial Intermediaries*, where the WB, EBRD and ADB are the most detailed; *Cultural Heritage*, where the WB and ADB have the broadest coverage; and *Health and Safety*, where IDB ESS standards have more limited coverage, as they only consider workers' *exposure to hazardous materials*. In the areas of *Environmental and Social Impacts*, *Pollution Prevention* and *Indigenous Communities*, there is a greater consensus among the MDBs.

Table 5.4 MDB coverage of the 10 ESS

Environmental and social impacts	Labour and employment	Pollution prevention	Health and safety	Land use and resettlement
Environmental and social assessment	Direct and indirect workers	Resource efficiency	Infrastructure and equipment safety	Involuntary land resettlement
Environmental and Social Commitment Plan (ESCP)	Labour management procedures	Pollution prevention and management	Security management	Compensation for affected persons
Project monitoring and reporting	Terms of employment	Management of hazardous and non-hazardous wastes	Universal access	Community engagement
Organizational capacity and commitment	Non-discrimination	Management of chemicals and hazardous materials	Road safety	Resettlement assistance
Risk categorization	Right to unionize	Management of pesticides	Community exposure to diseases	Procedures for economic displacement
Stakeholder engagement and information disclosure	Child and forced labour	Management of air pollution	Diseases introduced by project labour	Conditions for forced evictions
Use of borrower's environmental and social framework	Occupational Health and Safety	Resource efficiency distinction for water, energy, raw materials	Exposure to hazardous materials	Grievance mechanism
Detailed breakdown of ESA and ESCP	Feedback on unsafe environments	Noise emission management	Dam safety	Conditions for replacement locations
Supply chain management	Termination conditions		Services quality management	Collaboration with other agencies
Emergency preparedness	Worker accommodation		Vehicle safety	Involuntary resettlement instruments
	Grievance mechanism			
	Contracted workers and 3 rd parties			
	Collective dismissals			

Table 5.4 (Continued)

Biodiversity and natural resources	Indigenous communities	Cultural heritage	Financial intermediaries (FI)	Stakeholder engagement
Impact on biodiversity	Adverse impacts on indigenous people	Definition of cultural heritage	Definition of FI category	Information disclosure
Legally protected areas	Engagement with indigenous people	Chance find procedures	Environmental and social procedures	Meaningful consultation
Introduction of alien species	Free, prior and informed consent	Integration of cultural heritage into ESMP	ESMS	Engagement during implementation & external reporting
Distinction between critical, natural and modified habitat	Cultural heritage	Procedure for archaeological site	Environmental and social policy	Grievance mechanism
Management of living natural resources	Grievance mechanism	Mitigation for built heritage	Organizational capacity and competency	Stakeholder identification and analysis
No unnecessary land clearing	No involuntary resettlement	Mitigation for moving, cultural heritage	Monitoring and reporting	Stakeholder Engagement Plan
Sustainable primary suppliers		Mitigation for natural features with cultural significance	Stakeholder engagement	Third party performance
Distinction between fishery, forestry, livestock, etc.				Organizational capacity and commitment
Genetically modified organisms				



5.1.2 Environmental and social frameworks of NDBs and other financial institutions

We have seen that MDBs are playing a significant role in financing the SDGs, and their standards have integrated environmental and social considerations that reflect a shift in their investment and financing practices towards sustainability. In parallel, a number of NDBs have adopted their own sets of safeguards and environmental policies. An accepted line of new thinking seeks to put forward a more integrative approach to incorporating social and

environmental concerns in the entire project cycle (especially in the infrastructure sector), including in the initial project design stages.

This section surveys the efforts of NDBs and other financial institutions in moving towards sustainable investment and financing, identifying a common trend in their approach to lending and investing along the BRI.¹⁵⁶ It finds that a variety of initiatives in progress attempt to incorporate sustainability throughout the infrastructure project cycle. Similar initiatives are also increasingly embraced by the private sector. The chapter does not examine NDBs that do not participate in international financing.

Environmental and social frameworks of National Development Banks

NDBs play an important role in providing financial services that facilitate sustainable development. They can mobilize private sector funds for long-term investments and contribute to building capacities in BRI partner countries. Table 5.5 presents a list of national development banks with their lending totals and related environmental and social standards. China Development Bank, one of the largest NDBs, will be examined in the next chapter, which provides the details of Chinese investment and financial sustainability standards.

Table 5.5 Largest National Development Banks in the world economy

Country	National Development Bank	Outstanding loans in ¹⁵⁷ billion USD	Applicable standards	Own ESF in place
Germany	KfW Development Bank	551	WB, IFC and ILO	Sustainability Guideline ¹⁵⁸
Republic of Korea	Korea Development Bank	107	WB and IFC	E&S Framework
Japan	Japan Bank for International Cooperation	151	WB and IFC	Guidelines for confirmation of E&S considerations
	Development Bank of Japan, Inc	119	-	No

156 United Nations General Assembly, Resolution 69/313 (2015, July 27). Addis Ababa action agenda of the third International Conference on financing for development (Addis Ababa action agenda).

157 Data available from the 2018 financial report of KfW, 2018 annual report of JBIC, integrated report 2018 of DBJ, 2017 annual report of KDB, 2017 annual financial statement of DBSA, and 2017 annual report of Banobras. Total lending was converted to USD using exchange rates of 1 EUR = 1.14 USD, 107.12 JPY = 1 USD, 1155.43 KRW = 1 USD. Latest available data for Vnesheconombank is from 2015.

158 United Nations General Assembly, Resolution 69/313 (2015, July 27). Addis Ababa Action Agenda of the third International Conference on Financing for Development (Addis Ababa action agenda).

Table 5.5 (Continued)

Country	National Development Bank	Outstanding loans in ¹⁵⁷ billion USD	Applicable standards	Own ESF in place
Russian Federation	Bank for Development and Foreign Economic Affairs (Vnesheconombank)	40	GRI Sustainability Guidelines ¹⁵⁹	Sustainable Development Road Map
Mexico	Banco Nacional de Obras y Servicios Publicos S.N.C (Banobras)	20	-	No
South Africa	Development Bank of South Africa	4	IFC and AfDB	Environmental and Social Safeguards ¹⁶⁰

Source: NDBs' latest annual reports

KfW, Korea Development Bank, JBIC, and the Development Bank of Southern Africa (DBSA) all have ESFs in place.¹⁶¹ The Russian Bank for Development has a Sustainable Development Road Map with an overall objective of promoting sustainable development projects, but no environmental and social framework.

Environmental and Social Due Diligence (ESDD) and climate assessment are core elements of KfW's Sustainability Guidelines. The assessment includes: a preliminary appraisal of risks, definition of the scope, accurate assessment of environmental, social and climate-relevant impacts and risks, the design and implementation of an ESDD, in-depth climate adaptation/mitigation assessment. JBIC's Guidelines ensure transparency, predictability, and accountability regarding environmental and social issues. Their aim is to encourage consideration of environmental and social aspects and provide clear procedures, decision-making processes, and requirements. The DBSA has similar standards to those of the KfW that include environmental, social, economic, and financial sustainability considerations of investment. The frameworks for Korea Development Bank, KfW, JBIC and DBSA are presented in detail in Annex 2.

Table 5.6 presents a comparison of the standards for sustainable investment and financing of KfW, DBSA and JBIC. Three examples selected for comparison, following the WB ESS classification of standards.

159 The Global Reporting Initiative (GRI) is a non-profit organization promoting economic sustainability. It produces one of the world's most widely used standards for sustainability reporting, also known as "ecologic sustainability reporting".

160 Development Bank of Southern Africa. Environmental appraisal framework executive summary.

161 Korea Development Bank adopted the Equator Principles (presented in the next section) within its ESF.

Table 5.6 Summary of National Development Banks' environmental and social standards

Environmental and Social Standards (ESS)	KfW	DBSA	JBIC
1. Environmental and social impacts	✓	✓	✓
2. Labour and employment	✓	✓	-
3. Pollution prevention	✓	✓	-
4. Health and safety	✓	✓	✓
5. Land use and resettlement	✓	✓	✓
6. Biodiversity conservation and natural resource management	✓	✓	✓
7. Indigenous communities	✓	✓	✓
8. Cultural heritage	✓	✓	✓
9. Financial intermediaries	-	-	-
10. Stakeholder engagement	-	✓	✓
Other	-	✓	✓

Source: NDB websites

The sophistication of the environmental and social frameworks of the respective NDBs varies widely. Some NDBs like KfW and DBSA have relatively more sound and comprehensive frameworks, while others like the Development Bank of Japan and Mexico's Banobras do not have their own explicit ESFs (see Table 5.5).

Furthermore, although WB and IFC standards are the most commonly applied among the NDBs, this is not the case for several of the NDBs.

NDBs' ESFs are generally a step behind those of the MDBs, covering a somewhat smaller percentage of the standards. However, some NDBs have moved ahead of MDBs in applying standards for certain environmental and social aspects. For example, DBSA and JBIC encourage consideration of vulnerable groups regardless of gender or sexual orientation and have some standards that refer specifically to children and the elderly.

Still, critical gaps remain. In the case of JBIC, the omission of clear standards for labour or pollution prevention seems significant considering the increasing global awareness of environmental and climate change risks and the declining costs of renewables.

NDBs have significant potential for helping attract private funds for development projects. Setting up more comprehensive standards and frameworks to address the environmental and social aspects of NDB lending and investments would influence the modalities for private flows and thus contribute to strengthening the sustainability of projects along the BRI.

The International Development Finance Club (IDFC), with its 24 NDB members from both developed and developing countries, has been one of the frameworks through which NDBs work together to influence the flow of private funds.^{162, 163} The *Aligning with the Paris Agreement* published by the Club in December, 2018, for example, calls for financial flows to be compatible with the Paris Agreement's long-term goals and fully take account of the Agreement's implications for business and investment operations.¹⁶⁴ Given the central role of CDB in the BRI and its importance among NDBs, the example it sets for other investors and financiers can have a major positive impact on "greening" the BRI.

Together with some MDBs, IDFC members have committed to five Voluntary Principles for mainstreaming climate change in their strategies and operations:¹⁶⁵

1. Commit to climate strategies

Be strategic when addressing climate change by reflecting institutional commitments in strategic priorities, policy commitments and targets. This enables the integration of climate change considerations in a financial institution's lending and advisory activities over time.

2. Manage climate risks

Be active in understanding and managing climate risk in assessing portfolios, working with clients to determine appropriate measures for building resilience to climate impacts and improving the long-term sustainability of investments.

3. Promote climate-smart objectives

Identify instruments, tools and knowledge on how best to overcome risks and barriers for low-carbon and resilient investments. This includes mobilizing and catalysing additional financing and developing specialized financing vehicles/products such as green bonds, risk-sharing mechanisms and blended finance. Engage clients and other stakeholders (e.g. rating agencies, accounting firms) on climate change risks and resilience, and share lessons of experience to help further mainstream climate considerations into activities and investments.

4. Improve climate performance

Set up operational tools to improve climate performance in all activities. Monitor indicators tied to climate change priorities, including Greenhouse Gas (GHG) emission reporting, green lending and investment, climate-conscious asset allocations, and managing

162 International Development Finance Club (2018, December). Position paper aligning with the Paris Agreement. IDFC Position Paper.

163 International Development Finance Club. Who we are.

164 International Development Finance Club (2018, December). Position paper aligning with the Paris Agreement. IDFC Position Paper.

165 Climate Action in Financial Institutions

the institution's own climate footprint.

5. Account for climate action

Be transparent and report, wherever possible, on the climate performance of your institution, including increases in financing of clean energy, energy efficiency, climate resilience or other climate-related activities and investments. Transparently report the climate footprint of the institutions' own investment portfolio, and how the institution addresses climate risk.

The disclosure and reporting requirement on the climate footprint of the investment portfolio is a significant challenge. No institution is yet fully compliant with these commitments. Some MDBs have already introduced a shadow price for carbon emissions, (e.g., EIB) in their environmental assessments.¹⁶⁶ This is a remarkable step towards internalizing the social cost of carbon emissions in project appraisals, which contributes substantially to the implementation of the Paris Agreement.

Other public or private institutions

Both financial and non-financial entities are increasingly incorporating environmental, social and governance aspects into their decision-making and operations.

*Principles for Responsible Investment (PRI)*¹⁶⁷

The PRI are six voluntary investment principles compiled by an international investor network and supported by the UN. More than 1800 signatories, representing investors and financial institutions from 67 countries have voluntarily signed up to the PRI. 30 of them are developing countries, accounting for around 19% of the entire developing countries, 34 of them are developed economies, accounting for around 87% of the entire developed countries. Signatories are obliged to report annually on their sustainable investment activities. The PRI address Environmental, Social and Governance elements. Signatories commit to the following:

1. We will incorporate ESG issues into investment analysis and decision-making processes.
2. We will be active owners and incorporate ESG issues into our ownership policies and practices.
3. We will seek appropriate disclosure of ESG issues by the entities in which we invest.
4. We will promote acceptance and implementation of the PRI in the investment

166 Hawkins, J., and Wright, H. (2018, January 14). How are development banks performing on shadow carbon pricing? E3G: Third Generation Environmentalism.

167 Principles for Responsible Investment. What are the Principles for Responsible Investment?

industry.

5. We will work together to enhance our effectiveness in implementing the Principles.

6. We will each report on our activities and progress towards implementing the Principles.

The goal is to assist investors in understanding the implications of sustainable investment, and in implementing their investment strategies without neglecting environmental, social, and governance aspects of those investments. The PRI are flexible and compatible with the diverse range of investors operating in different sectors.

The Equator Principles (EP)

The Equator Principles are a voluntary set of standards that were developed by a group of financial institutions in 2003, with the objective of ensuring that projects are developed in a socially responsible manner and reflect sound environmental management practices. Currently 96 Equator Principles Financial Institutions (EPFIs) in 37 countries have adopted the EPs, covering the majority of international project finance debt within developed and emerging markets. Among them, 19 are developing countries, accounting for around 12% of the entire developing countries; and 18 of them are developed countries, accounting for around 46% of the entire developed countries. In China, the Bank of Jiangsu and the Industrial Bank Co., Ltd. both signed and adopted the Equator Principles. While financial institutions comply with the Equator Principles voluntarily and independently, for participating institutions reporting on implementation of the Principles is required.

These principles incorporate World Bank practices and guidelines and are voluntarily adopted and applied to (i) project finance advisory services and project finance with capital costs over USD 10 million; (ii) project-related corporate loans of at least USD 100 million or Equator Principles Financial Institution's (EPFI) commitment of USD 50 million or above; and (iii) bridge loans with a maturity of less than 2 years that will be refinanced by project finance or a project-related corporate loan. For adopting institutions, these principles are a “*credit risk management framework for determining, assessing and managing environmental and social risk in project finance transactions.*”¹⁶⁸

The EPs include:

1. Review and Categorization based on the potential environmental and social risks associated with the project.

2. Environmental and Social Impact Assessment (ESIA) to be conducted by the client,

168 Equator Principles (2013, June). The Equator Principles: a financial industry benchmark for determining, assessing and managing environmental and social risk in projects.

including measures to minimize, mitigate, and/or compensate for negative impacts.

3. Applicable Environmental and Social Standards, notably IFC Performance Standards on Environmental and Social Sustainability, WB Environmental, Health and Safety (EHS) Guidelines, and relevant host country laws and regulations.

4. Environmental and Social Management Plan (ESMP) to be prepared by the client to address issues raised in the assessment (Principle 2) and actions needed to comply with the applicable standards (Principle 3). If the client fails to meet the applicable standards, an Equator Principles Action Plan is prepared jointly with the EPFI to address gaps.

5. Stakeholder Engagement: the client will carry out effective consultations with affected communities and document the results of the consultations.

6. Grievance Mechanism to facilitate resolution of concerns and risks related to a project's environmental and social performance.

7. Independent Review of ESMP and Consultation documents. The reviewer will participate in the preparation of the EP Action Plan, if necessary.

8. Clients will submit the financial documentation to comply with host country environmental and social laws and regulations, ESMP and Equator Principles Action Plan and provide periodic reports that document compliance.

9. Independent Monitoring and Reporting to assess compliance with the EPs.

10. Reporting and Transparency: the client will report on GHG emission for projects with high levels of emissions¹⁶⁹ and submit a summary of the ESIA.

International Finance Corporation (IFC) Sustainability Framework

IFC's Sustainability Framework, approved in 2009, stems from the WB's ESF with modifications to reflect the private sector focus of IFC. It details the company's strategic commitment to sustainable development and takes environmental issues as a key part of its risk management. The *Sustainability Framework* is composed of *IFC Performance Standards for Environmental and Social Sustainability*, *IFC Policy for Information Use* and *IFC Performance Standards*. The *Performance Standards* define the requirements that customers need to meet throughout the project cycle of an IFC investment, covering eight areas; assessment and management of environmental and social risks and impacts; workforce and working conditions; resource efficiency and pollution prevention; community health, safety and security; land acquisition and involuntary migration; biodiversity conservation and sustainable management of biological natural resources; aboriginal and cultural heritage.

169 Over 100,000 tons of CO₂.

The OECD Common Approach

In response to civil society pressure in the 1980s and 1990s, Export Credit Agencies (ECAs) have moved toward setting environmental and sustainable development standards for export credit support. With the auspices of the OECD, in 1998 ECAs made a statement of intent to develop such standards. In 1999, they agreed to “*disclose environmental information for big projects.*” In the face of further scrutiny on ECAs from industrialized countries, a statement of voluntary common approaches was drafted in 2001 and became mandatory in 2003. The latest review of the Common Approaches was undertaken in 2012. The new standards emerging from that process are benchmarked against the WB Safeguard Policy and IFC Performance Standards and apply to projects that are officially granted export credits with a payment period of more than two years. “*The objectives of the Common Approaches are to increase environmental and social awareness in the buyer countries and to harmonize the environmental and social assessment procedure to be applied by all Export Credit Agencies in order to avoid any distortion of competition.*”¹⁷⁰ In 2015, the *Arrangement on Officially Supported Export Credits* of the OECD limited the ability of participating nations to finance low-efficiency coal-fired power plants.¹⁷¹

The global focus on environmental and socially responsible investment practices has led to several important frameworks for standards for overseas operations.

5.1.3 ESF monitoring and evaluation mechanisms

The impact of ESSs will ultimately depend not only on their design but also on how they are operationalized. A broader, consistently implemented definition of standards, and greater indicator coverage helps identify, prevent and minimize risks and negative impacts of projects. The MDBs have M&E mechanisms in place to assess the performance of projects and environmental and social issues, and the level of reporting varies across institutions. Table 5.7 outlines the M&E frameworks of the environmental and social frameworks for the MDBs presented before. The key aspects of each M&E mechanism are outlined in Annex 1.

170 Organization for Economic Cooperation and Development (2012, June 28). Recommendations of the Council on common approaches for officially supported export credits and environmental and social due diligence (the “Common Approaches”). Paris: OECD.

171 Organization for Economic Cooperation and Development (2018, January 16). Arrangement on officially supported export credits. Paris: OECD.

Table 5.7 MDB M&E frameworks

<i>WB</i>	Environmental and Social Commitment Plan
<i>IDB</i>	Environmental Assessment
<i>ADB</i>	Safeguards Assessment
<i>EBRD</i>	Environmental and Social Policy
<i>EIB</i>	Environmental and Social Management Plan
<i>AiIB</i>	Environmental and Social Assessment

Source: MDB policy documents

Common features associated with strong implementation of ESFs includes engagement, awareness of the host country's limitations and capacities, and provision of necessary support. Greater country ownership stems from increased use of country systems and understanding of environmental and social considerations. A comprehensive ESF on paper with a one-size-fits-all, inflexible approach will not ensure that environmental and social impacts are mitigated.

Table 5.8 shows that procedurally there is little variation across overseas development finance institutions. All banks apply an *ex-ante* project review of environmental impact assessments at the pre-lending stage and establish links between compliance with environmental regulations and disbursement. Regarding environmental standards, host countries' environmental regulations are the bottom line for all banks, and the WB, IDB, EIB and KfW require clients to comply with international standards and procedures as well. Put another way, the WB, IDB, EIB and KfW have mandated safeguard systems, whereas the rest of the sample defer or partially defer to country systems.

Table 5.8 Common procedures for common standards

Procedures	MDBs	NDBs
<i>Ex-ante</i> environmental impact assessments	✓	✓
Industry-specific social and environmental standards	✓	–
Require compliance with host country environmental regulations	✓	✓
Require compliance with international environmental regulations	✓	✓
Public consultations with affected communities	✓	✓
Grievance mechanism	✓	–
Independent monitoring and review	✓	–
Establishing covenants linked to compliance	✓	✓
<i>Ex-post</i> environmental impact assessments	✓	–

Source: Gallagher and Yuan 2017¹⁷²

172 Gallagher, K. P. and Yuan, F. (2017). Standardizing sustainable development: a comparison of development banks in Latin America. *Journal of Environment and Development*, 26(3), 243-271.

All the banks include public consultations with affected communities in their environmental assessments. For disputes on environmental issues, only the WB and EIB have project-level grievance mechanisms. Only the WB requires independent monitoring and review of environmental compliance during the project cycle. IDB, AIIB, and KfW do not require ex-post assessment while the rest do have this requirement.

While there are common sets of themes and procedures, the general approach of different actors varies significantly. As mentioned earlier, many MDBs have a “conditional” approach to ESRM, whereas some NDBs such as those from China defer to host country standards.¹⁷³ Some banks such as KfW, and now the World Bank and IDB are more “capability enhancing”. These institutions recognize that many actors in a project (bank financiers, local firms, foreign firms, local and foreign governments, workers, etc.) have very different capabilities to meet standards and require support to do so.

5.2 Debt sustainability frameworks

Sustainable development relies on three pillars: economic, social, and environmental sustainability. This section focuses on debt sustainability, a critical element of economic sustainability of international investment and financing.

There is a general consensus that taking on debt allows borrowers to fund investment in productive capacity and infrastructure as well as to build human capital and institutions, which holds the promise of enhanced economic growth. But to ensure positive net benefits in the long run, risks involved in borrowing must be managed effectively.¹⁷⁴ A prerequisite for this is that the financial returns to the investment need to suffice for covering the running and maintenance costs of the investment asset, as well as the resulting debt service obligations.

5.2.1 UNCTAD Principles for responsible sovereign lending and borrowing

The UN has consistently stressed the need for creditors and debtors to share responsibility in avoiding unsustainable debt situations. UNCTAD has developed, through a transparent, multi-stakeholder and inclusive process, a set of principles to promote responsible sovereign lending and borrowing and a platform to provide lenders and borrowers

173 Klooster, D. (2010). Standardizing sustainable development? The Forest Stewardship Council’s plantation policy review process as neoliberal environmental governance. *Geoforum*, 41 (1): 117-129.

174 Chudik, A., *et al.* (2018, April 3). When is debt a drag on economic growth? *Economic Research Forum*.

a space to share and discuss responsible practices. The Principles are presented in Annex 3. The purpose of the UNCTAD platform is to help avoid negligent financing of sovereign borrowers by assigning specific responsibilities to both borrowers and lenders.¹⁷⁵ A key principle is that sovereign borrowers that are fully transparent and provide full information when they incur debt will be in a better position to convince creditors to participate in debt service restructuring, if it is needed at a later stage.

Responsibilities allocated to lenders include making sure “*that government officials involved in sovereign lending and borrowing transactions are protecting the public interest (of the State and its citizens for which they are acting as agents)*” when they enter into borrowing agreements. Lenders are also responsible for determining, “to the best of their ability, whether the financing has been appropriately authorized and whether the resulting credit agreements are valid and enforceable under relevant jurisdiction/s”. They should make sure that all necessary information is disclosed to understand the risks and benefits of the loan or financial product, a responsibility that increases when the borrowing country lacks experience and debt-servicing capacity. Lenders also need to take into account the expected financial return from the project when agreeing on the terms of lending. Further, lenders need to avoid engaging in financial transactions with countries on which UN sanctions have been imposed.

Maintaining sustainable levels of debt is a shared responsibility for lenders and borrowers. Lenders should assess the borrower’s capacity to repay the debt, given already existing debt, and irrespective of the desire to carry out a financial transaction. Burdening a country’s capacity to repay could jeopardize not only the financial position of the creditor but also the relations of the debtor with other creditors. If a debt restructuring is needed, it should be done in a transparent way, informing other affected lenders, and sharing the losses equitably between lenders and borrower.

Monitoring systems should be put in place but monitoring by the lender should not interfere with the borrower’s autonomy to decide on its priorities. Borrowers should have in place debt sustainability and management strategies. Furthermore, when deciding on incurring new debt, the two sides should use a comprehensive framework that assesses (i) the financial viability of the specific project, including whether financial returns will be sufficient to cover running costs as well as debt service obligations; (ii) the sustainability of aggregate debt service obligations after contracting this new debt; and (iii) if a government guarantee is involved, the ability of the budget to carry the additional debt service obligations in case the guarantee is called. The debt

175 Li, Y. and Panizza, U. (2012, January 10). The economic rationale for the principles on promoting responsible sovereign lending and borrowing. *Sovereign Financing and International Law*, 15-37.

management framework should clearly define procedures, responsibilities for both contracting and guaranteeing new debt, for timely debt service and accountabilities.

The UNCTAD Principles cover a wide range of aspects, including social and environmental impacts, debt sustainability, transparency and stakeholder engagement. Such comprehensive considerations are a first step to minimizing negative impacts and the debt servicing risks of the project. However, the voluntary nature of the principles may reduce their impact. The UNCTAD initiative has been gaining increasing support from developed and developing countries, as recurrent public debt difficulties around the world have highlighted the need for careful management of public and publicly guaranteed debt.

5.2.2 World Bank-International Monetary Fund Debt Sustainability Framework (DSF)

In order to help countries mobilize resources while reducing the risks of accumulating excessive or unsustainable debt and its severe fiscal and/or external economic consequences, the International Monetary Fund (IMF) and the WB have jointly developed the Debt Sustainability Framework (DSF).¹⁷⁶ Debt Sustainability Analysis (DSA) is a key part of the framework (Box 5.3).

The DSF, operational since 2002, consists of two complementary components: the analysis of the sustainability of total public debt and that of total external debt. Each component includes:

- i. A baseline scenario, based on macroeconomic projections that articulate the government's intended policies, with the main assumptions and parameters clearly laid out;
- ii. A series of sensitivity tests applied to the baseline scenario, providing a probabilistic upper bound for the debt dynamics under various assumptions regarding policy variables, macroeconomic developments, and financing costs.

The methodology has been periodically revised and re-designed to allow for greater complexity and nuances. It helps “*clients to balance their needs for funds with the ability to repay*” their debts.¹⁷⁷ To help lower income countries (LICs) achieve their development goals while avoiding future debt problems, the joint WB-IMF DSF specifically aims to “*keep countries that have received debt relief under the (G7) Heavily Indebted Poor Countries (HIPC) Initiative and the (Multilateral Debt Relief Initiative) MDRI on a sustainable track.*”¹⁷⁸

176 International Monetary Fund (2018, July 13). The debt sustainability framework for low-income countries: introduction.

177 World Bank (2018, Dec 11), Debt Sustainability Analysis.

178 International Monetary Fund (2018, March 18). Factsheet - Debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative.

Box 5.3 IMF-WB Debt Sustainability Analysis (DSA)

The DSA is a “structured examination” of a country’s debt conducted regularly by debt experts from the IMF and WB in low-income and middle-income countries. The three main objectives of the IMF-WB’s DSA are:

1. Assessing the current debt situation: its maturity structure, whether it has fixed or floating rates, whether it is indexed, and by whom it is held;
2. Identifying vulnerabilities in the debt structure or the policy framework far enough in advance so that policy corrections can be introduced before payment difficulties arise;
3. In cases where such difficulties have emerged, or are about to, examining the impact of alternative debt-stabilizing policy paths.

The DSA consists of:

1. An analysis of a country’s projected debt burden over the next 20 years and its vulnerability to external and policy shocks;
2. An assessment of the risk of external debt distress in that time, based on indicative debt burden thresholds that depend on the quality of the country’s policies and institutions. The thresholds set for each level of debt capacity are presented in Table I in Annex 3;
3. Recommendations for a borrowing (and lending) strategy that limits the risk of debt distress.

The IMF differentiates its approach to debt sustainability for Low Income Countries (LICs), which usually have access to concessional financing, and for Market-Access Countries (MACs), which have to rely on international capital markets. For MACs, if economic indicators and the primary fiscal balance are in a reasonable range,¹⁷⁹ and do not have a negative impact on the country’s potential growth or on the risk of carrying the debt, the debt is considered sustainable.

Source: World Bank (2018), Debt sustainability analysis; IMF (2017), Debt sustainability analysis: introduction

The IMF-WB DSF provides a basis for financing decisions for the International Development Association (IDA), a branch of the World Bank Group that provides financing for the world’s poorest countries. The framework helps determine the grant-loan mix of assistance and the decision is linked directly to the country’s debt distress rating under

179 Under baseline and realistic shock scenarios.

the DSA. For LICs, the DSF advises donors on the mix of their concessional loans, grant allocations, and debt relief decisions.

The IMF has stated that DSAs should not be conducted in a mechanistic or rigid fashion. Their results must be assessed against relevant country-specific circumstances, including the particular features of a given country's debt as well as its policy track record and policy space. The use of two separate types of framework for MACs and LICs ensures greater responsiveness to the specific needs of different country groups in a changing economic and financial environment.

Although the DSF assists governments in answering the question of whether they can or should take on additional debt, it does not analyse critical additional impacts that taking on new debt may impose on a country, including on poverty, inequality, employment, access to public services, environment, and social peace.

5.2.3 Debt restructuring: The Paris Club

The Paris Club is an informal setting created by a group of creditor governments that conducts debt-rescheduling negotiations for government and government guaranteed debt with their sovereign debtors.¹⁸⁰ Debt rescheduling consists of either payment postponement or a reduction in debt service obligations for debtor countries in a period of macroeconomic and financial instability. Since its origin in 1956, the Paris Club has restructured USD 583 billion of debt, signing 433 agreements with 90 different countries.¹⁸¹

The IMF, WB, OECD, UNCTAD, EC, AfDB, ADB, EBRD and IDB are observers of the Paris Club. Representatives of permanent members who have no claims concerned by a debt treatment can also be observers, as well as representatives of non-members of the Paris Club who have claims on the concerned debtor country. Observers participate in negotiation meetings providing information and advice to the members.

Members adhere to the Six Principles of the Paris Club, and accept the general terms of all agreements.¹⁸² Specifically, the members agree to solidarity, consensus, information sharing, case by case approach, conditionality and comparability of treatment (e.g., requiring debtors to not accept less favourable conditions from non-member creditors than those agreed

180 Cheng, G., Díaz-Cassou, J., and Erce, A. (2016). From debt collection to relief provision: 60 years of official debt restructurings through the Paris Club. European Stability Mechanism.

181 Club de Paris. Key numbers.

182 Club de Paris. The six principles.

with Paris Club members).¹⁸³

Paris Club debt restructuring has contributed to reallocating considerable amounts of resources to development priorities. However, the global creditor structure has undergone important changes, in recent years, which has reduced the relevance of the Paris Club. In particular, China, India and Saudi Arabia do not participate in Paris Club rescheduling, and as these countries have become increasingly important bilateral creditors, the share of Paris Club members' lending has been declining.¹⁸⁴

Several initiatives have taken place to strengthen communication and coordination among official creditors, such as the Paris Forum in 2013 where the Paris Club and members of the G20 met for the first time to discuss the international financing and debt servicing landscape. However, no further dialogue or action was agreed.

The London Club, created in the 1970s when commercial banks emerged as the main source of financing for developing countries, is a similar informal group of creditors. It is a privately led initiative with no permanent members or formal structure that coordinates the rescheduling of commercial (non-government) direct debt of borrower countries. The London Club has also experienced declining relevance due to the aforementioned shifts in global lending.

5.3 Main global procurement principles

The manner in which procurement contracts related to BRI financing and investment are awarded is a critical element in determining the overall financial viability of these projects. These practices also directly influence the extent to which a project will have favourable impacts on local suppliers and employment. The total amount of such procurement under the BRI exceeds hundreds of billion dollars. For all these reasons, procurement modalities are key to sustainable development as well as national ownership of BRI projects. This section provides an overview of relevant standards and rules in this area.

5.3.1 World Trade Organization (WTO) Government Procurement Agreement (GPA)

The Government Procurement Agreement (GPA) is a multilateral agreement of the World

183 Which include sovereign creditors, multilateral banks and private creditors.

184 Viterbo, A. (2014). The role of the Paris and London Clubs: is it under threat? In: Waibel, M and Bastid-Burdeau, G. (eds.) Legal implications of global financial crises, colloques/workshops. Law Books of the Hague Academy of International Law.

Trade Organization (WTO) that aims to promote a more open and competitive government procurement market and expand international trade among members who voluntarily sign the GPA. At present, around 48 countries and regions have signed the Agreement. GPA provisions aim to ensure open and equal processes for domestic and foreign bidders, and encourage open and fair procedures through measures including information disclosure. GPA Signatories undertake the legal obligation of amending domestic laws to make them consistent with the GPA principles. GPA 2012 preserves the basic principles of GPA 2007 and 1994 while adding anti-corruption, anti-bribery, conflict of interest and corruption provisions.

5.3.2 World Bank procurement rules

World Bank procurement policy is based on a set of clear objectives. It requires strict supervision on the use of loans and calls for fair competition and openness for loan-based procurements. Accordingly, the WB has developed, for the use and supervision of project loans, four components of its procurement rules: implementation efficiency of a project, including the procurement of goods and civil works required for the project; fair chances to participate for all WB member bidders; support for borrowing countries to develop their industries and consulting services; publicly available procurement procedures.

5.3.3 European Union public procurement

EU government procurement is a prominent example of transparent public procurement. Government procurement systems of all EU member states follow several EU directives:

- Any procurement project whose value exceeds a certain threshold (updated every two years) shall be conducted by the government subject to the EU Public Procurement Directive series.¹⁸⁵

- The EU Public Procurement Directive enables members to implement national procurement policies, which is an important tool to achieve member country economic and social goals and contribute widely to the development of middle and small-sized enterprises.

- The principles of government procurement process selection are uniform. Procurement methods are required to embody the principles of full competition, national treatment and non-discrimination. At present, three procurement processes are the most common ones among EU member states: “*Open Procedure*”, “*Restricted Procedure*” and “*Negotiated Procedure*”. In 2004,

¹⁸⁵ The limits announced in January 2004 are: goods and services over EUR 154,000 shall be included in the central government procurement project, goods and services over EUR 236,000 shall be included in the local government procurement project, and engineering contracts over EUR 5,923,000 shall be included in the procurement project of either government.

the EU incorporated the “*Competitive Dialogue*” into the Public Procurement Directive revision, applicable for complex government projects.

- Information disclosure is required. For projects that follow a restricted procedure process, participating bidders and the awarded are also made public.

- All procurement methods shall follow the prescribed time and procedures. In the case where an EU member supplier does not comply with the Directive, other suppliers may file a lawsuit to the European Court of Justice.

5.3.4 The Swiss challenge system

The “Switzerland Challenge System”, mainly used for public-private partnerships, is a public procurement method that aims to identify the most financially efficient offer in several stages. When a public authority receives an unsolicited bid for a project, it publishes the details and requirements for the project and evaluation, and invites third parties to submit offers for the project during a designated period. If there is a superior offer from a third party, then the originally selected bidder gets a chance to counter-match the offer. The government publicly announces the requirements and procedures for the third parties’ proposals. Legal questions regarding the validity of this method have been raised when a third party’s proposal contains different specifications from the original proposal. Information asymmetries in the process are also a concern, affecting the transparency and the fair and equal treatment of bidders.

5.4 Alignment with national priorities and systems

Multilateral development financial institutions, state-level development financial institutions, commercial institutions, equity funds, private capital and other financial institutions all contribute to BRI financing and investment. Communication and coordination among participating institutions can contribute to maximizing the impact of sustainable investments and finance along the BRI, as they help reduce the burden of compliance on national partners and enhance global governance and international macroeconomic policy coordination in critical issues such as climate change.

Harmonized BRI standards need to structure financing and investment requirements uniformly. They can draw on the experience of national planning of developed countries such as the United States, France, Germany, and major emerging economies including Russian Federation, China, and India. BRI-wide standards need to be aligned with national development priorities and also cover governance issues. The EU and Japan are an example

of strengthened and sophisticated evaluation mechanisms, which enhance independent and objective performance assessments that include timely submission of results' assessment and public disclosure.

To the extent possible, harmonized BRI standards should be consistent with existing national systems of BRI partner countries in order to gain acceptance and minimize compliance costs for all stakeholders. The latter is crucial because developing country recipients often face different, specific and sometimes ill-coordinated borrowing and investment requirements set by international investors and lenders. The different requirements present BRI partner governments with excessive coordination and prioritization challenges and impose an additional burden on their already limited capacities and resources. It is, however, important to avoid harmonization at the “lowest common denominator” level (see Chapters 7 and 8).

The World Bank development framework and country assistance strategies

Since 1999, the World Bank has helped national governments to define national goals and formulate national development strategies. It has proposed a *Comprehensive Development Framework* that is aligned with members' long-term national development vision. For low-income countries, the World Bank develops a *Poverty Reduction Strategy Paper (PRSP)* in consultation with local communities and includes the expected development goals supported by solid analysis of the country's economic and social context. The PRSP consultation process with different stakeholders targets a nationally owned strategy and an open decision-making process. This strategy guides the World Bank and other agencies in tailoring assistance to the country's needs and priorities and aligning it with existing national policies and strategies.

5.5 Sustainable risk assessment and management frameworks

International investment and financing encounter common risks related to economic, political, legal, cultural, and environmental settings, as well as to conflict and debt sustainability issues.

As presented earlier in this chapter, there is a wide range of safeguard commonalities among MDBs, NDBs and other institutions. This common core of safeguards represents the distilled wisdom from decades of past development financing experience, and it therefore serves a very useful starting point for establishing risk prevention and mitigation frameworks.

Some BRI participants are not politically stable; they may encounter recurrent turbulence, conflict, and unpredictable political and security situations. The economic systems of some of these countries are incomplete and lack openness, and they can experience high fiscal and current account deficits or a large foreign debt burden. Policies and laws governing direct foreign investment differ significantly across the breadth of BRI partner countries and, in some cases, differ significantly from international norms. In addition, some BRI partner countries face ethnic, racial, and religious issues that are unpredictable, diverse, and complex. The outbreak of tensions along these lines could result in spillover impact on the development of both these countries and neighbouring ones.

Therefore, risk management strategies based on accurate assessment of project risks and coordinated at the macroeconomic level are crucial to ensure the successful implementation and sustainability of BRI projects and to maximize the benefits of sustainable investment for investors, host countries, and the global community.

5.5.1 The Economist Intelligence Unit risk identification system

The Economist Intelligence Unit formulated an operational risk model and an assessment method for country borrowing risk.

The assessment method for country risk, the Country Risk Model, measures and compares credit risk across countries. It uses quantitative and qualitative indexes to assess risks related to the sovereign, currency, banking industry, politics, economic structures, and the overall country risk.

The operational risk analysis, or Risk Briefing, covers 10 major aspects: security, political stability, government effectiveness, legal and regulatory environment, macroeconomic risk, foreign trade and settlement issues, labour markets, financial risk, tax policies, and local infrastructure levels. Macroeconomic risks mainly focus on exchange rate fluctuation, recession risk, price fluctuation, crowding-out effect and interest rate fluctuation. For foreign trade and settlement, the emphasis is on discriminating duties, current account convertibility, capital control risks, currency depreciation risks, local market access, trade embargoes, financial risks, and the depth and health of the banking system. The EIU Risk Briefing provides background studies and data covering all risk categories mentioned above, as well as relevant forecasts. The 66 indicators of the model are updated continuously and major events that may affect countries' operating risks.¹⁸⁶ The EIU's Risk Tracker provides weighted risk ratings for 28 industry sub-sectors, spread across the automotive, energy, consumer goods, healthcare, financial services,

186 The Economist Intelligence Unit (2016). Risk Briefing.

technology, travel and tourism sectors.

5.5.2 The Multilateral Insurance Agency (MIGA) political risk insurance

Founded in 1988, MIGA is one of the five international organizations that constitute the World Bank Group.¹⁸⁷ It encourages investment among member states, especially in developing countries. MIGA offers Political Risk Insurance, a tool to mitigate and manage risks that may arise from the adverse actions of governments. Political risk insurance contributes to providing developing countries a stable environment to attract and retain investment, and to unlock better access to finance. Investors frequently face difficulties from lenders, who often make provisions for country risk, and political risk insurance can play a helpful role in reducing provision requirements from lenders. MIGA prevents potential claims from escalating through pre-claim management, helping investors and governments to deal with potential political adverse issues that may jeopardize the project. MIGA adopts a series of innovative measures, including supporting political risk insurance through liquidity and enhancing government credit through swap transactions.

5.6 Implementation of global standards and best practices

5.6.1 MDBs best practices

The country that receives an investment holds ultimate responsibility for project implementation. However, financiers also have a responsibility to put in place mechanisms and tools to ensure transparency, accountability, stakeholder engagement, and compliance with environmental and social standards.

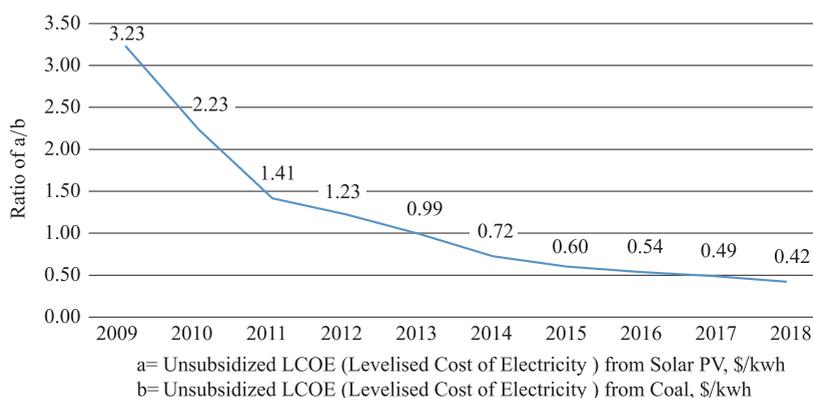
Complying with environmental and social standards along the BRI and putting in place effective monitoring and reporting mechanisms can help align investments with the SDGs, strengthen transparency, and increase stakeholders' accountability. MDBs are therefore steadily increasing the sophistication of their ESFs to more fully reflect global sustainable development challenges and experience. Below are some examples of best practice in complying with and promoting environmental and social standards in development financing.

¹⁸⁷ The World Bank Group includes the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA) and the International Centre for Settlement of Investment Disputes (ICSID).

Shadow carbon pricing

MDBs are increasingly “greening” their investment portfolios and taking action to address climate change. Shadow carbon pricing, adding a hypothetical surcharge to the prices of inputs that generate large greenhouse gas emissions, is regularly used in financial appraisals of proposals in order to factor in the likelihood of future increases in the prices of such inputs and reduce the risk of projects becoming unviable when those increases are realized. This has resulted in increased scrutiny, and the “weeding out” of high-emission project proposals. As a first step toward internationally coordinated action, six MDBs agreed in 2014 to use projected shadow carbon prices in their project appraisals “in appropriate cases”:

Figure 5.2 Change in LCOE for Solar PV/Coal, 2009-2018



Source: Calculated based on Lazard, “Levelized Cost of Energy Analysis”, 2018

ADB and EBRD have the lowest prices: EBRD’s prices are at the bottom of the range of recommended levels by the High-Level Commission on Carbon Prices.¹⁸⁸ In December 2018, EBRD announced a strong de-carbonization strategy (see below), which is functionally close to a high shadow carbon price. ADB’s prices do not reach the minimum price recommended. The WB and EIB have a broad range of prices with high, central and low prices defined. While the central EIB price remains below the recommended central price, it is the highest among participating MDBs (Figure 5.3).

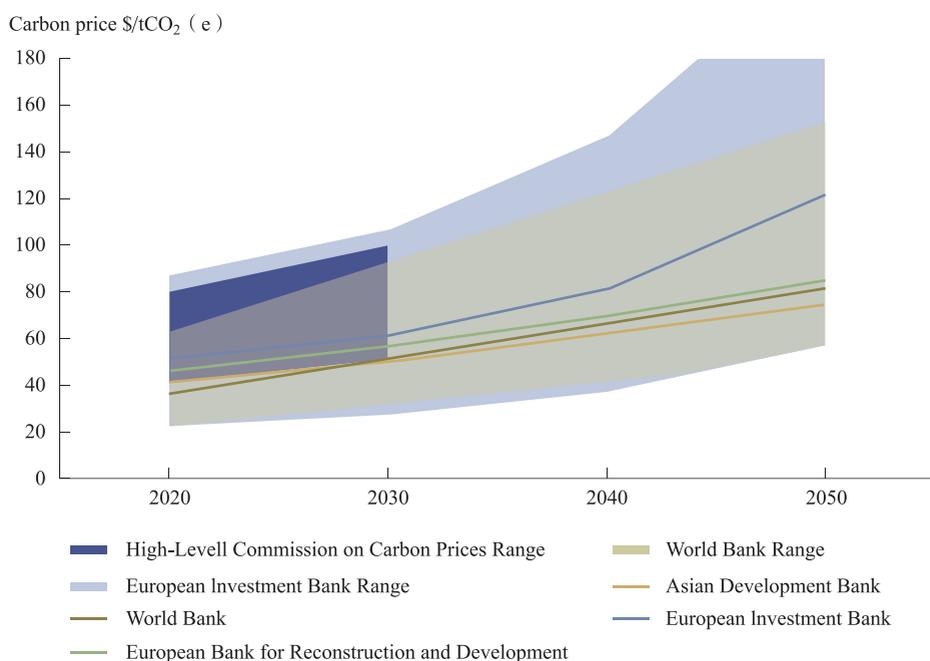
The ratio of the levelized cost of energy (LCOE) of Solar PV to Coal has been declining throughout 2009 to 2018.¹⁸⁹ It is likely that carbon prices will reflect all costs (implying elimination of fossil fuel subsidies and full internalization of externalities) within the long

188 Carbon Pricing Leadership Coalition. High-level commission on carbon prices.

189 UNDP’s calculation based on data from BP p.l.c. Statistical Review of World Energy.

horizon of financing investments to create coal and fossil fuel-based assets. If current investments are based on today’s carbon prices, these assets are likely to turn non-profitable well before the associated loans are repaid. This will substantially reduce not only debtor countries’ ability to repay, but also their future willingness to do so. This is a key argument for assuming full carbon prices when assessing the financial viability of new projects; and for financial institutions to reconsider supporting such loans today to help avoid a future surge in nonperforming loans in their portfolio.

Figure 5.3 Carbon prices used by development banks compared to High-Level Commission recommendations



Source: Hawkins, J. and Wright, H. (2018)¹⁹⁰

Active policy and regulatory steps coordinated along the Belt and Road through harmonized standards, including on carbon pricing could facilitate a rapid transition toward a low-carbon BRI while also creating the fiscal space to effectively support it.

Shadow carbon pricing aligns investment incentives with the goal of reducing GHG emissions. Since it affects a large number of power generation and other infrastructure investment proposals, it can encourage countries to avoid locking themselves into decades

¹⁹⁰ Hawkins, J., and Wright, H. (2018, January 14). How are development banks performing on shadow carbon pricing? E3G: Third Generation Environmentalism Blog.

of high-carbon emissions, and thereby to support the attainment of the Paris Agreement's objectives and of the SDGs.

EBRD's de-carbonization strategy

In December 2018, EBRD approved an energy sector strategy for the next five years that is intended to deliver clean, secure and affordable energy.¹⁹¹ The strategy includes a strong policy shift away from the most polluting energy sources to renewables. EBRD no longer finances coal power plants.¹⁹² It will not support the building of new, or the upgrading of existing thermal coal mining or coal-fired electricity generation plants. It no longer finances upstream oil development projects, except for those that can contribute to the reduction of GHG emissions.

AIIB - air quality improvement in China

China has made rapid progress in reducing pollution and improving the quality of air. AIIB President, Jin Liqun, emphasized China's commitment to reducing its consumption of coal and to improving the environment. In December 2017, AIIB announced a USD 250-million project to connect over 500 rural villages to the natural gas distribution network, which is expected to reduce China's annual coal use by about 650,000 tons.¹⁹³ Furthermore, the project will not entail any land acquisition or population displacement, and the Environment and Social Management Plan for the project has been published on the Beijing Gas (project implementer) and AIIB websites.¹⁹⁴

ADB - biodiversity conservation

ADB supports biodiversity in Cambodia, Lao People's Democratic Republic, and Viet Nam through the Greater Mekong sub-region Biodiversity Conservation Corridors Project. These areas are vulnerable to environmental degradation, and there is a need to safeguard investments in energy, transport, water, and food security, in order to protect and improve local livelihoods. The project aims to prevent and mitigate the fragmentation of biodiverse forests.

ADB and AIIB - accountability mechanism

ADB monitors compliance with the safeguard policies throughout a project cycle.

191 European Bank for Reconstruction and Development (2018, December 12). Energy Sector Strategy 2019-2023.

192 Financial Times (2018, December). Development bank halts coal financing to combat climate change.

193 Asian Infrastructure Investment Bank (2017, December 11). AIIB invests to reduce coal use and improve air quality in Beijing.

194 Asian Infrastructure Investment Bank (2017). Environmental social management plan.

Operations departments ensure that safeguard requirements are met and specific review missions are undertaken during the implementation of a project to monitor compliance with safeguard provisions in the legal agreements between the bank and the client. If there is a risk of non-compliance, they take appropriate actions to address it.

Additionally, ADB has set up an *Accountability Mechanism* through which people affected by ADB projects can raise complaints. The mechanism allows affected people to report non-compliance with ADB's operational policies and procedures, including safeguard policies. It provides a process for affected people to file grievances and requests for compliance review by ADB's Compliance Review Panel while it provides a platform for a consultation, led by an ADB facilitator, where affected people can seek solutions to the raised concerns.

The AIIB's ESF places emphasis on the leading role of the client. It requires the client to establish a suitable grievance mechanism in accordance with the Environmental and Social Policies (ESP) and applicable ESSs.

Further in December 2018, AIIB's Board of Directors approved its Policy on the Project-affected People's Mechanism (PPM), which takes effect on March 31, 2019, together with a PPM Directive and PPM Rules of Procedure. This marks the bank's incorporation of its own accountability mechanism that enables project-affected people to raise their concerns directly to AIIB.

5.6.2 NDBs and other financial institutions' best practices

The initiatives that have been detailed are non-mandatory, but a growing number of governments, central banks and regulators are moving towards integrating sustainability standards into laws and regulations for enterprises and financial market actors. Furthermore, national development banks and private institutions are increasingly complying with sustainable practices and adhering to initiatives that encourage sustainable practices. Below are some examples of best practices for implementing environmental and social standards by national development banks and private sector-led initiatives.

DBSA - building a resilient and resource-efficient Johannesburg

DBSA has partnered with the Global Environment Facility (GEF) in the framework of the Sustainable Cities Program. A USD 132 million DBSA project, *Building a Resilient and Resource-efficient Johannesburg*, aims to foster city level resilience, efficient management of resources, and reduce carbon emissions. The project has 4 components:

- i. Ensure sustainability in the development and implementation of the city's physical plans;

- ii. Improve urban food security in Johannesburg by increasing the efficiency of food flows and improving agricultural practices;
- iii. Adopt evidenced-based biodegradable waste management strategies;
- iv. Improve evidence-based planning in South Africa.

KfW - moving to a green and low-carbon loan portfolio

KfW investments are overwhelmingly green due to the German government's preference for green projects. KfW no longer funds coal projects and rarely provides financing for gas projects. KfW has shifted to financing renewable energy and climate change mitigation projects. For example, the German development bank has provided more than EUR 500 million for tropical forest conservation projects,¹⁹⁵ and EUR 2 billion for renewable energy and energy efficiency projects in Brazil.

JBIC - guidelines for measurement, reporting and verification of greenhouse gas emission

The Guidelines establish JBIC's criteria and procedures for the measurement, reporting and verification of GHG emission reductions. Based on the Guidelines, the bank publishes a list of GHG emission reductions that have been achieved by its renewable energy projects.

The United Nations Framework Convention on Climate Change (UNFCCC) has long recognized the need to reduce GHG emissions, and the 2015 Paris Climate Change Agreement acknowledges the need for activities to reduce emissions.

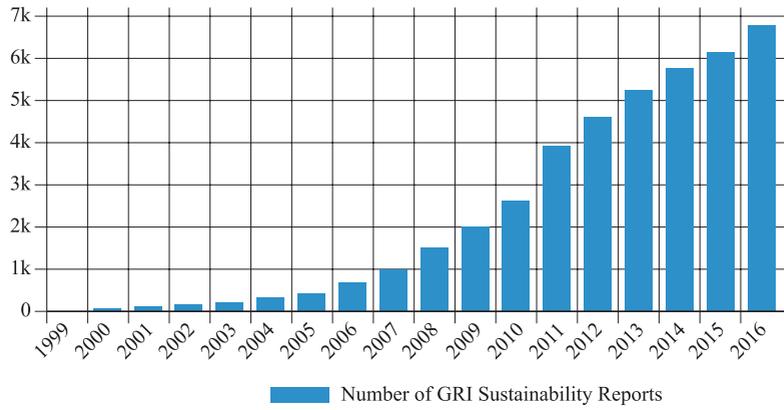
The measurement and reporting of GHG emissions can impact directly on a country's climate change strategies. Countries are increasingly asking for support to build their capacity to measure and report on GHG emissions. The Equator Principles also require reporting on GHG emission for projects with over 100,000 tons of with high levels of CO₂.

The GRI standards

The Global Reporting Initiative (GRI) is a global database that monitors progress in environmental, social and governance reporting and in the number of reports disclosed in each country (Figure 5.4).

The implementation of harmonized financial, environmental and social standards by national banks and the private sector can have a significant impact on the BRI, especially as the next phase of the BRI will bring in more private enterprises and a greater variety of international investors and financial institutions. Co-investment by different capital providers, public and private, will be essential in many projects. Ensuring financial viability and long-term sustainability are key to facilitating access to private and public international funding sources.

195 KfW Development Bank (2018, November 15). Shaping the global transport transition.

Figure 5.4 Number of GRI sustainability reports from 1999-2016

Source: GRI Sustainability disclosure database (2018)

Chapter 6 Chinese investment and financing standards for sustainable development along the Belt and Road

The Belt and Road Initiative offers China significant opportunities to contribute to transformations that can facilitate sustainable development both at the domestic level and across BRI partner countries. To capitalize on these opportunities, China has not only aligned the implementation of the BRI with the SDGs, but has also been actively participating in reforming the international development governance system by pursuing new global development partnerships and strengthening South-South cooperation.¹⁹⁶

On 13 May 2015, the Chinese government issued a position paper on the 2030 Agenda to highlight the importance of building global development partnerships, development financing, global economic governance, and subsequent implementation and regulatory commitments.¹⁹⁷ In this position paper, the Chinese leadership showed awareness of the responsibilities that come with its rising international status, and reaffirmed China's commitment to leading global development and SDG attainment efforts.

Investment in technology is one of the keys to support SDGs implementation, and it is also an area in which China is driving significant changes. China accounts for 36%, 40% and 36% of global investments in hydropower, wind, and solar energy respectively, with USD 360 billion in renewable energy investments planned for the 2017-2020 period.¹⁹⁸ China invested USD 409 billion in research and development (R&D) in 2015 alone,¹⁹⁹ surpassing Europe and nearly catching up to the volume of R&D investment in the US. The massive scale of Chinese

196 Ministry of Foreign Affairs of the People's Republic of China (2013, September 22). China's position paper on the post-2015 development agenda (link in Chinese, see references); United Nations Resident Coordinator's Office (2013, May). Post-2015 development framework: India. National Consultation Report.

197 Ministry of Foreign Affairs of the People's Republic of China (2013, September 22). China's position paper on the post-2015 development agenda.

198 Institute for Energy Economics and Financial Analysis (2017, January). China's Global Renewable Energy Expansion, 2.

199 OECD, (2017, November 22) OECD Science, Technology and Industry Scoreboard 2017.

investment, which is likely to increase further in the future, has so far created room for rapid advances in technological innovation that can foster sustainable development.

6.1 Sustainable investment development in China

The first domestic policy initiatives aimed at environmental evaluation and planning were introduced in the late 1970s, when the State Council issued the *Environmental Protection Law of the People's Republic of China*. This law, last amended in October 2014, included provisions that guaranteed, for the first time in China, public access to information to communities affected by projects considered to be environmentally harmful. In 2003, the *Law on Evaluation of Environmental Impact Studies of the People's Republic of China* was enacted. So far, as Table 6.1 shows, the majority of China's key policies and regulations related to sustainable development have seen their status elevated to that of "Guidelines" or "Directives".

Table 6.1 Policies for sustainable investment and financing in China

Year	Issuing Authority	Document and Policy	Objective
1981	State Council	Decision on Strengthening Environmental Protection Work during the National Economic Adjustment Period	Links credit and environmental protection with economic transformation; limits the flow of loans to industries with high pollution, high-risk and overcapacity.
2005	State Council	Decision on Implementing the Scientific Outlook on Development and Strengthening Environmental Protection	Connects economic development to environmental protection; establishes a sound policy system to support it; prohibits new loans to projects that fail to meet environmental protection requirements.
2007	SEPA PBOC CBRC CSRC CIRC	1. Opinions on Implementing Environmental Protection Policies and Rules and Preventing Credit Risks 2. Guiding Opinions on Further Supporting the Restructuring and Revitalization of Key Industries and Curbing Overcapacity in Some Industries through Financial Services 3. Green Credit Guidelines	Guides financial institutions in promoting green credit and financial transformation for sustainable development to help China's financial industry gradually meet international standards.

Table 6.1 (Continued)

Year	Issuing Authority	Document and Policy	Objective
2008	National People's Congress	Circular Economy Promotion Law of the People's Republic of China	Advocates credit policy to be conducive to developing the circular economy, strengthens the social responsibility of financial institutions, obliges financial institutions to consider environmental protection in their activities, and restricting credit for sectors included in the "elimination class".
2010	State Council	Opinions on Further Strengthening Energy Saving and Emission Reduction to Accelerate Structural Adjustment of the Iron and Steel Industry	Points out that financial institutions should strictly control loans to the steel industry and promote mergers and acquisitions within the industry.
2011	State Council	Opinions on Strengthening Key Environmental Protection Work	Clarifies seven outstanding issues that affect scientific development and damage to the health of people, including heavy metal pollution.
2015	PBOC MOF NDRC MEE CBRC CSRC CIRC	Guidelines for Establishing the Green Financial System	Aims to attract more private capital into green sectors and stem investments that might pollute the environment by proposing a mandatory environmental information disclosure system.
2015 (updated in 2017)	PBOC CSRC	Green Bond Guidelines	Clarifies in a detailed manner what projects are considered green.
2016	CBRC	Guidelines on Comprehensive Risk Management of Banking Institutions	Aims to guide the banking sector in increasing the awareness, governance framework, and capacity of risk management.

Table 6.1 (Continued)

Year	Issuing Authority	Document and Policy	Objective
2017	PBOC SAC CBRC CSRC CIRC	Standardization of Green Finance	Includes harmonization of standards defining the “greenness” of projects, commercial activities and assets, standardization of green certification and information disclosure, and alignment with global green finance standards.

Source: Official websites of the State Council of China, the National People’s Congress of China, CBRC, CSRC, PBOC, and SEPA.

Building on national “green goals”, Chinese financial regulators have formulated specific policies to help achieve them. The People’s Bank of China (PBOC) has included the development of green finance into the Macro Prudential Assessment (MPA) of the banking system, and identified green credits and green bonds as criteria for granting commercial banks access to Medium-term Lending Facilities. These two policies provide substantial direct incentives for banks and bank managers to develop the green credit market.

6.1.1 Guidelines and best practices in China

The environmental standards of Chinese banks are less detailed than those of multilateral financial institutions such as the WB, IFC, or IDB. However, Chinese banks have solid overarching regulations.

In 2012, the China Banking Regulatory Commission (CBRC) introduced its Green Credit Guidelines, a relatively comprehensive green credit policy framework built on a green credit statistics and evaluation system, showing clear institutional support for green credit and investment activity in 12 major industry sectors.

In 2015, PBOC, MOF, NDRC, MEE, CBRC, CSRC and CIRC together issued the *Guidelines for Establishing the Green Financial System*. These guidelines made China a pioneer in establishing a green financing mechanism to facilitate the economy’s transition to sustainable growth.²⁰⁰ Through a series of supportive policies, such as offering government interest subsidies, professional guarantees, and establishing green development as a national priority, the Guidelines help investors reduce financing costs and encouraged private capital to flow into green sectors. The Guidelines propose the establishment of a mandatory environmental information disclosure system

200 Xinhua (2016, September 2). China to help cultivate green financing sector. China Daily.

for listed companies and bond issuers. They also require strengthened international cooperation on green finance, continued promotion of global collective action under the G20 framework, the gradual opening of the green securities market, and the enhancement of the level of “greenness” of China’s outbound investment.²⁰¹ Such high-level policy guidance helped give rise to more concrete policy incentives for green finance and institutional innovation.

At the end of 2015, PBOC issued its *Green Bond Guidelines*, which provides further clarity on other aspects of green financing. The Guidelines were later updated by the China Securities Regulatory Commission (CSRC) for listed companies in March 2017.

In 2017, PBOC, CBRC, CSRC, CIRC and the Standardization Administration of China (SAC) announced a development plan to standardize the financial sector during the 13th Five-Year Plan period (2016-2020). The “standardization of green finance” was designated as one of five priority projects in the plan.

In November 2018, the Asset Management Association of China (AMAC) released the *Guidelines for Green Investment (Trial Version)*. This document serves as an important guide for promoting ESG investment in the fund industry by specifying the content, objectives and principles, and basic methods of green investments, as well as evaluation and monitoring requirements. It also constituted a concrete step in the overall development of ESG investment in China.

In March 2019, the *Green Industry Guiding Catalogue (2019 Revision)* and the explanatory documents (hereinafter referred to as the “*Catalogue*”) jointly issued by the NDRC, Ministry of Industry and Information Technology (MIIT), Ministry of Natural Resources (MNR), MEP, Ministry of Housing and Urban-Rural Development (MOHURD), PBOC, and National Energy Administration (NEA) are the most comprehensive and detailed guidelines for defining green industries and projects in China. The *Catalogue* belongs to the category of “green financial common standards” in the green financial standard system, providing unified basis and reference for other standards such as green credit standards, green bond standards, green enterprise standards and local green financial standards.

In May 2019, PBOC issued the *Notice by the People’s Bank of China of Supporting the Issuance of Green Debt Financing Instruments in Green Finance Reform and Innovation Pilot Zones* (hereinafter referred to as the “*Notice*”). The *Notice* issued a number of regulatory incentives for the development of green debt financing instruments, supporting its issuance in green finance reform and innovation pilot zones, and contributing to the overall strengthening of China’s green finance market.

201 People’s Bank of China (2016, September 1). The People’s Bank of China and six other agencies jointly issue “Guidelines for Establishing the Green Financial System”.

Box 6.1 China Banking Industry Joint Commitment to Green Credit

In late 2013, 29 Chinese financial institutions signed the China Banking Industry Joint Commitment to Green Credit. While the Joint Commitment has no legal binding power, the promises the banks made touched upon a list of noteworthy topics and banking industry concerns:

1. Incorporate all aspects of green credit into the banks' processes and culture and reflect them in the whole process of banking management. Strengthen management and capacity building in green credit organizations for effective allocation of resources;

2. Accelerate innovation in green credit products and services, actively promote the development of green, recycling and low-carbon economy development in accordance with risk control and business sustainability principles; increasingly focus on strategic emerging industries and energy conservation and environmental protection projects and services; strengthen credit management for overcapacity industries. This includes identifying risk bases, controlling policy boundaries, and effectively resolving excessive credit risk;

3. Improve the classification of environmental and social risks with close attention to clients and projects, environmental protection and production safety, and social impacts. High-risk customers will be urged to formulate and implement risk response plans; The banks need to promptly respond to appeals of customers, concerns of social organizations, and the media, and take appropriate measures to deal with customers and projects that have committed major violations of laws and regulations, and exit decisively while maintaining the safety of debt. Strengthen the management of overseas financing projects to ensure that projects comply with relevant international standards and practices and with relevant local laws and regulations.

4. Accelerate the establishment of a green finance evaluation system and a reward and punishment system, regularly conduct green finance self-evaluation, implement incentive and constraint mechanisms, ensure the sustainable and effective development of green finance. Establish and strengthen green finance information-disclosure mechanism, publicize green finance strategies and policies, disclose progress in the development of green credit, strengthen the communication with relevant social organizations and media, and accept public supervision.

5. Pay attention to the environmental and social performance of projects, promote energy conservation and emission reduction as well as the concept of green finance, promote green procurement and energy conservation of office buildings, and avoid government waste.

Source: China Banking Regulatory Commission (2013)²⁰²

Establishing a comprehensive Chinese domestic green credit evaluation system, however, requires more effort. More work is also needed on green credit guidance and environmental rating standards.²⁰³ Table 6.2 describes best practices in place in China

Table 6.2 Best practices of Chinese financial institutions for sustainable investment

Financial Institution	Strategies
China EximBank	China EximBank has set up a special department at its head office to provide low carbon transition support for foreign governments and international financial institutions. To date, China EximBank has formed the preliminary structure of new-energy lending for energy saving and environmental protection.
China Merchants Bank	In 2009, the “Green Financial Credit Policy” was issued. In 2011, the “Green Credit Plan” was formulated to clarify the implementation of six measures. The document formulated a credit policy with the core principle of “controlling two highs and promoting green” and listed “two high and one surplus” industries as industries to support, and an industry to undergo gradual compression, respectively.
Industrial Bank	In 2008, the Industrial Bank adopted the Equator Principles, implemented the Green Credit Policy as an entry point and issued a series of management methods, operational guidelines and associated supporting systems and documents related to the Equator Principles. In 2010, the relevant concepts and connotations of green credit were included in the “Development Strategic Plan for Corporate Finance Business 2010–2015”, highlighting the importance of sustainable development concepts. In 2011, a new strategic system was developed, consisting of a comprehensive risk management strategy with environmental and social risk management sub-strategies included in the eight sub-strategies.
ICBC	In 2008, the “Opinions on Promoting Green Credit Construction” were issued and ICBC became the first bank in China to promote green credit. The “Implementation Outline for Green Credit Construction” clarified the relevant basic purposes and principles and defined a detailed set of requirements on the credit culture, classification management, policy system, process management, product and service innovation and assessment mechanism. A “Green Credit Development Strategy” was formulated in 2015.

203 People’s Bank of China, United Nations Environment Programme (2015, April). Establishing China’s green financial system. Final report of the Green Finance task force, 28.

Table 6.2 (Continued)

Financial Institution	Strategies
Shanghai Pudong Development Bank	In 2008, the Green Credit Integrated Financial Services Program was launched. In 2011, the Bank issued “Interim Measures for the Management of Social and Environmental Risks.” In 2011, the Bank issued its 2011–2015 Development Strategic Plan,” clearly focusing on the development of green financial services, building low-carbon banks, and pursuing sustained and coordinated development.
Silk Road Fund	As China’s economy enters the stage of adjustment and upgrading of the industrial structure, the Silk Road Fund will strongly support projects that build China’s production capacity in areas where the economy has a comparative advantage and promote adjustment of the domestic industrial structure.

Source: Official websites of the listed financial institutions

6.1.2 Green bond development in China

Since the launch of China's green bond market in 2016, the scale and quantity of green bond issuances in China have grown steadily. The green bond market has become more standardized, providing a powerful driving force for green industrial transformation and green economic development.

- In December 2015, NDRC issued the *Guidelines for the Issue of Green Bonds* and proposed relevant policies to support bond variety innovation; supporting qualifying equity and green investment funds to issue green bonds; encouraging green projects to adopt a mix of special construction funds and green bonds.

- In March 2017, CSRC issued the *Guiding Opinions on Supporting the Development of Green Bonds* to listed companies in China. The guidance encourages financial institutions such as brokerage firms, fund management companies and banks to invest in green bonds, and encourages the Shanghai Stock Exchange and the Shenzhen Stock Exchange to develop special green corporate bond blocks, indices and other tools to promote green bond investment.

- In November 2017, the Green Finance Committee (GFC) of the China Society for Finance and Banking and the European Investment Bank (EIB) issued a White Paper that provides an international comparison of several green bond standards. The paper provided

consistency of definitions for green finance, and of standards between China and the EU.²⁰⁴

○ In December 2017, PBOC and the CSRC jointly released new guidelines for green bond verification activities and verifiers in China.²⁰⁵ The new guidelines are supervised by a new Green Bonds Standards Committee. Verifiers must follow either domestic or international standards as recognized by the Green Bonds Standards Committee.

As green finance in China becomes a strategic component, there has been a gradual promotion of a vision for green development, green investment and financing. Furthermore, the attitude of enterprises towards green bond financing has greatly improved. In 2018, China's domestic and foreign green bond issuance totalled RMB 268.6 billion, accounting for 23.98% of the global issuance scale in the same period, making China the second largest green bond issuer in the world. In 2018, a total of 128 green bonds were issued in China, with a total value of RMB 221.9 billion, an increase of 12.3% and 8.3% respectively over the previous year.

By directly issuing green financial bonds in the banking market, financial institutions can obtain stable medium- and long-term funds, which help to alleviate the problem of maturity mismatches in financial institutions. Energy-saving and environmental protection projects in China have relatively simple financing channels, mainly relying on green bank loans. The average liability period is quite short, just 6 months, while the financing needs of a number of green projects are large, with a long maturity. This should necessitate financial support in both the medium and long term. The issuance of green financial bonds is conducive for financial institutions to obtain stable medium- and long-term funds. Matching and supporting medium and long-term green funding for projects would greatly improve the ability of financial institutions to provide green loans with appropriate maturity. Therefore, green financial bonds, by the number and size of issuance, occupy a dominant position in the domestic green bond market.

In 2015, the Agricultural Bank of China (ABC) issued China's first overseas green financial bonds in the London Stock Exchange. This was a dual tranche RMB/USD bond with an interest rate of 2.125% for three-year maturity and 2.773% for five-year maturity, raising USD 400 million and USD 500 million respectively. The bond was more than four times oversubscribed. Along with this bond ABC also issued a 2-year RMB 600 million bond with a 4.15% interest rate, which was more than eight times oversubscribed. Three-quarters of the subscription was from banks, with the remainder mostly fund managers, private banks, and

204 European Investment Bank (2017, November 11). Joint White Paper by China Green Finance Committee and EIB set to strengthen international Green Bond market. EIB press release.

205 People's Bank of China (2017, December 27). Improve the green bond certification system and promote the sustainable and healthy development of the green bond market (link in Chinese, see references).

other investors. The funds raised from these bonds were for the financing of green projects—including clean transportation, renewable energy, biomass power generation, urban waste and sewage treatment. These projects fit the requirements of the Green Bond Principles and were approved by a qualified third-party authority.

In 2016, ten financial institutions in China issued 22 domestically-labelled green financial bonds worth a total of RMB 158 billion, accounting for 80% of the total green bonds issued that year. Smaller issuers of these bonds include joint-stock commercial banks, city commercial banks, rural commercial banks, and financial leasing companies. The average size of green financial bond issuance was about RMB 7.2 billion. By 2017, 25 financial institutions in China issued 44 green financial bonds worth a total of RMB 123.4 billion, accounting for 39% and 60% of all bond issuance by number and size respectively. In 2016, compared with large-scale commercial banks, the number of local small- and medium-size banks has grown significantly. In addition, after the issuance of green financial bonds by commercial banks and policy banks, two financial leasing companies issued 6 financial bonds for the first time in 2017. As the types of issue entities further diversified, in 2018, 38 green financial bonds were issued worth a total of RMB 129.9 billion.

In addition, green bonds for non-financial purpose such as green company bonds and green corporate bonds are developing rapidly. The number of non-financial green bonds increased from 55 in 2017 to 90 in 2018, representing a 63.6% year-on-year increase; their total worth increased from RMB 83.4 billion in 2017 to RMB 91.4 billion in 2019, representing a 9.7% year-on-year increase.

6.2 Chinese sustainable investment and financing along the Belt and Road

China has issued several high-level declarations on greening the Belt and Road. President Xi has repeatedly put forward the vision and initiative for building a green “Belt and Road” on international occasions. China’s suggestions of focusing on the concept of “ecological civilization”, promoting eco-friendly development, and strengthening eco-environmental protection along the Belt and Road are as follows: (1) the Chinese government will share both the concept and practice of “ecological civilization” and “green development” with countries and regions along the route through existing multi/bilateral cooperation mechanisms; (2) the construction of a “Green Silk Road” will provide developing countries with a Chinese alternative to the old pattern of “pollution first, remedy later”.

In China, the Ministry of Ecology and Environment, the Ministry of Foreign Affairs, the

National Development and Reform Commission, and the Ministry of Commerce jointly issued the *Guidance on Promoting Green Belt and Road*. They also jointly published a *Cooperation Plan for ecological environmental protection along the Belt and Road*. These documents defined the overall green development requirements of the Initiative, formulating a series of eco-environmental cooperation goals, projects and tasks, and further promoting the interaction and cooperation of environmental protection policies and regulations, technological standards and industries. In the process of infrastructure construction under the BRI, Chinese enterprises emphasize the improvement of low-carbon construction performance as well as awareness of environmental protection and social responsibility.

The Chinese environmental guidelines that apply to Chinese foreign investments appeared in the first decade of this century, coinciding with the start of large-scale Chinese lending to Latin America and Africa. Various Chinese guidelines encourage banks and firms to use additional Chinese legislation and international best practices, especially when these offer standards more stringent than those of the host country. Further, the Chinese guidelines emphasize that Chinese banks and firms should “strictly” respect the legal framework of the country in which they operate.

When investing in BRI partner countries, Chinese investors are required to follow the fundamental laws and policies governing overseas investment, as well as special principles and standards for investment and financing along the Belt and Road.

6.2.1 China’s fundamental laws and regulations on overseas investment and financing

The Chinese government has issued a series of policies and guidance documents to promote sustainability in the outbound investment of Chinese companies. Table 6.3 lists the key sustainable development-focused policies and regulations promulgated since 2007 that relate to Chinese investment overseas.

Table 6.3 Regulations on overseas investment and financing

Year Issued	Issuing Authority	Document and Policy
2007	SFA	Guide on Sustainable Management and Utilization of Overseas Forests by Chinese Enterprises
2008	State Council	Administrative Regulations on Contracting Foreign Projects
2009	MOFCOM, MOHURD	Measures for the Administration and Contracting of Foreign Construction Projects

Table 6.3 (Continued)

Year Issued	Issuing Authority	Document and Policy
2010	MOFCOM	Notice of the Ministry of Commerce on the Overseas Security Risk Early Warning and Information Release System of Foreign Investment Cooperation
2011	SASAC	Interim Measures for the Supervision and Administration of Overseas State-owned Assets of Central Enterprises
2012	CBRC	Green Credit Guidelines
2013	MOFCOM, MEP	Environmental Protection Work of Foreign Investment Cooperation Enterprises
2014	MOFCOM	Measures for Overseas Investment Management
2015	NDRC, MFA, MOFCOM	Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road
2016	State Council	Several Opinions of the State Council on Promoting Sustainable and Sound Development of Venture Capital
2017	NDRC	Measures for the Administration of Overseas Investment of Enterprises
2017	CBRC	Risk regulations

Source: Official websites of listed government authorities

China has vowed to deepen economic reforms and further open its market. As part of this broad policy, China has refined its regulations to encourage investment overseas to not only create economic value, but to also achieve sustainable development. This strategic direction is reflected in the *Outbound Investment Regulations* issued by the NDRC in 2017. For instance, Article 41 states that:

“Investors are encouraged to innovate in the modes of overseas investment, adhere to the principle of operation in good faith, abstain from acts of unfair competition, protect the lawful rights and interests of their employees, respect local public order and good morals, fulfil necessary social responsibilities, pay attention to environmental protection, and build a good image of Chinese investors”.

6.2.2 China’s special policies, principles, and standards for investment and financing along the Belt and Road

With rapid advances in industrialization, urbanization, and globalization, developing countries are facing common challenges related to environmental pollution, climate change,

and resource shortages. To place development on a sustainable basis, there is a need for coordination and cooperation among a range of countries, organizations, and companies. Green finance, energy conservation and environmental protection have increasingly become priorities for the international cooperation initiatives established by China and countries along the Belt and Road. AIIB, the SRF, and ADB have also reaffirmed their commitment to promoting infrastructure investment and SDG attainment in the context of Asia-Pacific financial cooperation.

The BRI, with its core focus on promoting economic growth and infrastructure connectivity across and within countries in Asia, Europe and Africa, has been envisioned from the outset as supporting the principle of balanced and sustainable development (Box 6.2).

Box 6.2 Guiding Principles on Financing the Development of the Belt and Road²⁰⁶

“The Belt and Road Initiative aims to promote policy coordination and facilitate connectivity, unimpeded trade, financial integration and people-to-people exchange among the countries along the Belt and Road (hereinafter referred to as “countries involved”), promote orderly and free flows of economic factors, efficient allocation of resources and deep integration of markets, and jointly create an open, inclusive, and balanced regional economic cooperation framework that benefits all.

Financial Integration is an important underpinning for implementing the Belt and Road Initiative. Therefore, we, Finance Ministers of Argentina, Belarus, Cambodia, Chile, China, Czech Republic, Ethiopia, Fiji, Georgia, Greece, Hungary, Indonesia, Iran (Islamic Republic of), Kenya, Lao PDR, Malaysia, Mongolia, Myanmar, Pakistan, Qatar, Russian Federation, Serbia, Sudan, Switzerland, Thailand, Turkey, United Kingdom, call upon the governments, financial institutions and companies from countries involved to follow the principles of equal-footed participation, mutual benefits and risk sharing as they work together to build a long-term, stable, sustainable financing system that is well-placed to manage risks.”

In 2015, *The Vision and proposed actions outlined on jointly building Silk Road Economic Belt and 21st – Century Maritime Silk Road* released by China emphasized that countries along the Belt and Road should strengthen green, low-carbon construction and operation of infrastructure, fully consider the climate change factors in the construction process, and actively promote cooperation in environmental protection. At the same time, it should highlight the concept of ecological civilization in finance and investment, strengthen

206 Belt and Road Portal, Official Documents.

cooperation over ecology, environmental protection, biodiversity and climate change.

In 2017, MEE, MOFA, NDRC, and MOFCOM jointly issued two government directives, the *BRI Ecological Environmental Protection Cooperation Plan* and the *Guiding Opinions on Promoting Green BRI Construction*, which further developed the idea of “greening” the BRI. In the same year, the MEE established the BRI Green Development International Alliance. Open for multilateral organizations, government agencies, companies and think tanks around the world to join, the Alliance allows stakeholders to share good practices and policy solutions for sustainable development.

The *Guidance on Promoting the Green Belt and Road* jointly issued in 2017 by the NDRC, MOFA, MOFCOM and MEP highlighted the principles of “ecological civilization”, “eco-environmental protection” and “green development” in BRI implementation.²⁰⁷ The Guidance calls on entities participating in the BRI to formulate environmental protection standards and codes, to share good practices in green transport, green building and clean energy, and to increase their environmental protection services and support in construction projects. The Guidance also calls for using the unique advantages of policy-based financial institutions to help channel funds into a green BRI.²⁰⁸

In May 2017, MEP released the *Belt and Road Ecological and Environmental Cooperation Plan* to promote the green transformation of the regional economy, and to support the 2030 Agenda. The Plan identified targets for 2025 and 2030, as well as key tasks including strengthening eco-environmental policy communications, promoting green efforts in international cooperation on production capacity and infrastructure development, facilitating green trade, expediting green investment, launching eco-environmental protection projects and activities, promoting people-to-people connectivity and enhancing capacitybuilding.²⁰⁹

In April 2019, the BRI International Green Development Coalition was formally established at the Belt and Road Forum, and the “big-data service platform for BRI eco-environment protection” was launched with three initiatives, namely the “Green Efficient Refrigeration Initiative”, the “Green Lighting Initiative”, and the “Green Go Global Initiative”. The coalition is open to multilateral organizations, government agencies, global businesses and think tanks, allowing stakeholders to share experiences and policy solutions

207 Belt and Road Portal (2017, May 8). Guidance on promoting Green Belt and Road.

208 Columbia University Center on Global Energy Policy and Renmin University of China Center for International Energy and Environment Strategy Studies (2017, November 19-21). Belt and Road Initiative green development conference.

209 Belt and Road Portal (2017, May). The Belt and Road ecological and environmental cooperation plan.

for sustainable development. It aims to integrate sustainable development (environmental sustainability in particular), international standards and best practices into the BRI. For now, however, the application of these standards and practices in BRI partner countries whose own national standards are less strict remains voluntary. By the end of August 2019, more than 130 institutions have become partners in the coalition, including the Ministries of the Environment of 25 BRI cooperation countries.

Over the years, various government departments and industry associations in China have issued voluntary guidelines for corporate social responsibility pertaining to the overseas investments of Chinese companies. The *Guidelines for Environmental Protection in Foreign Investment and Cooperation* jointly issued by MOFCOM and MEE requires enterprises to conduct environmental impact assessments on their development, construction, production and operation activities in accordance with the laws and regulations of the host country, and take reasonable measures based on the results of environmental impact assessment to reduce any possible adverse impact.

The latest internationally coordinated initiative to which several leading Chinese banks, including CDB and ICBC, have already signed up has led to the formulation of the Green Investment Principles (Box 6.3).

Box 6.3 Green Investment Principles for the Belt and Road

Published in London on November 30, 2018, the seven Principles are a joint effort by the Green Finance Committee (GFC) of the China Society for Finance and Banking and the City of London's Green Finance Initiative (GFI). The Principles aim to ensure that investments along the Belt and Road are channelled into low – carbon, sustainable, and inclusive development through effective strategies, policies, and implementation.

Principles 1 and 2 call for financial institutions to embed sustainability into all levels of corporate governance and to pay full attention to environmental, social and governance risks. Principle 3 requires banks to conduct environmental stress tests on investment decisions and to improve their environmental information disclosure. Principles 5 and 6, respectively, call for the utilization of green financial instruments such as green bonds and green asset backed securities (ABS), and the adoption of green supply chain management to accelerate the “greening” of both upstream and downstream industries.

There is a growing consensus among many governments and financial institutions on the “greening” of construction and investment along the Belt and Road. By the end of March 2019, twenty financial institutions from countries and regions along the Belt and Road such as China, Britain, Pakistan and the United Arab Emirates signed the *Green Investment Principles* initiated by China and the United Kingdom.

At present, a huge gap in green finance exists between the countries along the Belt and Road. The rapid development and continuous innovation of green finance in China has created favourable conditions for Chinese financial institutions to participate in Belt and Road green investment and further fill the gap in green finance. In addition, government agencies and international financial institutions in partner countries can issue green bonds in China to directly fund their green projects. China's accumulated experience in building its green financial system and developing the green financial market can provide references for partner countries and regions to build their own green financial systems.

At the same time, China attaches great importance to the local conditions and development needs of low-income countries along the Belt and Road, and maintains an open and positive attitude to the issue of debt sustainability. In April 2019, during the 2nd Belt and Road Forum for International Cooperation, the Ministry of Finance officially released the Debt Sustainability Analysis Framework for the Belt and Road (Box 6.4), demonstrating the Chinese side's commitment to the promotion of a sustainable financing system for the BRI.

Box 6.4 Debt Sustainability Analysis Framework for the Belt and Road

Drawing on the IMF and World Bank Debt Sustainability Framework for Low-Income Countries, the Debt Sustainability Analysis Framework for the Belt and Road aims to strengthen the debt management capabilities of relevant countries and the ability of BRI stakeholders to improve their financing decisions. The framework reduces sovereign debt risk along the Belt and Road while promoting the development of a long-term, stable, sustainable and risk-controlled financing system in the Belt and Road.

The debt sustainability analysis process includes the following nine steps: specifying the scope of debt, predicting macroeconomic trends, verifying the accuracy of forecasts, determining country groupings, conducting stress tests, judging risk signals, correcting model results, determining risk ratings, and producing debt sustainability analyses and reports to which the framework provides a template.

Overall, the framework can be applied to assess the debt sustainability of BRI partner countries. As a non-mandatory policy tool for financial institutions along the Belt and Road, this Debt Sustainability Analysis framework can be used voluntarily.

6.3 Chinese best practice in sustainable investment

6.3.1 Industrial and Commercial Bank of China

Green finance

Cognizant of voluntary international standards like the Equator Principles and the IFC Performance Standards and Guidelines, ICBC went one step further by making its environmental standards mandatory. This was achieved by implementing a “green credit veto” system under which no loans will be issued to any borrower or project that does not pass an environmental impact test. The Bank also formulated specific requirements for monitoring, identifying, controlling, and mitigating environmental and social risks. ICBC’s new standards also called for issuing timely warnings to companies that violate environmental or safe production regulations, and including environmental and safety incidents in its risk management models.

In 2018, the size of ICBC’s green credit portfolio exceeded RMB 1.24 trillion, having grown by 12.6% year on year. The growth rate of green credit exceeded the average growth rate of loans by 6.6 percentage points. ICBC limits lending to companies with high energy consumption and high pollution and supports resource allocation to green industries and enterprises. Most importantly, ICBC fully integrates environmental and green factors into its entire institutional system and operating process, with each department playing a specific role in it.

Since 2003, ICBC has been gradually formulating and improving its policies on green credit, implementing green credit policies for different industries, and supporting the business development of green credit in priority sector areas. ICBC has been actively giving financial support to green industries, establishing a relationship between industrial classification and economic capital, and encouraging and guiding the credit business in the green economy. Combining international standards and domestic green credit classification standards, ICBC has meaningfully improved its management of environmental and social risks. Lastly, ICBC has formulated specific policies to guide credit supply toward key fields of the green economy, such as the policy to support five green finance pilot zones, and the policy to support the greening of the Belt and Road.

Given the significance of green finance in supporting the green economy, ICBC has incorporated these aspects into the bank’s development strategy. ICBC established the goal of becoming an internationally leading green commercial bank, and formulated specific policies

to achieve it, such as integrating industry-specific green standards and energy conservation requirements into its credit policies for more than 60 industries.

Green bonds

ICBC's green bonds have marked several milestones in the industry, notably on size, investment theme, and structure. The "One Belt One Road Green Climate Bond" listed on the Luxembourg Stock Exchange in September 2017 was ICBC's inaugural green bond issuance. This USD 2.15 billion issue has won five major international honours, including Finance Asia's Best ESG Deal, IFR Asia's 2017 Best Socially Responsible Investment (SRI) Bond, The Asset's 2017 Regional and Deals Award: Best Green Bond, Environmental Finance's 2017 Bond of the Year for Innovation in Use of Proceeds, and Global Capital's 2017 Asia Pacific Green/SRI Bond.²¹⁰ Both the fixed and floating rate tranches of the bond, in U.S. dollar and euro, respectively, were the best in their class. The bond is the first climate bond under the BRI and the first green bond issued by a China-funded financial institution qualified according to the International Capital Market Association (ICMA) *Green Bond Principles and the People's Bank Green Bond Support Project Catalogue*.

In June 2018, ICBC listed a USD 1.58 billion Triple-Tranche floating rate bond on the London Stock Exchange, the largest green bond listed in London. The funds raised will be used to finance green asset projects in low-carbon transportation, renewable energy, and offshore wind power under the Belt and Road Initiative. Offshore windfarms demonstrate ICBC's commitment to embedding green credit services into local markets. In the same month, ICBC issued a USD 730 million green bond on the Hong Kong Stock Exchange, the first green bond issued by a bank registered in Hong Kong SAR, and the first green bond issue certified by a Hong Kong SAR subsidiary agency.

Technical aspects of sustainable investment

Working with the Shanghai China Securities Index Corporation, ICBC launched the "ESG Green Index" in 2017, which is the first ESG index of a financial institution in China.

Traditional credit rating systems do not take the environmental risk of a company's operation into account, since environmental factors of credit risks are hard to quantify. ICBC has been working on creating an Environmental Risk Stress Test to quantify the impact of environmental factors on bank credit risk, to effectively improve environmental risk prevention and control capabilities, and to optimize the corporate green credit structure.

210 Industrial and Commercial Bank of China Ltd. (2017). Annual green bond report.

Sustainable investment along the Belt and Road

As the organizer of the Belt and Road Bankers Roundtable and the initiator of the BRI Green Index (which will be published in April 2019), ICBC has supported projects including Chinese companies' foreign investment, external supply contracting, and export of equipment. The main financing models include export buyer credit, cross-border mergers and acquisitions, international syndicated loans, aircraft contract financing, and support for financing. ICBC has provided loans for over half of the important projects of the China-Pakistan Economic Corridor in the first half of 2018. Further important green projects include wind and solar farms across different provinces in China and in Pakistan, and the Three Gorges acquisition of a Peruvian hydropower station.

6.3.2 China Development Bank

CDB's achievements in promoting green finance

As China's leading bank supporting green finance and largest lender of green credit in China, CDB put forward the Bank's approach to the development of green finance in 2017. It has built a comprehensive green financial product system to actively promote green and sustainable development, environmental protection, and energy saving and emission reduction, while managing environmental and social risks during the entire credit process. This allowed for the development of the Bank's green corporate culture.

According to the annual report of CDB, the Bank's total lending for alternative energy, such as wind, solar, and biomass energy, was around RMB 39.3 billion (USD 5.8 billion) in 2017. By the end of 2017, CDB's green credit portfolio was RMB 1.6 trillion (USD 245 billion), with annual savings of 53 million tons of coal and 226 million m³ of water. It also helped reduce the emissions of carbon dioxide by 133 million tons, sulphur dioxide by 1.7 million tons, nitrogen oxide by 840 thousand tons, and ammonia nitrogen by 50 thousand tons. Actively broadening the sources of green development funds, CDB has issued over RMB 25 billion worth of green bonds, China's first USD 500 million and EUR 1 billion quasi-sovereign international green bonds, and has been exploring innovative issuing mechanisms of green bonds. In 2018, CDB issued RMB 342.8 billion of green loans, with total outstanding loans totalling RMB 1.9 trillion.

To further extend support for green economy, low-carbon economy, and circular economy, CDB has also formulated relevant management measures to manage potential environmental and social hazards and related risks that its customers and relevant stakeholders may bring to the environment and society during construction, production and business operation. Such risks can be related to energy consumption, pollution, land, health,

safety, resettlement, ecological protection, and climate change.

Building a sustainable investment and financing system

CDB's environmental and social risk management system has included specific requirements into the pre-approval, approval, and post-approval management of loans. The system identifies relevant requirements and mechanisms throughout the process of project planning and development, due diligence, credit review, fund payment, post-loan management, etc. There are four categories in the system: environmentally friendly, compliant, requiring rectification, and high-risk.

Risk management for sustainable investment

In the planning and development stage of a project, CDB performs a preliminary review whether the project conforms to national and regional policies related to environmental and social risks. During due diligence, CDB has formulated industry-specific standards for investigation risks associated with labour and working conditions, explosives and chemicals management, pollution prevention and control, community health and safety, land expropriation and involuntary migration, biodiversity conservation, sustainable natural resource management, etc. Through project and compliance reviews, CDB identifies environmental and social risks faced by projects and clients, including but not limited to industrial policy and market access rules, environmental impact assessment approval, energy conservation assessment, and energy conservation inspection of national and provincial key energy-saving enterprises, etc. During the compliance review, CDB ensures that the submitted documents and procedures are compliant, effective and complete, and the client has sufficient attention and effective dynamic control over relevant risks; for projects categorized as high social and environmental risks, requiring rectification and compliant, a written review opinion will be provided. Projects receiving any negative review opinion are not allowed to enter the stage of credit review. Meanwhile, a "one-vote veto system" is applied to high-risk customers and projects that violate national environmental protection, safety supervision, quality inspection, and land and immigration policies. CDB also suspends loans for projects whose environmental protection facilities are not operating reliably or projects that are causing environmental destruction. In the post-approval management phase, special post-approval management measures are developed for projects and clients with high environmental and social risks.

In the management of environmental and social risks of overseas projects, a due diligence checklist of environmental and social risks is drawn up, relevant international and national good practices followed, and qualified independent third parties hired to evaluate and inspect projects under dispute.

6.4 Opportunities and challenges for Chinese investors for harmonizing investment and financing standards along the BRI

6.4.1 Opportunities for Chinese financial institutions

Harmonizing financing and investment standards not only brings environmental and social benefits, but also enhances the probability of achieving other related SDGs. These standards would also substantially reduce the likelihood of assets funded by China becoming stranded, thereby rendering the associated loan non-performing. Finally, such standards can be an effective instrument for managing and reducing reputational risks for Chinese banks – an increasingly important focus both within China and along the Belt and Road – as they enter foreign markets and invest in overseas projects and companies.

Government policies and green consumer choices are conducive to both sustainable development and new business opportunities for financial institutions in China. In recent years, traditional industries have been increasing their investment in the circular economy, environmental protection, and energy conservation and emission reduction technologies. Banks can integrate environmental and social standards into their traditional products to benefit from this shift and to avoid potential losses. Conversely, if banks provide loans to companies that fail to address environmental and social issues, they could incur serious reputational damage. Banks could also explore new products to help prevent or address environmental and social problems such as climate change and water shortages.

The construction industry is a notable example – among many others – of new business opportunities for green banking. As the government and the public increasingly demand green buildings and energy-efficient renovations of existing buildings, the willingness to pay premia for green products and services has raised the profitability of developing green real estate projects. More broadly, industries such as eco-environmental protection, e-commerce, new materials and new energy applications are emerging and becoming a new growth engine with considerable market potential. Such changes are also broadening business models for financial institutions, which increasingly provide financial services through green loans, sustainable development funds, environmental leasing, environmental consulting, and environmental insurance.

Financial institutions, when providing financing and investment services, could inadvertently cause or exacerbate long-term environmental issues such as water and air

pollution and climate change, as well as social problems such as inequality, social tensions and human rights violations. Financial institutions can contribute to reducing negative environmental and social impacts. For instance, Credit Suisse and UBS have considerably reduced their resource consumption, while other banks have used renewable energy sources such as solar energy to reduce greenhouse gas and air pollutant emissions. Increasingly, such actions are seen to transcend the area of corporate social responsibility, and are mainstreamed into banks' overall operations and processes.

6.4.2 Challenges faced by Chinese financial institutions

Like their counterparts abroad, Chinese companies and banks face limitations in appraising the impact of different political, economic, cultural, and legal environments, and the unique business, social, and environmental risks in host countries. In addition, Chinese companies may have valuable experience operating in some countries, but less in others.

With regard to loans, a central challenge for banks is to reduce the risk of future debt repayment difficulties. Problems can occur in the design of a project, with the underlying assets created using borrowed funds not able to generate sufficient cash-flow to cover the operating costs as well as accruing debt service. These problems need to be minimized with careful debt sustainability analysis that needs to take into account economic, financial, and environmental pressure points, as well as expected future developments, so that the project's ability to carry the debt service burden is ensured throughout the lifetime of the asset. In addition, macro-level risks need to be considered. This could imply that even a well-designed project could tip total debt service obligations into unserviceable territory – e.g., if the debt level is already very high. Finally, a realistic assessment is needed of assurances from various contingency mechanisms – notably government guarantees, collateralization by assets financed, and escrow arrangements.

With regards to investment, Chinese banks are increasingly devoting attention to preventing risks related to environmental protection, land, occupational health and safety and other environmental and social issues. They have recognized the importance of minimizing these risks in order to avoid escalation into frictions and conflicts with local stakeholders. A related risk that requires careful analysis is conflict risk, which can be high in areas already dealing with severe social challenges. This calls for a deep understanding of the social and security landscape, and on this basis, for conflict-sensitive project design.

In recent years, Chinese companies have gained considerable experience in anticipating and managing environmental and social challenges that arise in the course of their overseas operations. As a result, they have recognized the need for:

- Greater environmental and social awareness for businesses. Some Chinese companies have focused on the growth of business while neglecting the importance of environmental and social issues for host countries. For example, in the development of hydropower projects in environmentally sensitive and ecologically fragile areas, there is a need to ensure that lenders and investors undertake sufficient research on environmental and social issues as well as effective early consultations with the local community, in order to avoid opposition from local residents, NGOs, or local governments. Without this preparation, the company could face additional obstacles and costs, and even the risk of project failure.
- Deeper knowledge and understanding of the host country's laws, regulations, customs and values. Companies are not always familiar with these aspects. This could lead Chinese companies to attempt to replicate their domestic management practices in other countries without having a "localization strategy," and ignoring cultural differences between China and host countries. Labour relations management after international mergers and acquisitions is one example. Chinese corporations often bring in Chinese management models, characterized by a strong Paternalistic hierarchical system and emphasis on personal loyalty and group identity, which can be different from the local corporate culture.²¹¹
- Enhanced engagement with local media and public opinion. In the process of investing, Chinese companies often adopt a low-key or even silent approach to the local media and public opinion in the host country. When they encounter environmental and social issues and are questioned or criticized by local or international media, Chinese companies are reticent in answering questions. In some cases, this approach can turn small and manageable problems into bigger and more challenging ones. Companies have also lost good opportunities to promote themselves to the world.
- Greater information disclosure and transparency. The guarded approach to communicating with local media and civil society has obscured the good practices of Chinese enterprises. For example, contrary to popular perception, many Chinese companies do hire locals on a large scale. These points suggest the importance of disclosing more information to the public to mitigate the perception that Chinese companies are supporting corruption and conducting black-box operations.

211 Shougang Corporation acquired a Peruvian iron ore company in 1992. Troubled labour relations caused strikes in the subsequent 20 years because of problems in handling cultural and labour differences.

China has made remarkable progress and is one of the world's leaders in green finance within its borders. It has also made strong commitments to promote sustainable development in its financing and investment activities around the globe, and has taken a number of steps toward realizing those commitments. As the BRI continues to grow, and as global awareness of the importance of the 2030 Sustainable Development Agenda continues to intensify, the experience of recent years provides a very useful foundation for integrating China's commitments into a harmonized set of financing and investment standards to guide its economic engagement with other countries.

Chapter 7 Toward harmonized standards for the BRI

While earlier chapters of the report have identified a set of common norms for development financing and investment among MDBs, NDBs, and Chinese entities operating globally, there is still a need to develop a clear, comprehensive set of underlying principles and an operational process for effective harmonization of standards along the Belt and Road. The resulting harmonized standards will need to apply throughout the entire project life-cycle, and cover all three pillars of sustainability, as well as monitoring, implementation and evaluation.

Based on research presented in earlier parts of this report, the present chapter further elaborates on the case for the introduction and implementation of harmonized standards. Section 7.1 identifies linkages between China’s investment policies and the Environmental and Social Standards (ESS) implemented by NDBs and MDBs. Section 7.2 illustrates how establishing a harmonized set of standards around these common norms on investment and financing and also building on further considerations—notably forward-looking ones to safeguard against newly emerging risks as well as consistency with China’s own standards—can reduce the risks and maximize benefits for both China and BRI partner countries, strengthen the credibility of the BRI as a program for enhancing global governance and providing global public goods. Section 7.3 presents a case study of Bangladesh that highlights some challenges that the introduction of harmonized BRI-wide standards may entail. Lastly, section 7.4 presents five fundamental considerations for the future standards harmonization process.

7.1 Taking stock of common norms for investment and financing

As presented in Chapters 5 and 6, China, MDBs and NDBs have a diverse, yet overlapping set of norms that they uphold in overseas development financing and investments. Those two chapters provide in-depth analyses of each of these norms for the various actors operating in the international development finance landscape and provide a picture of their shared features and remaining critical gaps.

MDBs and NDBs present their environmental and social provisions in a similar way, broadly following the standards of the World Bank’s Environmental and Social Framework,

which eases the comparison of norms across these institutions as presented in Table 7.1. As described in Chapter 5, although several MDBs have provisions for the same standards, the level of coverage varies. Health and Safety considerations are an example: although all MDB ESFs include them and most of the MDBs include provisions for infrastructure and equipment safety, security management or community exposure to diseases, IDB's Health and Safety standard only includes provisions regarding exposure to hazardous materials. Not all MDBs have established standards for labour and employment—e.g., IDB and ADB have not yet done so. However, ADB has publicly acknowledged this gap in its Safeguard Policy and the need to include labour and employment safeguards, as well as those related to gender equality.

With respect to NDBs, they do not always have complete Environmental and Social frameworks in place. For instance, JBIC does not have specific labour, pollution prevention or climate change safeguards. Thus, the list of NDBs that can be included in our study for having a framework in place is considerably shorter than that of MDBs.

**Table 7.1 MDB and NDB norms in international development
finance and investment**

	MDBs	NDBs
1. Environmental and social impacts	√	√
2. Labour and employment	–	–
3. Pollution prevention	√	–
4. Health and safety	√	√
5. Land use and resettlement	√	√
6. Biodiversity conservation and natural resource management	√	√
7. Indigenous communities	√	√
8. Cultural heritage	√	√
9. Financial intermediaries	√	–
10. Stakeholder engagement	√	–
<i>MDBs include: WB, IDB, ADB, EBRD, EIB and AIIB.</i>		
<i>NDBs include: KfW, DBSA and JBIC.</i>		

Source: Chapter 5.

Pollution prevention is not one of the common norms across all MDBs and NDBs. Still, it is a priority area for institutions participating in development finance, and one where significant progress is being made. As presented in Chapter 5, MDBs and NDBs are shifting practices toward GHG emission reduction, such as the elimination of financing for coal projects by KfW and EBRD, pollution reduction and air quality improvement projects by

AIIB or EIB's shadow carbon pricing. Even JBIC which, as noted earlier, does not explicitly include pollution prevention provisions in its Environmental and Social guidelines, has established procedures for measuring, reporting and verifying GHG emission reductions and publishes the GHG emission reductions achieved by its renewable energy projects.

Chapter 6 presented Chinese norms and regulations for environmental and social sustainability. Although Chinese actors have similar environmental and social norms in place, there is no overall framework like the one MDBs and some NDBs have. A similar comparison is, therefore, harder to perform across the three groups of Chinese institutions participating in the BRI. Table 7.2 presents examples of Chinese norms and regulations categorizing them according to the World Bank's ESS. This allows to clearly showcase that China also safeguards environmental and social impacts.

These regulations and guidelines are examples of existing Chinese environmental and social norms and regulations. They highlight that China's institutional framework clearly calls for safeguards to prevent and mitigate against negative social and environmental impacts.

MDBs, NDBs and Chinese development banks and institutions thus incorporate many common norms into their projects when operating abroad. While the exact form that these standards take varies, there are significant similarities and overlaps between the ESS of the various MDBs, NDBs and Chinese investors and financiers. Assessments of environmental and social impacts, health and safety, land use and resettlement, biodiversity conservation and the protection of indigenous peoples' rights as well as cultural heritage are priorities for all.

Earlier chapters showed that in terms of procedures there is little variation across MDBs and NDBs. Chinese policy banks follow a similar pattern in standards procedures, although not as closely. They also share several practices with MDBs, such as: compliance with host country environmental regulations, *ex-ante* environmental impact assessments, project review of environmental impact assessments, public consultations with affected communities and establishing protocols regarding compliance.²¹² Therefore, a broad finding of the research for this report is that most of the institutions involved in investment and financing activities along the Belt and Road already share a considerable body of norms regarding environmental and social considerations.²¹³ As presented in Tables 7.1 and 7.2, the commonalities listed below exist across most MDBs, NDBs, and China; in many cases, they exist across all of them. They include the following:

212 See: Irwin, A. and Gallagher, K. P. (2013). Chinese mining in Latin America: a comparative perspective. *The Journal of Environment & Development* 22 (2): 207–234; Ray, R., Gallagher, K. P. Lopez, A. and Sanborn, C. (2015, April). *China in Latin America: lessons for South–South cooperation and sustainable development*. Global Economic Governance Initiative, Boston University.

213 Ibid.

Table 7.2 Chinese norms and regulations linked to ESS

WB ESS	Guideline/ Regulation	Relevant Article	Issuing Authority	Executive Authority
ESS 1: Environmental and Social Impacts	Guidance on Implementing Environmental Protection Policies and Rules and Preventing Credit Risks (2007)	Provision 2: “Strengthen environmental supervision”	SEPA PBOC CBRC	Policy banks, state-owned commercial banks, and joint-stock commercial banks
ESS 2: Labour and Employment	Further Enhancement of Environmental Protection Work of Foreign Investment Cooperation Enterprises (2013)	Provision 3: “Provide training for employees”	State Council MOFCOM	Commerce Departments of all provinces, Economic and Commercial Counsellors’ Offices abroad, and all central enterprises
ESS 3: Pollution Prevention	Guidance on Strengthening Key Environmental Protection Work (2011)	Provision 1: “Reduce of major pollutants.”	State Council	Ministries and commissions of the State Council and institutions directly under the State Council
ESS 4: Health and Safety	Guidance on Strengthening Key Environmental Protection Work (2011)	Provision 2: “Focus on reducing impacts that can harm people’s health”	State Council	The people’s governments of all provinces and institutions directly under the State Council
ESS 5: Land Use and Resettlement	Measures for the Administration of Overseas Investment of Enterprises (2017)	Provision 2: “Guide land use for investment overseas”	State Council NDRC	N/A

Table 7.2 (Continued)

WB ESS	Guideline/ Regulation	Relevant Article	Issuing Authority	Executive Authority
ESS 6: Biodiversity Conservation and Resource Management	A Guide on Sustainable Management and Utilization of Overseas Forest by Chinese Enterprises (2009)	Provision 5: “Guidance for biodiversity conservation”	SFA MOFCOM	SFA, MOFCOM
ESS 7: Indigenous Communities	Guide for Countries and Regions on Outward Investment and Cooperation (2018)	Provision 6 of different country chapters: “Advising the avoidance to hurt interest of any indigenous people”	MOFCOM	MOFCOM
ESS 8: Cultural Heritage	Measures for the Supervision and Administration of Overseas Investments (2017)	Provision 1: “Respect local laws and culture”	State Council	SASAC
ESS 9: Financial Intermediaries	Guiding Opinions on Regulating Banking Services for Enterprises Heading Overseas and Strengthening Risk Prevention and Control (2017)	Provision 2: “Investigate, coordinate, and supervise third parties involved in the contract overseas”	State Council CBRC	All local offices of the China Banking Regulatory Commission; all policy banks, large-scale banks
ESS 10: Stakeholder Engagement	Guide on Social Responsibility for Chinese International Contractors (2012)	All chapters: guiding effective stakeholder engagement	MOFCOM China International Contractors Association	MOFCOM, China International Contractors Association

Source: Official websites of listed issuing authorities

- Encouraging effective stakeholder engagement;
- Promoting the mainstreaming of environmental, social and governance aspects from the early stage of a project to avoid or mitigate potential liabilities from climate change and other environmental and social risks in investments;
- Developing the capacity of borrowers to identify issues of social and environmental sustainability and effectively address them;
- Devising mechanisms to address emergency events at an early stage of a project;
- Introducing prevention/management systems to avoid or mitigate pollution;
- Encouraging the financing of green projects;
- Ensuring biodiversity conservation and ecosystem protection;
- Providing safe and decent working conditions;
- Ensuring the health and safety of the population involved in or affected by projects;
- Preventing or minimizing negative impacts for vulnerable communities and compensating for impacts that are not possible to avoid;
- Avoiding involuntarily resettlement, and providing assistance to affected populations;
- Engaging and consulting with indigenous people and formulating projects taking into consideration adverse impacts on them;
- Protecting cultural heritage;
- Establishing grievance and resolution mechanisms for disputes or conflicts.

Furthermore, economic development is fundamental for human development and progress. It creates growing resources to address human needs at improving levels, and also strengthens society and the social fabric. Improved protection of the environment needs to go hand in hand with economic development. Instead of stifling economic growth, environmental protection enables it to continue in the medium and long run—in other words, it helps make development sustainable. Edward B. Barbier, in his landmark book *Economics, Natural Resources, Scarcity and Development*, defines this aspect of sustainable development as: “maximizing the net benefits of economic development, subject to maintaining the services and quality of natural resources over time”.

With regards to rules and concepts guiding sustainable economic growth, MDBs, NDBs, and Chinese financial institutions follow some common investment and financing principles, international financial regulatory rules and risk management regulations. These reflect the lessons from decades of economic and financial development, and are widely accepted. This chapter will focus on comparing and analysing the main aspects of sustainability, without going over all relevant information in detail point-by-point. The common core of standards and related considerations will be presented in Chapter 8, such as the shared conviction that:

- Borrowers and lenders share the responsibility to avoid unsustainable debt situations. Transparency and information disclosure are encouraged to facilitate the ability of lenders to assess borrowers' capacity to repay the debt—taking into account already existing debt—and to assist borrowers to convey the need for a debt restructuring, if needed. The UNCTAD *Principles for Responsible Sovereign Borrowing and Lending* (Chapter 5 and Annex 3) urge lenders and borrowers to share this responsibility and support clearly assigning specific responsibilities to each party to avoid unsustainable financing agreements.

- A transparent and fair procurement process is needed, as seen in the WTO's, the WB's, and the EU's procurement rules as well as in the 2015 *Regulation on the Government Procurement Law of the People's Republic of China* issued by the State Council.

- An accurate assessment of project risks and strong risk management strategies are needed to prevent and mitigate the negative impact of projects. Examples are MIGA's Risk Insurance, the EIU's Risk Identification System and the 2015 *Chinese Guidelines on Comprehensive Risk Management of Banking Institutions* issued by CBRC.

These commonalities reflect long-accumulated experience in international development finance and investment and constitute an excellent basis for further progress.

Remaining gaps that need to be addressed mostly pertain to risks to sustainable development due to considerations that require foresight, rather than hindsight. They involve looming future risks, for which past experience may not provide solutions or sufficient guidance—such as climate change, the risk of eroding the rules-based international trade and financial system, and a dramatic escalation in inequality or a global pandemic. These looming issues can become binding constraints in the future, greatly impacting sustainability, and thus require prompt and decisive collective action. Incorporating these considerations effectively into the standards that apply along the Belt and Road should also be a key part of the policy agenda.

7.2 The benefits of harmonizing standards for financing and investment practices along the Belt and Road

Despite the commonalities noted above, there is a variety of financing and investment standards across the BRI region. Some have been made legally binding under certain treaties, some are adopted at the discretion of individual institutions and apply only under certain conditions, while others are followed by multilateral development banks such as the World Bank. Adding a further layer of complexity to the present situation is the fact that national laws, policies and regulations of BRI partner countries may not fully comply with stringent

industry standards and social responsibility systems, which can have a direct impact on project execution. In 2018, in an effort to streamline the variety of international financing and investment rules and standards, the G20 Eminent Persons Group put forward its *Report on the Reform of the International Financial System*, encouraging institutions to adopt a series of “core standards”. This idea is similar to the set of common norms shared across different BRI stakeholders outlined in the previous section.

Table 7.3 summarizes the potential benefits of introducing harmonized investment and financing standards across the BRI. Such harmonization will not only serve Chinese actors by increasing business opportunities and reducing risks, but also benefit host countries and their local communities economically, socially, and environmentally. Equally important is for the appropriate harmonization of these common norms and standards to align the BRI and its objectives to the 2030 Agenda and specifically to the SDGs.

Table 7.3 Benefits of harmonizing standards along the Belt and Road

Chinese actors	Chinese government	<ul style="list-style-type: none"> – Prevention and mitigation of reputational risk; – Prevention and mitigation of environmental and social risks.
	Financial institutions	<ul style="list-style-type: none"> – Prevention of default risk; – More innovative and competitive financial services.
	Business entities	<ul style="list-style-type: none"> – Expansion of markets; – Greater returns and effectiveness of projects; – Improved competitiveness and risk management.
Partner countries	Partner governments	<ul style="list-style-type: none"> – Economic growth and poverty alleviation; – Improved management of fiscal resources; – Improved management of natural resources; – Strengthening of institutional capacities; – Prevention and mitigation of environmental and social risks; – Reduction of compliance costs.
	Business entities	<ul style="list-style-type: none"> – Expansion of domestic markets and linkage to international value chains; – Increased opportunities for participation in BRI-related procurement; – Improved compliance and risk management.

Table 7.3 (Continued)

Local communities	<ul style="list-style-type: none"> – Improved livelihoods, decent jobs; – Reduced likelihood of social conflict; – Enhanced voice and ownership of projects; – Reduced vulnerability against potential negative impacts.
Global community	<ul style="list-style-type: none"> – More equitable use of resources and growth; – Enhanced interconnectivity and cooperation; – Provision of global public goods; – Improved global governance.

First, harmonized standards can help Chinese banks and enterprises maintain and expand market share overseas. China's experience in Peru is a case in point. Because of a lack of strong Environmental and Social Risk Management (ESRM) on the part of Chinese investors, they encountered disputes with workers and local communities over occupational health and safety issues, emergency preparedness, and environmental impacts. Though some of the issues can be attributed to the relatively weak enforcement of regulations and standards in the host country, Chinese investors suffered reputational damage that affected their business performance. In some cases, for example, the perception that Chinese firms and financiers do not have proper risk management strategies in place made it more difficult for them to win local contracts for mining and exploration.

For instance, with harmonized standards and proper implementation mechanisms in place, Chinese copper firms can devise substantive ESRMs through meaningful stakeholder consultations at the project design stage. This could potentially enhance the reputation of Chinese firms and investors and help them gain further market access as well as political and community support. In case of an accident, ESRM plans that follow harmonized high standards would allow both the company and the host country to respond effectively and mitigate against potential damage.²¹⁴

According to the World Bank, the typical cost of safeguard programs ranges from USD 116,000 to USD 225,000 per large-scale project, accounting for 3.3% to 7.6% of project preparation and supervision costs. For borrowing countries, the average cost of compliance is USD 6 million, or 3% of the total project cost.

214 See: Irwin, A. and Gallagher, K. P. (2013). Chinese mining in Latin America: a comparative perspective. *The Journal of Environment & Development* 22 (2): 207–234; Ray, R., Gallagher, K. P. Lopez, A. and Sanborn, C. (2015, April). *China in Latin America: lessons for South–South cooperation and sustainable development*. Global Economic Governance Initiative, Boston University.

While full assessments of the costs and benefits of ESRM are hard to quantify, a 2010 assessment by the World Bank Independent Evaluation Group (IEG) concluded that benefits from environmental safeguards far outweigh their incremental costs, even though in some cases measured benefits fell short of the costs, since many types of social benefits are not directly quantifiable. Weighing risks and benefits from a sample of projects, the World Bank found that most projects yielded “low cost—low benefits,” or “high cost—high benefits” for recipient countries (although this does not take into account compliance costs to borrowing countries in terms of staff time and efforts). The World Bank also found that over half of the team leaders surveyed reported that “the Bank’s safeguards increased the acceptability of the project among beneficiaries”, and that the safeguard policies increased acceptability among nearly 30% of co-financiers.²¹⁵

Second, a harmonization of standards could help reduce compliance costs, structuring requirements uniformly and thereby maximizing the benefits of managing social and environmental risks. This is critical as developing countries can be overwhelmed by the highly specific and uncoordinated requirements from the different international standards and financing sources. This presents government ministries in partner countries with coordination and prioritization challenges and with a highly resource-intensive workload that requires a large portion of their already limited resources to be devoted to complying with these requirements.

Third, harmonizing standards can help promote risk identification with respect to social and environmental conflict and debt sustainability. This not only generates economic dividends for host countries and profit for firms, but also helps maintain a healthy relationship between investors and host country governments, or lenders and borrowers. For example, in the case of Ecuador, which carefully analyses debt sustainability when seeking foreign loans, international credit rating agencies have pointed out that Chinese loans have helped the country improve its fiscal position. Credit rating agencies have in fact upgraded Ecuador’s credit rating based on the country’s ability to pay back China—allowing Ecuador to access more funds at a lower cost.²¹⁶

Fourth, harmonized standards can help strengthen the protection of local communities affected by new projects. Applying standards that require engaging with local communities prior to project implementation across the BRI region can help identify concerns that could

215 World Bank (2010). Safeguards and sustainability policies in a changing world: an independent evaluation of World Bank Group experience. IEG Study Series, 47.

216 Lin, J. Y., and Wang, Y. (2017). *Going beyond aid: development cooperation for structural transformation*. Cambridge: Cambridge University Press.

otherwise evolve into conflicts if not adequately addressed. In Bolivia, for instance, Chinese tin companies took part in a “prior informed consent” engagement with local communities that rejected newly designated locations for the tin companies. These later found a better-suited and better-equipped location, confirming the effectiveness of the local engagement process in averting social conflicts that would have otherwise hurt both the welfare of local communities and the business prospects and reputation of Chinese tin companies.²¹⁷

Strong BRI-wide standards can enhance project performance and profitability, thereby boosting the host country’s economic growth, and also serve the provision of global public goods, bringing global benefits. The International Finance Corporation (IFC) found that the establishment of shared standards in accordance with each of the previously mentioned common norms were correlated with stronger financial performance (measured by return on assets and return on equity), and better financial risk ratings in 656 IFC projects worth USD 37 billion.²¹⁸ Harmonized standards could contribute to leveraging private financing from international markets and therefore expand the available funds for BRI projects.

Meanwhile, financing terms based on thorough debt sustainability analysis that meets best-practice standards can help minimize default risk on projects for both lenders and borrowers.²¹⁹ In addition, increased interconnectivity through BRI infrastructure projects that conform to social and environmental sustainability standards will boost trade and investment in the BRI region, promote the inclusiveness of economic growth, as well as increase welfare,²²⁰ and protect the cultural heritage of local communities. Finally, BRI-wide standards carefully aligned with SDGs, including the ambitions pertaining to environmental protection, social governance, and global partnership, can become effective tools to advance global efforts towards sustainable development.

7.3 Potential challenges ahead in harmonizing standards

This section discusses the challenges that get in the way of implementing harmonized

217 Ray, R., Gallagher, K. P., and Sarmiento, R. (2016). China-Latin America economic bulletin 2016 edition. Discussion Paper 2016-3. Global Economic Governance Initiative, Boston University.

218 International Finance Corporation (2018). Operating principles for impact management.

219 According to one estimate, China has had to provide debt relief on over 60 projects in almost as many countries across the world so far. See: Hurley, J., Morris, S. and Portelance, G. (2018, March). Examining the debt implications of the Belt and Road Initiative from a policy perspective. CGD Policy Paper 121.

220 De Soyres, F. (2018). The growth and welfare effects of the Belt and Road Initiative on East Asia Pacific countries. Washington, DC: World Bank.

standards for financing and investment of BRI projects. It presents a case study that focuses on the implementation of harmonized standards for environmental and social risk management in Bangladesh. Harmonized standards would have to come to terms with existing national conditions of BRI participating countries, including but not limited to the legal, social, cultural and political characteristics of the country in question, the local taxation regime, regulatory conditions, investment environment, as well as the country's debt sustainability situation. Additional challenges could also arise due to variations in actual national conditions, notably in data and procedural transparency, and in how standards are implemented.

There is a multitude of policy and regulatory areas where discrepancies and gaps can emerge, which can all pose challenges to the harmonization process and to the implementation of BRI-wide standards. The expansion of a coal power plant and an adjoining coal mine that was already operating in Barapukuria in the north-eastern part of Bangladesh is a useful case study through which we can examine some gaps and inconsistencies in practices and rules on environmental and social risk management. The Barapukuria case highlighted several critical gaps pertaining to ESRM relating to (1) official processes and procedures for the screening of environmental and social risks, (2) public consultation and grievance arrangements, (3) environment management planning; (4) resettlement policy, and (5) monitoring. Importantly, these by no means represent the entire landscape of gaps that need to be addressed for the effective implementation of BRI-wide standards in Bangladesh or elsewhere. Conversely, several of them may have been addressed in the years since the period covered by the case study.

In addition, it is worth noting that gaps and inconsistencies in policies and practices are not necessarily the main hindrance to the harmonization of standards valid across the BRI. For example, there may be several national or international public consultation and grievance resolution standards available and readily applicable for a particular BRI project. Insufficient resources, a lack in capabilities for implementing relevant measures, or a lack of willingness, efficiency or transparency in adopting more stringent standards or in making them binding can all prevent investors and governments involved in the project from effectively handling complaints or providing remedies. While this report does not go into the details of such challenges, finding practical ways to address them will be a necessary next step.

7.3.1 Case study: Bangladesh²²¹

The present case study highlights issues which emerged from a recent power plant expansion project in Bangladesh. It covers only national standards related to this single project. More in-country fieldwork research and updates would be needed on how stringent the core principles currently upheld by the Bangladesh Department of Environment (DOE) are compared to those of other countries, including China.

For benchmarking purposes, the policies of ADB are also introduced, as ADB is active in the power generation sector in Bangladesh and across the region. Further, since the Government of Bangladesh has expressed its intention to attract more private financing for future power plants, the Equator Principles were also considered as a comparative benchmark.

Background and context

Over the past decade, the real GDP of Bangladesh has grown at an annual average rate of 6.2%. The size of the national economy has nearly doubled, and per capita GDP has increased by over 80%. Since 2016, the country's GDP growth rate has reached 7%, driven by double-digit growth in manufacturing and construction.²²² The government has reinforced its commitment to continuing along this development path, aiming to turn the country from a Least Developed Country (LDC) into a developing country by the year 2024.

Despite this notable progress, Bangladesh is a largely agrarian economy, still has a high poverty rate and faces infrastructure challenges. In 2013, the World Bank estimated that the country would need to invest 7.4%-10% of GDP per year in infrastructure financing for a decade.²²³ while a 2017 World Economic Forum comparison on infrastructure ranked Bangladesh second-last among developing countries in Asia.²²⁴ Bangladesh faces particular challenges in its power supply sector. Due to the country's low household-level access to electricity and low energy use in the public sector and in production, Bangladesh ranks among the countries with the lowest per capita consumption of electricity in the world in the

221 This section draws on Kamal, R. (2018, September). Burning for development: a case study on socioeconomic, environmental, and climate change impacts of the Barapukuria coal plant. GCI Working Paper 002.

222 World Bank (2018, April). Bangladesh development update: building on resilience.

223 Andrés, L., Biller, D., Herrera Dappe, M. (2014). Infrastructure gap in South Asia: infrastructure needs, prioritization, and financing. World Bank Policy Research Working Paper 7032.

224 Schwab, K., and Sala-i-Martin, X. (2017). Global competitiveness report 2017-2018. World Economic Forum Insight Report.

International Energy Agency's Energy Development Index (EDI).

To sustain its economic growth, Bangladesh is striving to transform its energy system. In its latest *Poverty Reduction Strategy Paper* (PRSP 2015) and *Power System Master Plan* (PSMP 2016), the government has planned to increase access to electricity. This involves an estimated average increase in annual energy use by 6% for the next decade, which requires the country's power generation to nearly double by 2030. Traditionally, the fuel mix of Bangladesh's power plants has relied on natural gas; yet, the country's domestic reserves may run out by 2025. The government thus plans to meet growing energy demands by dramatically increasing coal-fired power generation from the current 2% to 50% of the nation's total mix by 2041, building on the country's large coal reserves.²²⁵

The Government of Bangladesh is seeking to finance the construction of new coal-fired power plants through foreign loans, especially multilateral and bilateral ones, as domestic sources of long-term financing are limited by the country's national fiscal capacity, a shallow domestic financial market, and relatively high costs of raising domestic funding. Although infrastructure funding around the world has traditionally been dominated by Western-led banks, emerging Asian financial institutions, particularly from China, have provided increasing amounts of financing to developing countries since the 2008-2009 global financial crisis. In the case of Bangladesh, China has become one of its main development partners over the past decade, as well as its largest energy partner in 2017.²²⁶ Chinese companies and banks are offering financing, investment, technologies and skills to develop information, communication, and power infrastructure, while assisting with water management in the country's industrial zones.²²⁷ Bangladesh and China have also signed an MoU on strengthening investment and production capacity cooperation, with China pledging USD 24.5 billion in bilateral assistance for 34 projects and programs across Bangladesh.²²⁸

Given its national infrastructure and energy development needs, its medium-term national energy plan, and the recent MoU signed with China, Bangladesh is well placed to take advantage of the BRI and receive greater development funds from China. The expansion

225 Sustainable and Renewable Energy Development Authority, Power Division, Ministry of Power, Energy and Mineral Resources, Government of the People's Republic of Bangladesh (2015, October). Scaling up renewable energy in low-income countries (SREP)-Investment plan for Bangladesh.

226 Siddique, A. B. (2016, October 18). China becomes Bangladesh's largest energy partner. The Third Pole.

227 Basu, M., et al., (2017). Determinants of water consumption: a cross-sectional household study in drought-prone rural India. *International Journal of Disaster Risk Reduction* 24, 373-382.

228 Byron, R. K., and Rahman, M. F., (2016, October 15). Deals worth \$24.45 billion struck between China, Bangladesh. *The Daily Star*.

of the Barapukuria coal power plant was undertaken by a Chinese company.

Gaps between rules, policies, implementation and outcomes

According to available information, the coal mine and power plant use relatively advanced technology and focus on safe production. The projects helped with the training of hundreds of engineers and thousands of skilled workers in Bangladesh, contributing to Bangladesh's economy and employment. The analysis in this section reviews the problems and risks in terms of rulemaking and implementation, showing that even well-developed policies could face potential risks in implementation. This highlights the types of important gaps that will need to be bridged in order to effectively define and implement harmonized standards along the Belt and Road.

The Government of Bangladesh has a number of policies that apply to the construction and operation of coal power plants. These cover screening, scoping out the impacts to be considered and their scale, specific requirements in terms of social and environmental impact assessments or management plans, health and safety requirements, resettlement planning, monitoring policies including provisions or requirements for independent reviews, information disclosure, and public consultation—including the frequency of consultation and for establishing channels of communication with affected parties.²²⁹

Bangladesh is also a signatory party to a number of major environmental agreements, such as the UN Convention on Biological Diversity, the UN Convention to Combat Desertification, and the UN Framework Convention on Climate Change. Over the past decades, the Government of Bangladesh has adopted or amended existing domestic legislation including the 1992 Environment Policy, the 1995 National Environment Management Action Plan (NEMAP), and a series of sectoral policies to address the country's environment and development issues.²³⁰

In 1995, the Bangladesh DOE updated project screening criteria, and in 2009, the Parliament of Bangladesh enacted the “Right to Information Act”. The DOE has issued screening criteria to categorize projects, dividing them into “Green”, “Orange A”, “Orange B”, and “Red” in order of increasing severity of environmental impact, each of which triggers a requirement for a corresponding level of Environmental Impact Assessment (EIA).

229 Kamal, R. (2018, September). Burning for development: a case study on socioeconomic, environmental, & climate change impacts of the Barapukuria Coal Plant. GCI Working Paper 002.

230 These include the Forest Policy (1994), the New Agriculture Extension Policy (1995), the Energy Policy (1995), the Fisheries Policy and the Water Policy (1998). See: Aminuzzaman, S. M. (2010, July 5-9). Environment policy of Bangladesh: a case study of an ambitious policy with implementation snag. Paper presented at the South Asia Climate Change Forum, Monash University, Australia.

Projects that fall under “Orange B” and “Red” categories do require a full-scale EIA.²³¹ The aforementioned EIA report covers “Occupational and Community Health and Safety” aspects, “Exclusions and Sensitivities” and “Identification and Assessment of Alternatives” (to sites, routes, process, raw materials) as part of mitigation measures. Bangladesh has also defined eight locations as “Environmentally Critical Areas”.

The DOE issues and updates the emission and ambient standards, which are generally comparable with international standards. The DOE recommends that a technical summary be prepared, which includes an “Environmental Management Plan” (EMP) as one of the outcomes of the EIA. The EMP requires risk analysis when hazardous or toxic substances are stored or handled; “Compensatory Afforestation” when over 5 hectares of land are deforested; plans for “Resettlement and Rehabilitation” when more than 1,000 people are displaced. The EMP includes an implementation schedule and monitoring requirements. Workplace and occupational standards are covered under the “Factories Act”.

EIA “Guidelines for Industrial Projects” recommend a “Post-Project Monitoring Program”. However, the EIA guidelines have no formal provisions to conduct independent assessments of EIA reports or an independent audit of approved projects. Third-party monitoring through approved laboratories is recommended by EIA guidelines, but is not required. The DOE is responsible for monitoring and making compliance reports available to the public. Under DOE Guidelines, public consultation and participation, fixed time frames for prior disclosure of EIA reports to the public and grievance mechanisms are also recommended but not mandatory.²³²

The points above are a summary of the policies, rules and guidelines of the Government of Bangladesh in 2011, which played a role in moderating the environmental impacts of the projects. However, the case of Barapukuria demonstrates that there are problems in the implementation of these policies, rules and guidelines. We analyse the application to the Barapukuria Power plant of five categories of these policies and guidelines, in each of which some gaps were identified: screening, public consultation and grievance mechanisms, environmental management planning, resettlement and monitoring.

1. Screening: The Barapukuria coal plant falls under the “Red” category for government screening. Yet, there are indications that the screening process may not have taken into consideration scale or location when the Barapukuria expansion was screened. Although

231 Bangladesh Centre for Advanced Studies (2011, June). Draft Environmental Impact Assessment. BAN: Bibiyana I and II Gas Power project.

232 Ibid., 26-37.

the DOE has listed “Environmentally Critical Areas”, this consideration may not have been factored into the screening criteria and process.

According to Bangladesh DOE rules, EIAs are only required for Categories “Orange B” and “Red”. This reflects a significant gap between the country’s domestic legislation, the Equator Principles,²³³ and the common core principles and standards valid across ADB countries (“Environmental Assessment” rules). Seen within the context of the growing presence of BRI projects across South Asia, the domestic legislation of Bangladesh also appears to be less stringent than NDRC and MOFCOM’s 2017 *Regulations on Outbound Investment and Business Activities of Private Enterprises*.

2. Public consultation and grievance mechanisms: The Barapukuria case shows the importance of transparency and procedural clarity, as well as the need for open and readily accessible public consultation and grievance mechanisms, and for follow-through remedial measures. The EIA “Guidelines” of the Government of Bangladesh could be improved by having stronger requirements on public consultation and participation, fixed time-frames for prior disclosure to the public of the EIA, and the establishment of a grievance mechanism, which could be guided by ADB policies and transparency norms.

Community members in the Barapukuria plant area and NGO activists noted that there was prior public consultation before the expansion of the operations, but the degree of potential risks regarding water depletion and water pollution were not adequately addressed in the EIA process. For the power plant, an online portal for complaints was also created, but a similar online portal was not created for new proposed projects at the plant. After problems arose, there was clear government policy support, as outlined in the policies of the Power Development Board (PDB), for filing a complaint with the PDB, the power generation and distribution entity under the Ministry of Power, Energy and Mineral Resources, and the main national owner and operator of the plant. NGOs, however, noted that insufficient follow-up action was taken, even after the necessary consultation procedures were undertaken, and the obligatory forms were filled out by the communities and activists to highlight the breaches and negative impacts to the authorities. NGOs also noted that the communities organized protests after their complaints were not handled effectively.

Eventually the authorities responded, and for the coalmine, provisions were made for a grievance mechanism, and complaints that were filed were also posted on an online portal

233 To which Bangladesh was a non-Designated Country in 2018, given that it is not “deemed to have robust environmental and social governance, legislation systems and institutional capacity designed to protect their people and the natural environment”. See: Equator Principles (2018, April 4). Designated Countries.

that could be accessed by the public. PDB officials maintained that the necessary policies and procedures were followed. NGOs suggested that the positive modifications that were eventually made in terms of lessening environmental impacts, such as increasing the chimney height of the power plant, and increased power availability in the locality only occurred in this second round.

3. Environmental management planning: An EMP is required as an outcome of the EIA, covering aspects such as risk analyses if hazardous or toxic substances are stored or handled. In the case of Barapukuria, an EMP was completed, which explicitly mentioned mitigating risks related to an ash pond, but risk management measures were not followed up. In contrast, ADB follows a “polluter pays” principle, and for Barapukuria, such a practice would help surrounding communities to buy water and deal with the water depletion and pollution caused by the coal plant and mine.

4. Resettlement policy: A “Resettlement and Rehabilitation Plan” is required when more than 1,000 people are displaced, according to Bangladeshi government policy.

The EIA for the Barapukuria expansion would have benefited from having a more exact definition for the scope of impacted individuals, including not only “titleholders” of the land on which the power plant was built, but also those who lost land due to coal extraction.²³⁴ In brief, the government of Bangladesh did compensate and resettle titleholders, but the resettlement land plot may not have been sufficient to accommodate the number of persons that were relocated. Moreover, the Social Impact Assessment (SIA) and Management Plan for Barapukuria did not include non-title holders, sharecroppers, nor the indigenous communities whose access to the land could have been reduced due to the plant expansion. Affected households that are not provided with feasible livelihood alternatives could face great difficulty in finding alternatives in land-constrained Bangladesh. This includes an ethnic minority group, the life of which is rooted in agricultural labour (rice production).

ADB and the Equator Principles explicitly mention the protection of indigenous communities and livelihood impacts. ADB policies are especially detailed in terms of the scope of direct and indirect impacts considered.

5. Monitoring: The EMP applied in the projects required a monitoring plan and scheduling of monitoring, but independent audits or third-party monitoring were not a stated requirement. However, there is no information on whether the Bangladeshi or Chinese partners required this monitoring during the expansion of the Barapukuria plant area.

Community members and university researchers recommend institutionalizing

234 Bangladesh Center for Advanced Studies (June 2011). Draft Environmental Impact Assessment. BAN: Bibiyana I and II Gas Power Project, 26-37.

independent third-party monitoring of air and water quality in Barapukuria.

It should be noted that this case only focuses on one specific project. The Government of Bangladesh and relevant departments are constantly working to improve policymaking and policy implementation mechanisms. The enterprises joining these projects are also paying more attention to the needs of local communities and to the role each project plays in the promotion of local economic and social development.

7.4 Fundamental considerations for the harmonization of standards along the Belt and Road, and the Capability Enhancement approach

Amid the wide range of general considerations guiding the harmonization of financing and investment standards, some stand out as fundamental. To the greatest extent possible, harmonization needs to lift standards across the BRI to a high level (rather than to the “lowest common denominator”), enabling the resulting standards to bolster SDG attainment. Such harmonization, if accepted and made consistently binding by all BRI partner countries, could inspire the setting of standards in countries beyond the BRI. This section identifies five fundamental considerations.

7.4.1 Fundamental considerations

Consideration 1: Respect partner countries’ right to development and national priorities

Economic development serves as an important foundation for national strength, social stability and the overall welfare of society. It is a key driver for reducing and eliminating poverty, which can both cause and result in greater environmental degradation, especially in developing countries. The harmonized BRI-wide investment and financing standards need to facilitate economic, social and environmental sustainability, as well as respect the right to development in lower-income countries. Specifically, they can contribute to achieving sustainable economic growth and realize greater economic benefits for all parts of society by complementing sound economic policies and measures to maintain social peace and protect the environment. To do so, support needs to be provided for the adoption of sustainable development ideas and models to alleviate social and environmental pressures caused by economic activities.

There is also a need to carefully consider each country’s domestic development goals, investment and legal environment, and their respective political systems, as well as their

religious traditions and cultural heritage. In addition to respecting local contexts and national planning, harmonized BRI-wide standards need to facilitate effective policy coordination among participating countries and globally, ensuring that the respective needs and goals of different parties are well expressed, assessed, and balanced.

Consideration 2: Align with the 2030 Agenda for Sustainable Development and comply with international conventions

Legally binding or not, international conventions and protocols represent generally accepted rules to which signatory countries agree to abide by, or practices and principles they follow when conducting certain activities. They play a pivotal role in highlighting global concerns, establishing common goals, and guiding economic and social activities. Aligning BRI-wide standards and rules with UN-led international conventions and protocols will help ensure that, when national and international rules do not match, the stringent rules are respected and applied. A detailed list of international conventions and declarations relevant to the BRI is presented in Annex 8.

Harmonized rules and standards across BRI partner countries should be closely aligned with the 2030 Agenda for Sustainable Development. The BRI and 2030 Agenda both propose long-term visions for sustainable economic, social, and environmental development, creating momentum for development and opportunities for synergy. The underlying rationale of the BRI, as well as its goals, can therefore be seen as complementary to SDG attainment. Harmonized BRI-wide standards, consequently, should also be built in resonance with the abovementioned three pillars of sustainable development. The eight principles on a proposed framework for BRI investment and financing standards introduced in the next chapter should also have clear linkages with the 2030 Agenda and reflect the sustainable development ambitions set by the international community.

Consideration 3: Refer to the common norms of international standards on investment and financing

The harmonization process should build on the common core of the standards of MDBs and NDBs, incorporating key elements of them that can be made compatible with national and local rules and standards. This will ensure the broad compatibility of harmonized BRI-wide standards while also identifying aspects where national standards need to improve to best contribute to greater inclusiveness of financing and development and to promote the welfare of all stakeholders.

Consideration 4: Ensure feasibility of implementation

In harmonizing BRI-wide standards, full consideration needs to be given to implementation feasibility. Existing definitional, coverage, and capacity gaps as well as differences in the level of stringency between national standards and international ones need to be identified, together with the feasibility and costs versus benefits of converging at the national or international level. This approach would ensure that support needs for attaining more ambitious standards are made clear from the early stages of the harmonization, and that resources can be assigned to help BRI partner countries consent to such standards, which would better serve their (and the world's) sustainable development needs.

Consideration 5: Apply BRI-wide standards equally

It is critical that harmonized BRI standards are (and are seen to be) fairly and equally applied and made binding in all BRI partner countries, including China, to avoid creating arbitrage opportunities across countries that could undermine sustainability. Clear and robust criteria are needed on sustainable development and on financing and investment risk mitigation and prevention to ensure that BRI projects not only meet short-term objectives of the investing entity and the host country, but also serve the long-term interest of all stakeholders. Vital to this is the availability of timely and relevant information on the terms of financing and on the specifications of the assets created in BRI projects to enable monitoring and evaluation of projects. The lessons learnt over the entire project cycle and the lifetime of the project asset created need to be fed back into the design and financing of new BRI projects to make them more effective, efficient and sustainable.

In short, BRI-related finance and investment should support infrastructure projects only if aligned with financial and social sustainability and the environmental protection strategies laid out by BRI participating countries as part of their commitment to sustainable development and to climate change mitigation. Harmonized standards could also crucially underpin legislation or general criteria for sustainability of large-scale infrastructure projects; and increased transfer of best-in-class technologies that rely on renewable energy sources and environmentally-friendly materials in the context of such projects, placing China and BRI partner countries firmly on a low-carbon development path.

This context offers China the opportunity to play a leading role in protecting the environment and mitigate climate change by not merely adopting and implementing rigorous, forward-looking rules and standards at the domestic level, but also by introducing and respecting the same set of harmonized standards and rules valid across the BRI.

7.4.2 Practice in harmonizing standards: the Capability Enhancement approach

The path toward attaining harmonization of standards is also important. In general, the standardization process has either followed a “conditional” approach whereby financing is provided on condition that a set of standards designed and executed by an MDB are met, or a “deferential” approach whereby the project is expected to simply comply with host-country standards, without assessing those standards or the national capacity to enforce them. The weaknesses in both of these approaches have been clearly demonstrated in recent years. The “conditional” approach is often seen as imposing, and lacking a spirit of cooperation, and can lead to long delays in project implementation. On the other hand, the “deferential” approach can be costly—notably by giving rise to sizable cost overruns—especially when the host country lacks the capability to enforce its own standards, or lacks them altogether. Unintended consequences to host countries and communities under either approach implemented rigidly can accentuate social and environmental conflict and also trigger reputational risks for the financier. Alternative approaches to the application of standards need to be considered.

The capability enhancement approach is a critical instrument to help the harmonization process move along in the direction of agreeing on, installing and enforcing best-practice standards in all BRI partner countries. In case a capacity gap precluding the implementation of SDG-conforming or otherwise mutually desired standards is identified—in terms of human or institutional capacities—then funds would be needed to bridge this gap in a lasting manner.

Applied by some NDBs and by South-South MDBs, the capability enhancement approach was originally defined as allowing a financing body to bring its own set of standards while taking into account host country standards in a cooperative manner. The development bank examined the extent to which host country standards met the bank’s own standards, and worked with the host country to ensure that a particular project was in compliance with local laws and norms. If country-system standards and capabilities were deemed to be inadequate relative to sustainable development needs of the country or to the financier’s standards, then the development bank provided technical assistance and financial support for the borrower country to improve the latter’s standards and for the project, in turn, to meet the development bank’s.²³⁵

Some NDBs, such as KfW, and some MDBs, such as the Development Bank of Latin America (CAF), are more “capabiliby enhancing” than others. These institutions recognize that projects have many actors—bank financiers, local and foreign firms, local and foreign

235 Gallagher, K. P., and Yuan, F. (2017). Standardizing sustainable development: a comparison of development banks in Latin America. *Journal of Environment and Development*, 26(3), 243-271.

governments, workers, etc.—with very different capabilities to meet a given standard. In the BRI context, it is important to note that Chinese standards would in some cases be more stringent than those found in a particular host country, such as Bangladesh. The introduction of a capability enhancing approach would therefore require China to work with some host country actors to enable them to meet more stringent standards. In countries where social and environmental standards are relatively more stringent than in China, the Chinese standards would be the ones in need of further enhancement. These two examples highlight an inclusive process for harmonization that would need to be put in place that examines the standards of development banks, host countries, and globally inspired standards; and would fund and enable the development bank, host country officials and foreign contractors to work together to align all parties to a set of standards and oversee implementation accordingly.

Some South-South development banks like the Caribbean Development Bank (CaDB) are already adopting an approach similar to “capability enhancing” that is flexible with respect to effectively incorporating standards into the project cycle. As Box 7.1 shows, CaDB takes a largely deferential approach to host country standards but also brings in some international standards. Moreover, if CaDB determines that the borrowing country is lacking capacity to enforce its own standards for the project, CaDB provides technical and sometimes financial assistance to upgrade the performance of the project and build capacity in the host state.

Box 7.1 CaDB’s Approach to Applying Loan Standards

All operation activities of the Caribbean Development Bank must comply with the ESRP directives and with other relevant World Bank policies and operational guidelines. Projects are also required to demonstrate compliance with the Borrower’s national legislation and regulations for environment and social requirements, pollution abatement and control, and health and safety issues.

If an appropriate legislative or regulatory framework is weak or absent, the Bank will work with the Borrower to determine the most appropriate requirements to be used given the nature of the project, the national context and internationally accepted norms and practices. CDB will assist in strengthening BMC’s capacity to manage environment and social issues, either through discrete technical assistance or the inclusion of specific capacity building components in the design of programs or projects.²³⁶

236 Gallagher, K. P., and Yuan, F. (2017). Standardizing sustainable development: a comparison of development banks in Latin America. *Journal of Environment and Development*, 26(3), 243–271.

Regarding DSAs, there is no one-size-fits-all approach to this task. The main idea of IMF-World Bank DSAs—that technical specialists examine in a structured way low-income and middle-income countries’ debt and debt service obligations—is a very useful starting point for identifying common or shared standards for DSAs for the BRI.²³⁷ In particular, a proper DSA needs to analyse the country’s projected debt and debt service burden over the coming 20 years and its vulnerability to external and policy shocks, assessment of the risk of external debt distress in that time, based on indicative debt burden thresholds that depend on the quality of the country’s policies and institutions, and recommendations for a borrowing (and lending) strategy that limits the risk of debt distress.²³⁸ All these need to incorporate contingent liabilities and constraints imposed by future income streams committed as loan collateral. Another key element of the World Bank-IMF DSF that could serve as a foundation for DSA standards for the BRI would be to have differentiated DSFs/DSAs for middle-income versus low-income countries owing to disparate levels of access to international financial markets. But the national context—such as debt service history, and the level of debt service obligations the country’s budget is able to tolerate, given expected volatility in Gross National Income and in fiscal space—also needs to be taken into account. Very importantly, there is a need for using a development perspective to evaluate debt issues and debt sustainability by taking into account the purpose of debt and national development prospects. At the 2nd Belt and Road Forum (BRF) for International Cooperation, the Ministry of Finance, with reference to the World Bank-IMF DSF framework and the characteristics of Belt and Road partner countries, compiled and released the Debt Sustainability Analysis Framework for the Belt and Road, and obtained the attention and recognition of all parties involved.

For the BRI to be successful along the lines discussed in the first two sections of this chapter, a capability enhancing approach could be adopted to help compare and align host country and investing country standards with a common set of BRI standards (which would also build in forward-looking considerations to ensure provision of an adequate level of global public goods). When either a host country or a foreign lender/investor lacks the capacity to meet a BRI-wide standard, a BRI entity would assess where the gaps in their respective capabilities lie and devise a package of capability-enhancing instruments, including training, financial support, and monitoring assistance. The BRI entity would then partner with the host government to enable the latter to adhere to standards shared by all BRI participating countries. This, of course, would require assigning some funds to cover the costs of this

237 World Bank (2018, December 11), Debt Sustainability Analysis.

238 Ibid.

approach—but the benefits accruing to all BRI partner countries would far outweigh these costs, making this course of action optimal from the point of view of BRI partner countries (including China) as a group.

In light of the approach, government agencies and financial institutions could work together to form a capability assessment unit for each new project along the Belt and Road, which could:

- Assess the extent to which host country standards align with BRI standards that are based on the best-practice norms;
- Defer to the host country on standards that are already aligned with best-practice standards, but work with the host country to boost implementation, compliance and monitoring capability on other ones;
- Identify which host countries lack the capabilities to implement standards, and which ones lack standards altogether, relative to those of the designated BRI entity;
- Work with host countries and foreign investors/companies to enhance the institutional and human resource capabilities of these actors to meet BRI-wide standards.

Efforts to enhance capabilities may come in the form of technical support and monitoring, or modest grant financing to host country entities or Chinese companies. This approach could help ensure partner country ownership in applying and enforcing the BRI-wide standards in line with China’s core standards or SDG-conforming ones. At the same time, it would allow room for the development of a more inclusive, cooperative, capability enhancing approach that could substitute practices received with limited enthusiasm, such as imposing conditionality or outsourcing due diligence altogether.

Harmonizing BRI investment and financing standards is aimed at promoting global cooperation, relieving constraints on the efficiency of capital flows into development, and providing key momentum for SDG attainment. Given these objectives, the last chapter of this report outlines a set of principles that can help the BRI put in place a set of harmonized and “capability enhancing” standards in a way that minimizes risk, maximizes benefits, and could strengthen the legitimacy of the BRI. These principles will help ensure that future harmonized standards are high quality and forward-looking while still feasible, and are based on comprehensive considerations of regional differences and national gaps.

Chapter 8 Summary and key recommendations for formulating the framework of investment and financing standards along the Belt and Road

This report has demonstrated that the Belt and Road Initiative has made significant achievements in the first six years since its inception. In a relatively short period of time, the initiative has mobilized billions of dollars toward infrastructure, integration, and connectivity, helping meet the infrastructure needs of BRI partner countries and contributing to global economic growth. The report has also highlighted that the appealing opportunities stemming from such a large-scale and rapid process of resource mobilization have also brought with them several challenges and risks.

Those risks are common to all development finance and investment, and a number of tools have been created over the years to manage them. This report has identified a core set of norms and standards that development finance institutions are employing at present to ensure the sustainability of their financing and investment. The application of these standards has gained further impetus since 2015 from the global commitments to the SDGs and the Paris Agreement. These two critically important agendas will only be realized if strong action is taken to more closely align global finance and investment criteria with the principles of sustainable development. Given the scale and scope of the BRI, it markedly impacts global flows. Thus, the modalities of BRI flows are critical on a global scale, elevating the importance of the standards guiding them.

This final chapter builds on the analysis and insights described in earlier parts of the report. It recommends a set of eight Principles that—taken together—lay the foundation for devising a suitable framework for investment and financing along the Belt and Road that bolsters sustainable development. The list includes the common wisdom that international development institutions have acquired over decades of experience in development finance, as well as a forward-looking approach that protects against foreseeable mounting risks. The Principles also emphasize the need to balance the existing context of participating countries with the need to implement stringent standards that ensure the BRI's alignment to the SDGs. Each Principle presented includes several specific policy recommendations regarding crucial aspects of calibration of the BRI toward the SDGs.

Principle 1: Respecting BRI partner countries' existing constraints and legal setting, harmonize environmental assessment standards in line with the United Nations' environmental requirements for sustainable development.

The environmental protection principle is considered a priority of the BRI's Investment and Financing Standards Framework. This principle encourages all stakeholders to embrace the “green” development concept, respect natural resource endowments, adopt sustainable development laws and regulations, strengthen environmental capacities, and harmonize management mechanisms. This principle encourages stakeholders to mainstream environmental considerations in the development of the BRI and promotes sustainable economic growth in partner countries. It involves the following key aspects:

- **Harmonize the definition of “green” investment along the Belt and Road.** A harmonized definition of “green” can help stakeholders efficiently allocate capital for environmentally sustainable projects, enabling them to make well-informed decisions for the development of a sustainable BRI.

- **Mainstream environmental sustainability in all BRI projects.** Harmonize environmental assessment and management systems and set up a comprehensive governance system for all stakeholders engaged in the BRI. Screen, evaluate, monitor, and disclose environmental risk factors in the design phase of the project and provide financial institutions with binding environmental guidelines to avoid or mitigate potential liabilities deriving from climate change and other environmental risks.

- **Promote organizational capacity and commitment.** Strengthen capacity development of stakeholders in BRI partner countries to support the mainstreaming of environmental sustainability in all BRI projects.

- **Develop an early dialogue mechanism for all stakeholders.** Encourage actors in BRI partner countries to engage in effective two-way consultations, green investments, and comply with international environmental conventions, and respect national and regional requirements on climate change. Ensure consultation and communication with stakeholders are carried out from the initial stage of the project, and leave enough time for necessary adjustments on the basis of feedback received.

- **Ensure biodiversity conservation.** Promote the protection and restoration of environmental systems, preserve biodiversity and protect against alien species in ecosystems,

manage forests sustainably, strengthen the protection of the marine environment, and build ecological security barriers.

- **Strengthen pollution prevention and pollution management measures** to improve air, water and land quality and prevent the catastrophic impact of climate change. Promote shadow carbon pricing, carbon permit trading and carbon taxes—using the fiscal space created to facilitate the transition to a low-carbon BRI and to support renewable energy.

- **Ensure emergency preparedness.** Identify measures to address emerging needs and constraints in the BRI partner country at an early stage of each project.

- **Promote the incorporation of environmental, social, and governance aspects into the decision-making process of the private sector.** Increase the engagement of the private sector for SDGs attainment, adhere to international environmental conventions and promote the use of independent third-party supervision and evaluations. Encourage the private sector to engage in research and development in the field of ecological and environmental protection.

- **Promote the financing of green investments.** Promote policy actions in BRI partner countries to incentivize capital to finance green projects such as low-emission, environmentally friendly and climate resilient projects. Put forward appropriate preferential policies²³⁹ to encourage the private sector to implement responsible business practices throughout the project's life-cycle.

- **Promote international exchanges, communication and cooperation among BRI partner countries on environmental issues.** Strengthen communication and policy coordination in critical areas such as pollution prevention, environmental governance, biodiversity conservation, and green growth.

Principle 2: Support shared prosperity and promote employment in participating countries to support poverty alleviation and balanced development

The BRI aims to strengthen the economic and social development of BRI partner countries and improve the livelihoods of their populations. The long-term objective of

239 Ref: The Policy Framework for Investment of the Organization for Economic Cooperation and Development sets out Responsible Business Conduct guidelines for multinational enterprises. These include provisions on information disclosure, human rights, labour, environment, revenue, anti-commercial bribery, consumer rights, competition policy and other responsible business practices.

the Initiative is to promote economic growth, foster employment, alleviate and eradicate poverty, guarantee equitable benefit sharing (win-win cooperation), allow countries to fulfil their development aspirations, improve the livelihoods of local populations (especially women, youth, and vulnerable groups) and to reduce inequality, thereby supporting global SDG attainment. Standards and procedures are needed for project selection, design and implementation as consistent as possible with these goals, by ensuring decent working conditions, avoiding negative impacts for vulnerable groups and putting compensation mechanisms in place. Specific recommendations include:

- **Reduce inequality and promote inclusive economic growth.** Support social cohesion and an inclusive development and economic growth in BRI partner countries. Promote productive employment to increase opportunities for income generation.

- **Target efforts to increase growth, specifically among poor and vulnerable populations and promote pro-poor growth. Promote balanced rural and urban development.** Revitalize rural areas and—constructively aligning with ongoing urbanization trends—support the comprehensive and coordinated development of both urban and rural areas in order to reduce the rural-urban income gap.

- **Ensure safe and decent conditions for workers.** Ensure safe and decent labour conditions for workers in accordance with national laws and regulations of BRI partner countries to increase the development benefits brought by BRI projects. Encourage transparency and communication with workers by informing them of their working conditions at the start of their employment. Child and forced labour will be avoided in all projects across the BRI.

- **Ensure health and safety of workers and population involved in or affected by BRI projects.** Develop procedures for a safe working environment. Guarantee the safety and security of workers and populations exposed to BRI projects by keeping workplaces, machinery, equipment and processes safe and avoiding the exposure of workers to health risks.

- **Establish effective dispute and conflict resolution mechanisms.** Ensure that workers are able to raise concerns regarding the workplace and their working conditions, and for transparently managing the measures taken in response. Develop measures to ensure all workers are granted access to a grievance mechanism.

- **Incorporate gender equality, youth and disabilities considerations into project design and implementation.** Encourage the participation of women, youth, and vulnerable groups along the Belt and Road by avoiding any discriminatory practice. Devise capability-development mechanisms to increase the access of these groups to employment opportunities.

- **Avoid or minimize negative impacts for vulnerable communities.** Reduce economic inequality and work towards promoting inclusive economic growth not only by avoiding the negative impacts that BRI projects can have on vulnerable groups but also by enabling these groups to seize the opportunities that result from BRI projects.

- **Compensate vulnerable communities negatively affected.** Channel host country's financial resources into compensatory programs for populations negatively affected by BRI projects, with risk compensation mechanisms for populations in high-poverty areas.

- **Avoid involuntary resettlement.** Avoid economic, social and environmental risks stemming from involuntary resettlement by obtaining prior informed consent from affected populations. Where involuntary resettlement is unavoidable, develop and implement appropriate measures to mitigate the impacts of resettlement on displaced persons, such as providing resettlement assistance to affected populations.

- **Engage with indigenous peoples and formulate projects to avoid adverse impacts on indigenous peoples.** Promote projects that enhance opportunities for indigenous people and their participation in BRI projects. Encourage early consultation with indigenous people to improve project design and implementation and promote local support to projects.

- **Protect cultural heritage throughout the entire project life-cycle.** Consider the overall and project-specific risks and impacts of BRI projects on cultural heritage. Protect cultural heritage from the negative impacts of BRI projects and support its preservation as an integral part of the identities and traditions of local populations. Promote early consultations with stakeholders to identify and protect cultural heritage.

Principle 3: Promote strategic alignment with national development priorities and plans and ensure economic and social benefits of projects

The BRI encourages openness and inclusiveness for “win-win” cooperation, and strategic alignment of BRI projects with the sustainable development needs of partner countries while also promoting consistency with their macroeconomic characteristics and development stage. There is no one-size-fits-all approach for the harmonization of standards along the Belt and Road. Instead, these will need to consider the existing context of partner countries, their institutional and human capacities, and promote the implementation of the highest available standards, providing technical assistance and financial resources when needed. This approach allows for the attainment of harmonization of best-practice standards,

also enabling partner countries to implement standards in line with the future expected (rather than current) development levels of partner countries. In particular, the recommendations are:

- **Encourage global coordination to move away from conditional funding in order to improve the efficiency of the funding and ensure alignment with partner countries' needs and development goals.** Align projects with the national needs and development goals of partner countries, contributing to a substantial improvement in the effectiveness and efficiency of development financing and providing a critical impetus in ensuring the social and economic benefits of projects. Enable the use of existing country systems, including channelling funds through the national budget, whenever possible.

- **Support local development and respect local contexts.** Respect and value the process of development, enhance the local capabilities and self-sufficiency of partner countries. Provide capacity-building for partner countries: training, policy seminars, and in-country expert technical assistance to support countries' efforts to increase their revenues from tax collection, create employment opportunities and attract capital for investment. Provide early technical assistance to address identified capacity-enhancing needs to enable the application and implementation of SDG-conforming harmonized standards for financing and investment along the Belt and Road.

- **Promote BRI-wide policy coordination and resource mobilization.** Encourage BRI partner country governments to devise coordinated BRI-wide policies and participating organizations to coordinate stakeholders in BRI projects to align the BRI with the 2030 Agenda and the low-carbon priorities included in BRI partner countries' Nationally Determined Contributions (NDCs) under the Paris Agreement. Encourage standards calling for conducive regulatory changes and increased financing of projects that are aligned with sustainable development and inclusive growth. Secure funding to ensure that partner countries receive support to apply stringent standards along the Belt and Road for the promotion of sustainable development when these differ from the ones currently in place.

- **Align financial allocations of BRI partner countries with their national planning.** Promote the study of successful sustainable development cases and replicable international development experiences to guide medium- and long-term national and regional development plans and strategies. Support the development of feasible and inclusive financing plans for BRI projects, and encourage public investments that will maximize the economic and social benefits for partner countries.

- **Support sound macroeconomic policies in BRI partner countries and strengthen communication and coordination among them.** Promote adopting stability-inducing macroeconomic policies in BRI partner countries, ensure transparent project

implementation and hedge against negative spill-over effects. Establish clear and transparent communication among BRI partner countries and engaged stakeholders. Encourage international organizations to support partner countries by conducting country needs assessments to ensure early and accurate identification of needs.

- **Establish a strategic framework for public investments.** Carefully consider the existing priorities of partner countries and the need for greater provision of global public goods. In BRI projects, develop medium- and long-term policy and strategy frameworks for public investment, establish a standardized mechanism for revision of project plans and allocation of national resources to promote SDG attainment. These frameworks need to include: a comprehensive assessment and monitoring system that involves governments, industries, and third parties; a full life-cycle management system with clearly defined responsibilities for relevant stakeholders; and an assessment of local capacity to ensure effective project implementation.

- **Establish mechanisms to ensure institutional coordination in partner countries.** Set up joint institutions to promote national coordination at all administrative levels. Ensure nationally coordinated public investments, carry out coordinated management of projects, and establish effective governance systems for the sustainable and inclusive development of partner countries.

Principle 4: Harmonize programmes and management systems for debt sustainability assessments in BRI partner countries; strengthen debt management to ensure that it is carried out in an effective manner

BRI partner countries need to strike the right balance between their financing needs and their debt sustainability, at the same time implementing effective debt sustainability management and assessment systems. Several key factors need to be considered when assessing debt sustainability, including already existing sovereign debt service obligations (duly considering the potential impact of contingent liabilities that may materialize as a result of called government guarantees), the overall debt structure, and debt service profile, and debt repayment situation, and the likely ability of the proposed individual project to generate sufficient financial returns to cover its full running costs and the debt service obligations created. This will help evaluate the country's debt sustainability level more objectively and

highlight the positive economic impacts of debt financing for productive investment. Specific recommendations include:

- **Develop debt management capacities of BRI partner countries.** Develop the capabilities of BRI partner to develop and implement legislation and policies on national debt management and governance. Raise awareness and knowledge of debt sustainability assessment processes across BRI partner countries. Encourage international agencies to continuously support BRI partner countries and provide them with technical assistance to optimize their financing options, strengthen their resilience to shocks, and safeguard their use of public funds.

- **Promote lending under the BRI that is fully oriented toward bolstering sustainable growth.** Assess the relationship between incurred debt and its expected impact on economic growth, and factor into debt management decisions a realistic assessment of the extent to which it is conducive to the country's long-term, sustainable economic development.

- **Set up management frameworks that clearly define procedures and all parties' responsibilities when contracting or guaranteeing new debt.** Establish a rigorous market-based auditing system when debt is contracted or guaranteed that sets out the responsibilities of all parties and procedures for identifying risks and resolving problems that may arise.

- **Consider existing domestic and foreign debt, contingent liabilities, and private sector debt of BRI partner countries when assessing debt sustainability, as well as the expected financial return of the project being considered.** Both at the individual loan level and at the aggregate level, debt sustainability assessments should take into account both domestic and foreign debt, covering total sovereign debt service obligations, as well as sovereign contingent liabilities, such as those arising from government guarantees. Assessment of the project's expected financial returns should be realistic and deemed sufficient to cover the full operating and debt service costs.

- **Disclose the terms and conditions of BRI financing without breaking national laws and commercial confidentiality.** Transparency will be maintained, to enable accurate overall assessment of borrowing countries' debt sustainability. This will also support mutual trust and increase the legitimacy of the BRI.

- **Establish an inclusive BRI debt sustainability analysis framework.** Establish a BRI debt sustainability analysis framework that builds on and strengthens existing international assessment systems and supports the assessment of the debt carrying capacity of partner countries. In the analysis, encourage the inclusion not only of the country's ability to pay but also the impact that debt repayment will have on the country's sustainable

development.

- **Ensure the borrower's autonomy to decide over its development priorities.**

Respect and value the right to sustainable development of partner countries, strive to enhance local capabilities and self-sufficiency, introduce capacity-building programs for partner countries to enhance their human capital and create tax revenue, employment, and investment opportunities.

Principle 5: Ensure full-cycle sustainability of the financing and investment for BRI projects, and establish an effective, multi-level financial and investment system.

BRI infrastructure projects are typically long-term and capital intensive. For these to be sustainable, they need to adhere to principles such as sustainable returns, efficiency, and controlled risks. They should be financed through a diversified portfolio of instruments offering overall terms that are fully compatible with the financial returns expected to be generated to ensure financial sustainability over the full project life-cycle. To this end, the recommendations are:

- **Improve the efficiency of BRI project funding.** Reduce project costs by taking into account the characteristics of each project. Evaluate financing options according to best practices that ensure economic, social and environmental sustainability. Encourage and promote knowledge sharing while providing technical assistance and financial support to develop the local capacities of BRI partner countries. Consider steps toward creating a BRI asset class that would facilitate international private financing flows to supplement existing sources of financing for the BRI.

- **Encourage increased diversification of financing sources along the Belt and Road.** Adhere to the principle of productive investment and risk sharing. Diversify BRI financing sources and mechanisms to promote sustainable development, leveraging private capital. Financing instruments to consider include international syndicated lending, green bonds, infrastructure asset securitization products, PPPs, and private or public sector equity.

- **Encourage collaboration of the national financial institutions of partner countries.** Encourage trilateral cooperation among relevant countries and organizations; design BRI cooperation standards with reference to the experiences of leading international financing and development assistance arrangements; share information among parties and

clearly define responsibilities and implementation plans through the drafting of joint roadmaps.

- **Enhance the capacity of BRI partner countries to build a business environment conducive to attracting and leveraging private capital.** Establish a cross-border financial cooperation mechanism for infrastructure and information and communications technology connectivity; deepen financial regulatory communication and dialogues. Strengthen mutual trust among financial regulatory agencies. Promote cooperation among multilateral financial institutions across various fields.

Principle 6: Adhere to openness and transparency in procurement, standardizing, and internationalizing the flow of goods

A standardized harmonized procurement system could significantly contribute to ensuring the fairness and transparency of procurement processes. Harmonized procurement standards adopting efficient, fair and transparent procurement practices can contribute to reducing corruption, ensuring the successful completion of projects, and optimizing the projects' impact and the efficiency of using financial resources. Standards and procedures should take into account factors such as the domestic context and level of development of partner countries, and the financing mechanism of the project that is being tendered. Specific recommendations include:

- **Ensure the transparent disclosure of critical information and encourage parties to voluntarily adopt principles conducive to this.** Publicly disclose information regarding the bidding process through designated channels, including informing about the requirements of the project for which bids are invited, the winning bidder, the ability to fulfil the requirements of the project and the steps of the evaluation process applied. Encourage parties to adopt global initiatives that allow for a coordinated monitoring of environmental, social and governance reporting.

- **Include provisions for the fight against corruption, bribery, and conflicts of interest.** Define clear provisions and procedures to prevent corruption, bribery and conflicts of interest in the procurement process and throughout the entire project life-cycle. Set high standards of conduct for public officials, especially for the identification and management of conflicts of interest. Set up effective mechanisms for the reporting of misconduct.

- **Ensure open and equal procurement processes for all qualified domestic and foreign BRI bidders.** Ensure fair competition by implementing transparent and open procurement processes. Safeguard the quality of projects and encourage the best value for

money. Apply a standardized procurement process open to all bidders that promotes open competition, non-discrimination and objective evaluation.

- **Encourage participation of local bidders in BRI projects and provide support for borrowing countries to develop their industries and consulting services.** Create effective channels for the participation of the private sector through nationally accepted forms of PPP, and level the playing field for public and private, national and international, and small and large enterprises.

- **Promote the use of national procurement policies.** Enable BRI partner countries to implement national procurement policies—an important tool to achieve their economic and social development objectives and contribute to the development of the local private sector, creating employment opportunities and increasing access to income generating activities.

Principle 7: Adhere to general international financial risk management requirements and establish a framework for the identification and reduction of risk throughout the entire project

BRI participating countries have different economic, political, legal and regional characteristics, as well as different cultures and traditions. This increases the exposure of BRI projects to further potential risks. A strengthened framework for risk identification and assessment and full life-cycle risk management can assist investors and borrowers in mitigating and diversifying risks. Key recommendations in this regard include the following.

- **Establish a categorization system for risks.** Identify from an early stage of the project environmental, social, financial sustainability, political and other risks for partner countries, and also those for China.

- **Support the early establishment of a risk management framework.** Establish risk management frameworks from an early stage of the project to maximize the benefits of BRI-supported sustainable investment for China, host countries and the global community.

- **Ensure that risk management frameworks consider all critical aspects, including security, political, governance, macroeconomic, financial and other factors.** Incorporate risk identification, assessment, management and control processes into the operations of all organizations engaged in project design and finance. Ensure that risk management frameworks allow comparisons within and across countries, and over time.

- **Develop a reasonable and practically applicable risk management toolkit.**

Integrate the specific features of BRI project risks into the existing risk assessment frameworks of international rating agencies. Explore the idea of setting up a BRI-specific risk assessment model that includes a full life-cycle risk management framework.

- **Increase the accountability of borrowers based on transparency.** Borrowers should be expected to adhere to the principle of business integrity and transparency to reduce the risks that stem from unfair competition, failure to comply with socially and environmentally responsible practices or other malpractices.

- **Establish a monitoring and accountability mechanism for the conduct of investors along the Belt and Road.** A mechanism is needed to hold those guilty of misconduct accountable. This will send a positive signal about the way the BRI is implemented.

- **Carry out cross-border financial regulation and supervision to ensure financial safety.** Encourage coordinated cross-border financial regulation and supervision along the Belt and Road to ensure stakeholders comply with rules and their responsibilities. Encourage international organizations to support BRI partner countries in developing their capacities in financial risk management, compliance with global standards for anti-money laundering and counter-terrorism financing, and therefore contribute to creating a fair, efficient, and stable environment for financing.

Principle 8: Implement rigorous and objective project evaluation procedures through the establishment of an evaluation mechanism that monitors progress throughout the project financing and implementation process.

A comprehensive full cycle performance evaluation mechanism is essential for the implementation of harmonized standards and the alignment of the BRI with the SDGs and the Paris Agreement. It will bolster the credibility of the BRI as an initiative that is promoting sustainable development in partner countries and globally, and it will strengthen investment transparency. These actions will also make a great contribution to the capacity-building process required to build an environment that enables high-quality investments. Recommendations in this area include the following.

- **Establish a comprehensive performance evaluation mechanism.** Support the establishment of a comprehensive full life-cycle performance evaluation mechanism that

promotes best practices and set up an information and experience sharing platform for BRI partner countries. These will ensure that standards are included in projects from the decision-making stage and compliance during the implementation phase. They will also increase the resilience of projects to unforeseen shocks.

- **Maintain ongoing project reporting, monitoring and evaluation.** Monitor on an ongoing basis, report against defined indicators, baselines, and targets as well as the requirements included in the legal agreement. The depth of reporting and monitoring of environmental and social performance should be proportionate to the expected risks and impacts of the project. It is critical to establish post-project evaluation systems that enable learning, with results feeding into future project design.

- **Encourage the optimal delivery of projects based on rigorous external and self-assessments.** Promote objective and independent project quality evaluation and compliance with standards. Ensure the allocation of funds for carrying out performance evaluation as part of the project's life-cycle. Define binding principles that can be assessed, encourage stakeholders to strengthen self-assessment practices, and carry out independent and objective external evaluations. These can serve as an incentive for lenders to support projects.

- **Conduct effective participatory assessments and evaluations.** Ensure that project performance evaluation is managed and reviewed by industry-specific regulatory agencies or relevant departments stipulated in the contract, and that participatory assessments are included. Relevant stakeholders should be expected to collaborate on performance evaluation. Promote the sharing of resources (data, information) among them throughout the project life-cycle to maximize the transparency and effectiveness of the process.

- **Implement environmental, social and governance standards throughout the project life-cycle and promote cross-sectoral coordination to capture all dimensions of project activities.** Promote cooperation among stakeholders and government departments in partner countries to effectively and promptly respond to emerging challenges in large-scale BRI infrastructure projects, particularly those relating to environmental, social and governance aspects. Introduce an incentive system to encourage stakeholders to comply with sustainability norms. Clearly define stakeholder responsibilities and establish an accountability mechanism that allows for the prompt notification of violations to relevant authorities.

- **Promote information and experience sharing among BRI partner countries to encourage best practice.** Rigorous project evaluations will generate a great deal of valuable information regarding design and implementation of projects that promote

sustainable development. Encourage collaboration among BRI partner countries and support the establishment of knowledge sharing platforms to foster sharing of that information and experience, to facilitate learning and to promote best practices to enhance the attractiveness of the BRI to investors.

Conclusion

This report encourages the adoption of harmonized financing and investment standards along the Belt and Road as a key tool to integrate and manage the economic, environmental and social risks of BRI projects focused on connectivity in a general sense. These standards cannot be taken “off the shelf”. They need to be developed in coordination with BRI partner countries over a period of time, taking guidance from SDGs, the distilled wisdom from international practice, from China’s own vast development experience, and also from forward-looking considerations. This chapter provided a set of Principles to guide this process that can lead to harmonized standards that can safeguard fair and equitable treatment of all participating countries with the same processes and implementation requirements for all.

Given the scale and scope of the Belt and Road Initiative, agreeing on, applying, and implementing such harmonized standards in China and all along the Belt and Road can critically contribute to sustainable development, in particular, to the attainment of the SDGs. The large number of countries that would sign up for standards compatible with global ones—many of which are voluntary and thus so far less taken up—could bring the world close to a tipping point in applying lending and investment standards that firmly promote sustainable development.

The eight Principles set out above reflect the fundamental considerations for harmonized standards along the Belt and Road that (i) respect partner countries’ national priorities and conditions; (ii) Align with the 2030 Agenda for Sustainable Development and comply with international conventions; (iii) refer to the common core of international standards on investment and financing; (iv) ensure feasibility of implementation, and (v) apply BRI-wide standards equally.

In the course of finalizing and implementing these harmonized standards there will be frequent need to reconcile differences in existing practices among BRI participants. This challenge is also an opportunity. Operationalization of these principles will require further consultations within and among all BRI stakeholders, including China and partner countries. In addition to serving as a means to build a shared understanding of and commitment to sustainable development across diverse BRI partner countries, they can strengthen the

unity and identity of the BRI as a major source of support to SDG achievement, and further underscore China's positive role in that global effort. The capability-enhancing approach to standard setting that this report proposes highlights the need to choose the higher, tougher standards more conducive for facilitating sustainable development and support their consistent implementation when these differences are encountered. The report also recommends matching these with concrete enabling support for strengthening related national capacities in the participating countries.

Importantly, this would be consistent with two core principles of Chinese development finance: respect for the specific conditions of BRI partner countries, and the desire for development finance to not only fund projects, but to also promote development more broadly. The capability-enhancing approach allows for some flexibility in the details of standards in different settings, but ensures that the overall goals of economically, environmentally and socially sustainable development are consistently advanced—to the benefit of China, BRI partner countries, and the global community.

*** Annex 1 Summary and Mapping of Environmental and Social Frameworks of Multilateral Institutions**

This Annex provides a detailed description of the World Bank's Environmental and Social Framework, then discusses the Framework of other MDBs in a much more succinct way, given the significant overlaps among them.

WB-Environmental and Social Framework (ESF)

The World Bank Safeguard Policies²⁴⁰ provide a mechanism to address environmental and social issues throughout the project life-cycle.²⁴¹ They provide a framework for consultation with communities and for public disclosure.²⁴²

The ESF was developed in August 2016 to provide a coherent and consistent set of requirements.²⁴³ The ESF defines policy statements, borrower requirements, and procedural phases. Although it is mandatory for all WB investment projects since October 2018, some of the running projects still apply the Safeguard Policies.²⁴⁴

The new ESF has made important progress in transparency and accountability, non-discrimination and public participation, and harmonizes the WB's environmental and social policies with those of other multilateral development institutions. It represents a shift from a system based on the Bank's safeguards to a system focused on implementing the borrower's

* In order to provide access to a wider variety of original sources, we have included more information in the English version of the report's Annex for ease of reference.

240 World Bank (2005, July). Chapter 1, Table A1, Environmental and social safeguard policies-policy objectives and operational principles.

241 Comprising 10 operational policies since 1997 (6 environmental, 2 social, and 2 legal policies) to support compliance during project preparation and implementation. These were reviewed and updated in 2012 to meet borrowers' new and heterogeneous needs in a world with new social and environmental challenges.

242 World Bank. Environmental and social policies.

243 World Bank (2005, July). Chapter 1, Table A1, Environmental and social safeguard policies-policy objectives and operational principles, 57.

244 World Bank. Environmental and social policies.

own laws and policies. It promotes the borrower's ownership of projects and strengthens capacity and institutions in the long term, eases the upward harmonization of laws, policies and standards, and provides opportunities for collaboration and learning.

The capacity to manage social and environmental risks and impacts varies across countries. To overcome this challenge, the ESF allows for Financial Intermediaries (FIs) to take charge of risk management, which has raised concerns regarding the process of consultation and engagement of local communities and through which affected population are granted compensation for harm.²⁴⁵

The ESF includes mandatory procedures for borrowers and non-mandatory advisory practices. It differentiates the Bank's and the borrower's obligations and is comprised of the following:

- Vision for Sustainable Development;
- Environmental and Social Policy for Investment Project Financing (IPF),²⁴⁶ which sets out the requirements that apply to the Bank;
- Bank Directive on Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups;²⁴⁷
- Non-mandatory Environmental and Social Standards²⁴⁸ that set out requirements that apply to the borrower, and to the project throughout its life-cycle, as follows:²⁴⁹

IDB-Environment and Safeguards Compliance

The IDB's Sustainability Framework (SF) reflects the Bank's mandate to reduce poverty and inequality and achieve sustainable growth in Latin America and the Caribbean. It includes sector strategies, sector frameworks and Safeguards Policies and Guidelines which follow best practices with a two-pronged approach to sustainability.

The safeguard policies have assigned guidelines for the following six areas:²⁵⁰ (i) Environment and Safeguards Compliance; (ii) Natural Disaster Risk Management; (iii) Involuntary Resettlement; (iv) Indigenous Peoples; (v) Gender Equality in Development; and (vi) Access to Information Policy.

245 Sinani, N. (2016, July 26). World Bank updated safeguards a missed opportunity to raise the bar for development policy. Huffington Post.

246 World Bank (2017). The World Bank Environmental and Social Framework.

247 World Bank. Policies and procedures.

248 World Bank. Environmental and Social Standards.

249 World Bank (2017). The World Bank Environmental and Social Framework.

250 Inter-American Development Bank. Safeguards and sustainability.

ADB-Safeguard Policy Statement

The ADB safeguard policies include the Involuntary Resettlement Policy (1995), the Policy on Indigenous Peoples (1998), and the Environment Policy (2002). In 2010, the updated Safeguard Policy Statement became effective. It consolidates the previous policies into a single policy framework that applies to all ADB-supported projects and their components, including investment projects financed by loans, grants, equity and/or guarantees. An Operations Manual contains sections covering the three areas.²⁵¹

The goal of the Safeguard Policy Statement (SPS) (see Table II) is to promote “the sustainability of project outcomes by protecting the environment and people from potential adverse impacts of projects.”²⁵²

Table I Extracts from ADB’s key safeguard areas and principles²⁵³

<i>KEY SAFEGUARD AREAS</i>	<i>PRINCIPLES & REQUIREMENTS</i>
<i>ENVIRONMENTAL SAFEGUARDS</i>	<ul style="list-style-type: none"> • Conduct an environmental assessment and prepare an environmental management plan (EMP); • Assess potential transboundary and global impacts, including climate change; • Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management; • Biodiversity protection and sustainable natural resources management; • Carry out meaningful consultation with affected people and facilitate their informed participation; • Do not implement project activities in areas of critical habitats; • Apply pollution prevention and control technologies and practices; • Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease; • Conserve physical cultural resources.

251 Asian Development Bank (2009, June). Safeguard policy statement.

252 Asian Development Bank (2013, October). Operations manual bank policies (BP).

253 Asian Development Bank (2009, June). Safeguard policy statement.

Table I (Continued)

<i>KEY SAFEGUARD AREAS</i>	PRINCIPLES & REQUIREMENTS
<i>INVOLUNTARY RESETTLEMENT SAFEGUARDS</i>	<p>Policy Principles:</p> <ul style="list-style-type: none"> • Improve, or at least restore, the livelihoods of all displaced persons; • Provide physically and economically displaced persons with needed assistance; • Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards; • Provide displaced persons without titles to land with resettlement assistance and compensation for loss of nonland assets; • Prepare and disclose a resettlement plan; • Pay compensation and provide other resettlement entitlements before physical or economic displacement. <p>Eligibility (three types of displaced persons): (i) Owners of land/assets with titles, (ii) Land users with customary claims and (iii) Occupants without titles or customary claims.</p>
<i>INDIGENOUS PEOPLES SAFEGUARDS</i>	<ul style="list-style-type: none"> • Undertake a culturally appropriate and gender-sensitive social impact assessment to assess potential project impacts, both positive and adverse, on Indigenous Peoples; • Ascertain the consent of affected Indigenous Peoples communities, if a project involves: <ul style="list-style-type: none"> ✓ Commercial development of cultural resources; ✓ Physical displacement from customary lands; ✓ Commercial development of natural resources within customary lands. • Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources; • If not possible, ensure affected Indigenous Peoples communities participate in design, implementation, monitoring and evaluation of management arrangements for such areas and natural resources; • Ensure equitable sharing of benefits; • Prepare and disclose an Indigenous People’s plan (IPP); • Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains.

There are several requirements common to all policy principles in all three areas:

- Project Screening;
- Impact Assessment;
- Planning / Management Plan (EMP, RP, IPP);
- Information Disclosure;
- Meaningful Consultations;
- Grievance Redress Mechanism;
- Monitoring and Reporting.

EBRD-Environmental and Social Policy (ESP)

The Environmental and Social Policy (ESP) outlines how EBRD addresses its projects' environmental and social impacts.²⁵⁴ All projects are structured to meet a set of ES Performance Requirements (PR).

EIB-Environmental and Social Standards

The EIB Statement on Environmental and Social Principles and Standards lays out the policies for environment and human well-being protection. The EIB relies to a large extent on its clients: borrowers and project promoters to achieve sustainability objectives.²⁵⁵ The standards emphasize their responsibilities regarding a project's social and environmental risks and impacts, which should be considered at the earliest stage possible. All projects financed by EIB must comply with national legislation and international conventions and agreements ratified by host countries and best international practice in assessing and managing environmental and social risks and impacts.

AIIB-Environmental and Social Framework

In 2016, the Asian Infrastructure Investment Bank (AIIB) adopted its own Environmental and Social Standards (ESS).²⁵⁶ Three mandatory ESS set out detailed requirements in the following areas: (i) Environmental and Social Assessment and Management; (ii) Involuntary Resettlement; and (iii) Indigenous Peoples Social Framework.

The ESS are part of the AIIB broader Environmental and Social Framework (ESF) that defines the Bank's vision statement regarding environmental and social sustainability and

254 European Bank for Reconstruction and Development (2014, May 7). Environmental and social policy.

255 European Investment Bank (2018, August 10). Environmental and Social Standards.

256 Basu, S. (2016, September 20-22). AIIB Environmental and Social Framework.

the role of AIIB in Asia’s sustainable development. The AIIB ESF includes the following elements in Figure I:²⁵⁷

Figure I AIIB ESF elements



Source: AIIB Environmental and Social Framework. Basu, S. (2016, September 20-22). DFI Social Experts Meeting hosted by ADB in Manila, Philippines.

AIIB publishes project descriptions including environmental and social assessments on its website. Since most of the early lending operations of AIIB were co-financed with other multilateral development banks (WB, ADB, EBRD), the assessments of those institutions were used. AIIB is in the process of building capacity to carry out its own assessments and support countries in building their respective capacities. AIIB places emphasis on the leading role of the client and does not have its own grievance mechanism. It provides technical and specialized advice and oversight to support its clients to integrate environmental and social considerations into projects.²⁵⁸

ESF Monitoring & Evaluation Mechanisms

WB-Environmental and Social Commitment Plan

The WB’s ESF is measured through a Monitoring & Evaluation Program that documents and assesses the delivery of the project outcomes relating to the ESF. The expected result is to strengthen sustainable outcomes, protect people and the environment, reinforce the institutional capacity of borrowers in environmental and social management good

257 Ibid.

258 Asian Infrastructure Investment Bank (2016, February). Environmental and Social Framework.

practice, and increase the efficiency and effectiveness of environmental and social risk management.²⁵⁹

The Environmental and Social Commitment Plan (ESCP) is the tool used by the WB to monitor and report on the progress of the ESS. It is agreed between the borrower and the WB and it facilitates the early identification of potential environmental and social risks and impacts, mitigation measures and actions required. The specific content of the ESCP is tailored to the scope and nature of a project, and in each case the project requirements and timeframes are outlined, focusing on aspects of the national framework. In particular, the ESCP defines the project's timeframe and assigns Key Performance Indicators (KPI) to help measure and assess its impact.

IDB-Environmental Assessment

The IDB Environmental Assessment (EA) is carried out by the borrower and IDB may advise and assist as required. The borrower produces an Environmental Impact Assessment report (EIA)²⁶⁰ that describes the project, and the Policy, Legal and Regulatory Framework outlines the different possible scenarios under which the project can evolve, the potential impacts associated to each scenario and the best ways to address them.

The EA starts at an early stage of project identification, where the purpose of the assessment is defined. The EA takes place through a consultative process with stakeholders and is required to share information in a timely manner to ensure informed opinions from affected actors are obtained.

The different scenarios contemplated in an EIA and identified at an early stage allow for several alternatives and their analysis to inform the decision making and to contemplate possible changes over time, which can mitigate their potential negative impacts. The EIA includes mitigation measures which must include the actions required to prevent or reduce potential negative environmental and social impacts identified earlier.

The EIA includes monitoring the borrower's activities and evaluating key environmental impacts caused by the project. It complies with the project's Environmental and Social Management Plan.

259 World Bank (2016, August 4). Review and update of the World Bank's safeguard policies. Environmental and Social Framework (proposed third draft).

260 Inter-American Development Bank (2007, May). Implementation guidelines for the environment and safeguards compliance policy. Sustainable Development Department Sector Strategy and Policy Paper Series. Washington, D.C.: Inter-American Development Bank.

ADB-Safeguards Assessment

ADB has an internal review and compliance monitoring system for its SPS that assesses performance at the bank and project level. The Bank monitors and evaluates its SPS against the objectives set in the policy.²⁶¹

ADB's SPS are divided into three key areas: environmental safeguards, involuntary resettlement safeguards and Indigenous Peoples safeguards. Integrated monitoring against these three areas are required for each project.

Environmental safeguards: The assessment of environmental issues starts at an early stage of the project preparation, where potential risks and impacts associated with the project are identified. Depending on the scale of the impacts identified, an EIA or an Initial Environmental Examination is done during the project cycle. The scope of the EIA is broader, with a report that identifies the baseline data, defines anticipated environmental impacts and mitigation measures, and provides an analysis of alternatives. The EIA also discusses consultation, participation and information disclosure, as well as grievance redress mechanisms.

Following the identification of impacts, the borrower prepares the EMP, where mitigation measures, monitoring and reporting requirements and procedures, capacity development and training measures, timing and cost estimates, and trackable performance indicators or targets need to be included. Progress and performance against the expected outcomes are tracked on a semi-annual basis (quarterly in the case of complex and sensitive projects). If necessary, the EMP leaves space for corrective actions.

Involuntary resettlement safeguards: In addition to the EIA report, the borrower prepares a Resettlement Plan (RP) that seeks to guarantee livelihoods and standards of living of affected, displaced and vulnerable people by improving those or at least restoring them to levels before the project. The RP must ensure that affected people are informed and consulted about their options and choices and provided with alternatives. The RP identifies a grievance mechanism, a resettlement budget and financing plan, institutional arrangements, and an implementation schedule together with resettlement indicators.

The monitoring reports of the RP are submitted semi-annually. They present progress in compensation payments and other resettlement activities and track the expected outcomes as well as a corrective action plan, if necessary. Project components with identified resettlement impacts will not be implemented until the RP has been presented and approved.

261 Asian Development Bank (2009, June). Safeguard policy statement.

Indigenous Peoples safeguards: When a project's Social Impact Assessment (SIA) identifies potential impacts for Indigenous Peoples, an Indigenous Peoples plan (IPP) is prepared with an associated budget and financing including for capacity building, grievance redress mechanisms and corrective actions. The borrower monitors the IPP on a semi-annual basis, with inspections and audits to verify requirements are being met and progress is made toward expected outcomes. The borrower is responsible for establishing conflict resolution mechanisms to address concerns, complaints and grievances on environmental, involuntary resettlement and social issues related to the project.

EBRD-Environmental and Social Policy (ESP)

EBRD borrowers/clients are responsible for monitoring the environmental and social performance of the project. They submit Annual Environmental and Social Reports on projects to be reviewed by EBRD, who may also carry out site visits to verify the assessment of the client.

EBRD reports on projects' environmental and social issues in the Project Summary Documents, which are then captured in an annual report on environmental and social sustainability. This report outlines EBRD environmental and social activities and the implementation of the ESP.

The Bank has established a Project Complaint Mechanism (PCM) to solve problems raised by local individuals and organizations. The PCM also serves as an accountability mechanism for the ESP and the Public Information Policy (PIP).

The PCM provides a channel for feedback from stakeholders who perceive harm from a Bank project, a means of raising complaints and seeking assistance with problem solving independently from banking operations. It can also be used by individuals or groups to file a complaint if they believe that the Bank has not complied with this Policy or project-specific components of the PIP.

EIB-Environmental and Social Management Plan

EIB promotes an integrated approach to the management of environmental and social impacts and risks by requiring Environmental and Social Management Plans (ESMP) that cover environmental and social impacts and risks, and the identified measures to be taken to address them adequately. The ESMP aims to enhance the positive impacts and opportunities to achieve additional environmental and social benefits, to avoid preventable negative impacts, and to mitigate and adequately compensate for those that cannot be prevented.

The ESMP needs to include appropriate qualitative and quantitative indicators to monitor the resources and responsibilities within the timeframe allocated for its implementation. It takes into account the consultation and engagement process with relevant stakeholders and suggests improvements to the project design to make sure the evolving needs and changes in circumstances of affected people and other project factors are considered.

AIIB-Environmental and Social Assessment

When a project identifies environmental and social risks and impacts, AIIB requires the borrower to prepare an environmental and social assessment identifying these risks and impacts and to design adequate measures to prevent, mitigate and offset or compensate for them when unavoidable. AIIB generally requires an integrated environmental and social assessment. However, in some cases countries' legislation and procedures require separate documents.

Involuntary resettlement and Indigenous People impacts, if necessary, are addressed in the social aspect of the assessment and complemented by a Resettlement Planning Framework and an Indigenous Peoples Planning Framework, respectively.

The Environmental and Social Assessment report includes a description and scope of the projects and its framework, an analysis of alternatives with baseline data, information on the consultation processes carried out and an evaluation of the risks and impacts identified, including an Environmental and Social Management Plan (ESMP) with monitoring, management and mitigating actions. The borrower must integrate the ESMP into the project's overall planning, design, budget and implementation timetable; and to include information disclosure and consultation provisions; capacity development and training requirements; and measurable outcomes and indicators.

The following comparative tables summarize the coverage of the main areas across the MDBs.

Table II Environmental and social impacts

ESS 1	WB	IDB	ADB	EBRD	EIB	AIIB
Environmental and social assessment (ESA)	✓	✓	✓	✓	✓	✓
Use of borrower's environmental and social framework	✓	✓	✓	–	–	✓
Risk categorization	✓	✓	✓	✓	–	✓

Table II (Continued)

ESS 1	WB	IDB	ADB	EBRD	EIB	AIIB
Environmental and Social Commitment Plan (ESCP)	✓	✓	✓	✓	✓	✓
Project monitoring and reporting	✓	✓	✓	✓	✓	✓
Stakeholder engagement and information disclosure	✓	✓	✓	–	✓	✓
Detailed breakdown of ESA and ESCP	✓	✓	✓	–	–	✓
Organizational capacity and commitment	✓	✓	✓	✓	✓	✓
Supply chain management	✓	✓	–	✓	✓	–
Emergency preparedness	✓	–	–	✓	✓	✓

Table III Labour and employment

ESS 2	WB	IDB*	ADB**	EBRD	EIB	AIIB
Direct workers and indirect workers	✓	–	–	✓	✓	✓
Labour management procedures	✓	–	–	✓	✓	✓
Terms of employment	✓	–	–	✓	✓	✓
Termination conditions	✓	–	–	✓	–	✓
Non-discrimination	✓	–	–	✓	✓	✓
Right to unionize	✓	–	–	✓	✓	✓
Child labour and forced labour	✓	–	–	✓	✓	✓
Occupational health and safety	✓	–	–	✓	✓	✓
Feedback on unsafe environments	✓	–	–	–	–	✓
Contracted workers and third parties	✓	–	–	✓	✓	–
Worker accommodation	✓***	–	–	✓	✓	–
Collective dismissals	–	–	–	✓	✓	–

*Although IDB has an Operational Policy on Labour sector, it does not address labour and employment considerations in the Environment and Safeguards compliance policy for the Bank's operations. **Labour considerations are included in ADB's *Social Protection Strategy* (2001), however they are not specific to the Bank's operations. ***Covered under ESS 4.

Table IV Pollution prevention

ESS 3	WB	IDB	ADB	EBRD	EIB	AIIB
Resource efficiency	✓	✓	✓	✓	✓	✓
Resource efficiency distinction for water, energy, raw materials	✓	✓*	–	✓	–	✓
Pollution prevention and management	✓	✓	✓	✓	✓	✓
Management of air pollution	✓	✓	–	✓	✓	✓
Management of hazardous and non-hazardous wastes	✓	✓	✓	✓	✓	✓
Management of chemicals and hazardous materials	✓	✓	✓	✓	✓	✓
Management of pesticides	✓	✓	✓	✓	✓	✓
Noise emission management	–	–	–	–	✓	✓

* No distinction of raw materials.

Table V Health and safety

ESS 4	WB	IDB	ADB	EBRD	EIB	AIIB
Universal access	✓	–	–	✓	✓	✓
Infrastructure and equipment safety	✓	–	✓	✓	✓	✓
Services quality management	✓	–	–	✓	✓	–
Road safety	✓	–	–	✓	✓	✓
Vehicle safety	✓	–	–	✓	–	✓
Community exposure to diseases	✓	–	✓	✓	✓	–
Diseases introduced by project labour	✓	–	✓	✓	✓	–
Exposure to hazardous materials	✓	✓	✓	✓	✓	–
Dam safety	✓	–	✓	✓	✓	–
Security management	✓	–	✓	✓	✓	✓

Table VI Land use and resettlement

ESS 5	WB	IDB	ADB	EBRD	EIB	AIB
Involuntary land resettlement	✓	✓	✓	✓	✓	✓
Conditions for forced evictions	✓	–	✓	✓	✓	✓
Compensation for affected persons	✓	✓	✓	✓	✓	✓
Community engagement	✓	✓	✓	✓	✓	✓
Resettlement assistance	✓	✓	✓	✓	✓	✓
Grievance mechanism	✓	–	✓	✓	✓	✓
Conditions for replacement locations	✓	✓	–	✓	✓	–
Procedures for economic displacement	✓	✓	✓	✓	✓	✓
Collaboration with other agencies	✓	–	–	✓	✓	✓
Involuntary resettlement instruments	✓	–	–	✓	–	–

Table VII Biodiversity conservation and natural resource management

ESS 6	WB	IDB	ADB	EBRD	EIB	AIB
Impact on biodiversity	✓	✓	✓	✓	✓	✓
Legally protected areas	✓	✓	✓	✓	✓	✓
Distinction between critical, natural and modified habitat	✓	–	✓	✓*	✓	✓
Introduction of alien species	✓	✓	✓	✓	✓	✓
Management of living natural resources	✓	–	✓	✓	✓	✓
No unnecessary land clearing	✓	✓	✓	–	–	✓
Sustainable primary suppliers	✓	–	–	✓	✓	–
Distinction between fishery, forestry, livestock, etc.	✓	–	–	✓	–	–
Genetically Modified Organisms	–	–	–	✓	–	–

* Distinction between natural and critical habitat but not modified habitats.

Table VIII Indigenous communities

ESS 7	WB	IDB	ADB	EBRD	EIB	AIIB
Adverse impacts on Indigenous Peoples	✓	✓	✓	✓	✓	✓
Engagement with Indigenous Peoples	✓	✓	✓	✓	✓	✓
Free, prior and informed consent	✓	✓	✓	✓	✓	✓
Cultural heritage	✓	✓	✓	✓	✓	✓
Grievance mechanism	✓	✓	✓	✓	✓	✓
No involuntary resettlement	✓	✓	✓	✓	–	✓

Table IX Cultural heritage

ESS 8	WB	IDB	ADB	EBRD	EIB	AIIB
Definition of cultural heritage	✓	✓	✓	✓	✓	✓
Integration of cultural heritage into ESMP	✓	✓	✓	✓	–	✓
Chance find procedures	✓	✓	✓	✓	✓	✓
Procedure for archaeological site	✓	✓	–	–	✓	–
Mitigation for built heritage	✓	–	✓	–	–	–
Mitigation for movable cultural heritage	✓	–	✓	–	–	–
Mitigation for natural features with cultural significance	✓	–	✓	–	–	–

Table X Financial intermediaries

ESS 9	WB	IDB	ADB	EBRD	EIB	AIIB
FI category ²⁶²	✓	✓	✓	✓	✓	✓
ESMS	✓	✓	✓	✓	–	–
Environmental and social policy	✓	–	✓	✓	–	✓
Environmental and social procedures	✓	✓	✓	✓	–	✓
Organizational capacity and competency	✓	✓	✓	✓	–	–
Monitoring and reporting	✓	–	✓	✓	–	✓
Stakeholder engagement	✓	–	–	✓	–	–

262 A project will be categorized as “FI” if the financing structure involves the provision of funds through financial intermediaries (FI) whereby the FI undertakes the task of sub-project appraisal and monitoring.

Table XI Stakeholder engagement

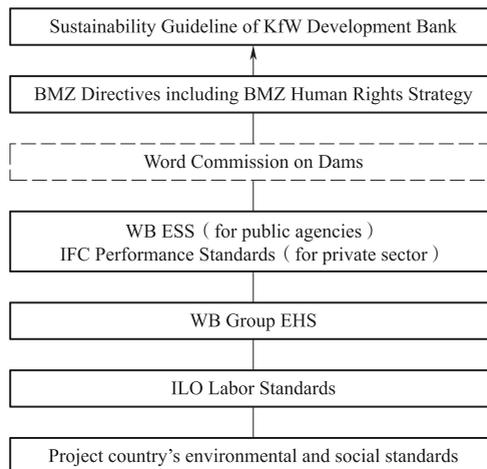
ESS 10	WB	IDB	ADB	EBRD	EIB	AIB
Stakeholder identification and analysis	✓	–	–	✓	✓	✓
Stakeholder Engagement Plan	✓	–	–	✓	✓	✓
Information disclosure	✓	✓	✓	✓	✓	✓
Meaningful consultation	✓	✓	✓	✓	✓	✓
Engagement during project implementation and external reporting	✓	✓	✓	✓	✓	✓
Organizational capacity and commitment	✓	–	–	✓	–	–
Grievance mechanism	✓	✓	✓	✓	✓	–
Third party performance	–	✓	✓	✓	–	–

Annex 2 Environmental and Social Frameworks of Selected National Development Banks

KfW Development Bank (German Development Bank)

The German Development Bank has principles²⁶³ based on national and international legal, mandatory, and non-mandatory guidelines and declarations. These principles are similar to the standards of the WB, IFC and ILO (Figure II), and form the basis for project approval processes. KfW carries out Environmental and Social Impact Assessments for all investments and projects in emerging and developing countries, as well as for project and export financing operations.

Figure II KfW Development Bank's sustainability framework



Source: KfW

Korea Development Bank (KDB)

KDB has an integrated Environmental and Social (E&S) Framework, which is based on WB and IFC standards. Within the E&S Framework, KDB formally adopted the Equator Principles²⁶⁴ in 2017. The objectives of the E&S Framework are to:

263 KfW Development Bank. Our Principles, 5.

264 Equator Principles (2013, June). The Equator Principles: a financial industry benchmark for determining, assessing and managing environmental and social risk in projects.

- i. Enhance the predictability, transparency and accountability of its actions and decision-making, manage E&S risks and impacts, improve performance, and enhance positive development outcomes on the ground;
- ii. Promote the sustainability of project outcomes by protecting the environment and people from the project's potentially adverse impacts;
- iii. Comply with internationally recognized environmental and social standards;
- iv. Govern substantial and procedural rules and guidance in respect of E&S impact risk.

Japan Bank for International Cooperation (JBIC)

JBIC established its non-mandatory “Guidelines for Confirmation of Environmental and Social Considerations” (the Guidelines) in 2009. The Guidelines were reviewed in 2012, and again in 2015. They aim to encourage the implementation of appropriate environmental and social considerations by clarifying the relevant procedures, decision-making processes and requirements. JBIC aims to ensure transparency, predictability, and accountability regarding environmental and social issues.

JBIC explicitly refers to the WB's ESF, the IFC's performance standards, and it promotes awareness of the OECD Guidelines for Multinational Enterprises.²⁶⁵ JBIC publishes the results of project environmental assessments on its website.

Development Bank of Southern Africa (DBSA)

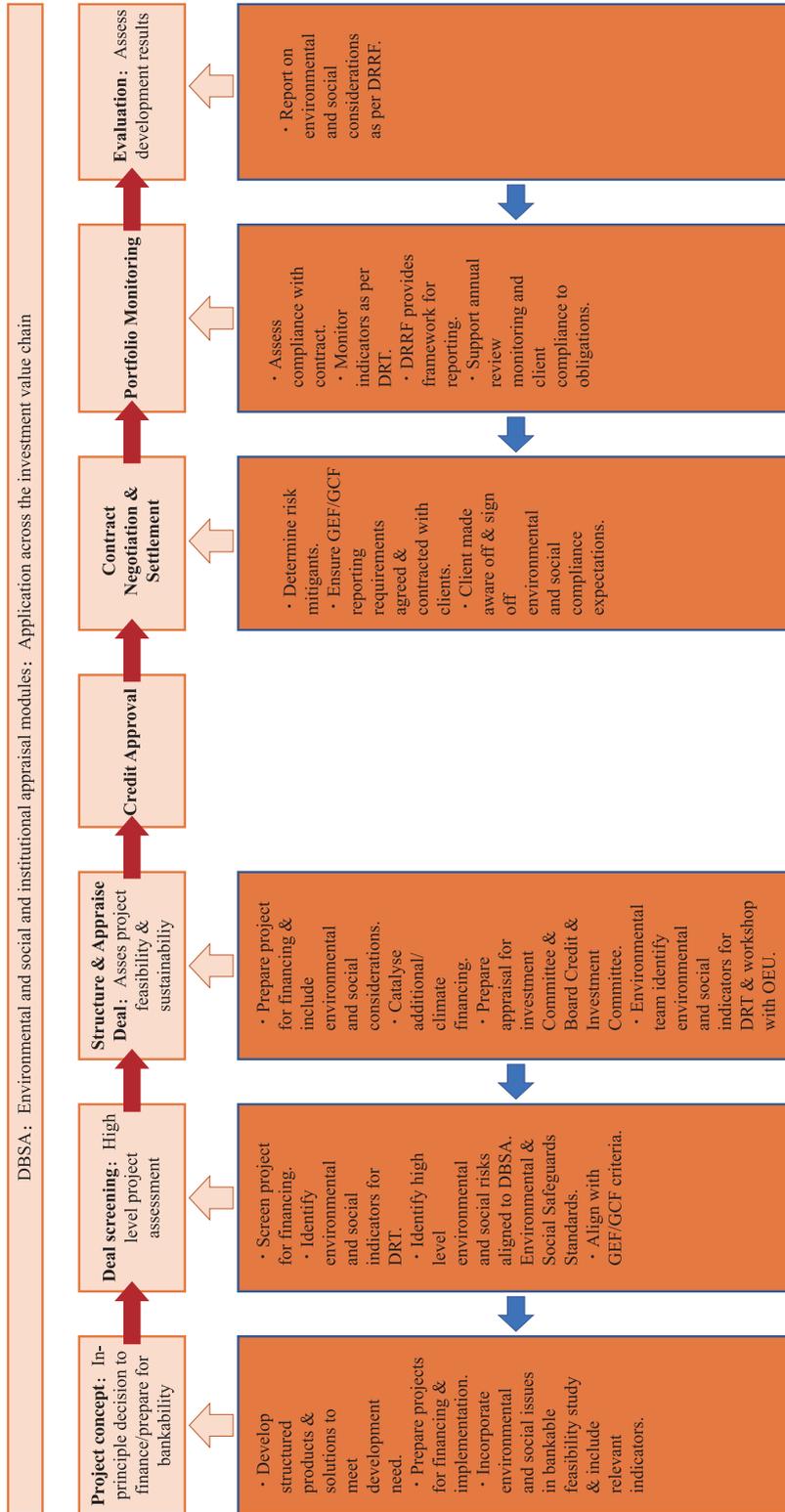
DBSA has developed Environmental and Social Safeguards²⁶⁶ which are similar to KfW's standards, and which are based on the ESS of AfDB and IFC. The safeguards include financial and economic sustainability, and address sustainability aspects of investment, with a specific focus on potential impacts on the environment and communities, and sustainable human capital and procurement practices.

The actions taken to meet the requirements of DBSA safeguards are managed through the Environmental and Social Management System (ESMS). They are periodically assessed (but are not published on the Bank's website). Assessments include an Environmental Impact Assessment and a Social and Institutional Impact Assessment—with the latter accompanying the environmental appraisal (Figure III):

265 Organization for Economic Cooperation and Development. Annual reports on the OECD guidelines for multinational enterprises.

266 Development Bank of Southern Africa (2018, May 21). Climate Finance Facility (CFF): environmental and social management framework.

Figure III DBSA's Environmental, social and institutional appraisal process



Source: DBSA's Environmental and Social Management Framework

Annex 3 International Debt Sustainability Frameworks

World Bank-IMF Debt Sustainability Framework (DSF)

Table XII DSF debt burden thresholds and benchmarks²⁶⁷

	Present value (PV) of external debt in % of		External debt service in % of		PV of total public debt in % of
	GDP	Exports	Exports	Revenue	GDP
Weak	30	140	10	14	35
Medium	40	180	15	18	55
Strong	50	240	21	23	70

Source: Joint World Bank-IMF Debt Sustainability Framework for Low-Income Countries

UNCTAD Principles for responsible sovereign lending and borrowing²⁶⁸

1. Responsibilities for lenders

- i. Lenders should recognize that government officials involved in sovereign lending and borrowing transactions are responsible for protecting public interest.
- ii. Lenders have a responsibility to provide information to their sovereign customers to assist borrowers in making informed credit decisions.
- iii. Lenders have a responsibility to determine, to the best of their ability, whether the financing has been appropriately authorized and whether the resulting credit agreements are valid and enforceable under relevant jurisdiction/s.
- iv. A lender is responsible to make a realistic assessment of the sovereign borrower's capacity to service a loan based on the best available information and following

²⁶⁷ International Monetary Fund (2018, July 13). The debt-sustainability framework for low-income countries.

²⁶⁸ United Nations Conference on Trade and Development (2012, January 10). Principles on promoting responsible sovereign lending and borrowing.

- objective and agreed technical rules on due diligence and national accounts.
- v. Lenders financing a project in the debtor country have a responsibility to perform their own ex ante investigation into and, when applicable, post-disbursement monitoring of, the likely effects of the project, including its financial, operational, civil, social, cultural, and environmental implications. This responsibility should be proportional to the technical expertise of the lender and the amount of funds to be lent.
 - vi. All lenders have a duty to comply with United Nations sanctions imposed against a governmental regime.
 - vii. In circumstances where a sovereign is manifestly unable to service its debts, all lenders have a duty to behave in good faith and with cooperative spirit to reach a consensual rearrangement of those obligations. Creditors should seek a speedy and orderly resolution to the problem.

2. Responsibilities of Sovereign Borrowers

- viii. Governments are agents of the State and, as such, when they contract debt obligations, they have a responsibility to protect the interests of their citizens. Where applicable, borrowers should also consider the responsibility of lenders' agents toward their organizations.
- ix. A sovereign debt contract is a binding obligation and should be honored. Exceptional cases nonetheless can arise. A state of economic necessity can prevent the borrower's full and/or timely repayment. Also, a competent judicial authority may rule that circumstances giving rise to legal defense have occurred. When, due to the state of economic necessity of the borrower, changes to the original contractual conditions of the loan are unavoidable, Principles 7 and 15 should be followed.
- x. The process for obtaining financing and assuming sovereign debt obligations and liabilities should be transparent. Governments have a responsibility to put in place and implement a comprehensive legal framework that clearly defines procedures, responsibilities and accountabilities. They should particularly put in place arrangements to ensure the proper approval and oversight of official borrowings and other forms of financing, including guarantees made by State-related entities.
- xi. Relevant terms and conditions of a financing agreement should be disclosed by the sovereign borrower, be universally available, and be freely accessible in a timely manner through online means to all stakeholders, including citizens. Sovereign

debtors have a responsibility to disclose complete and accurate information on their economic and financial situation that conforms to standardized reporting requirements and is relevant to their debt situation. Governments should respond openly to requests for related information from relevant parties. Legal restrictions to disclosing information should be based on evident public interest and to be used reasonably.

- xii. In the context of project financing, sovereign borrowers have a responsibility to conduct a thorough ex ante investigation into the financial, operational, civil, social, cultural and environmental implications of the project and its funding. Borrowers should make public the results of the project evaluation studies.
- xiii. Debtors should design and implement a debt sustainability and management strategy and to ensure that their debt management is adequate. Debtor countries have a responsibility to put in place effective monitoring systems, including at the sub-national level, that also capture contingent liabilities. An audit institution should conduct independent, objective, professional, timely and periodic audits of their debt portfolios to assess quantitatively and qualitatively the recently incurred obligations. The findings of such audits should be publicized to ensure transparency and accountability in debt management. Audits should also be undertaken at sub-national levels.
- xiv. Governments have a responsibility to weigh costs and benefits when seeking sovereign loans. They should seek a sovereign loan if it would permit additional public or private investment, with a prospective social return at least equal to the likely interest rate.
- xv. If a restructuring of sovereign debt obligations becomes unavoidable, it should be undertaken promptly, efficiently and fairly.

Annex 4 BRI investment risk questionnaire, 2018

Jointly conducted by UNDP and CDB in late 2018, the survey has three sections: basic information, innovation and investment models, and investment risk and obstacles, and has collected responses from 50 Chinese companies. Among them, 26 are state-owned enterprises (SOEs), 14 are private enterprises, 3 are joint venture companies, and the rest are other types of companies. The average registered capital of the 50 companies surveyed is USD 227,029,934 (lowest: USD 194,500; highest: USD 2,072,633,700). They have a wide variety of investment approaches, with the most common types being representative offices, subsidiary companies, sole proprietary company, transnational M&A, joint venture, and cooperative operation. Almost all of the 50 companies surveyed have used loans to finance their projects, project-based loans being the most common type. Half of them have loans larger than USD 100 million, 30% of them have loans between USD 10 million and USD 50 million and the remaining 20% have loans of less than USD 10 million. The average size of investments of these companies tends to be very large, with almost half of them investing over USD 100 million on a project on average.

In responding to questions on the purpose of their overseas investment in the BRI region, 85% of the companies chose “(to fulfil) the need of companies’ long-term development strategy”, and 58% mentioned “to explore international markets for their products”. 38 companies further expressed their willingness to expand investment in the BRI region, indicating the attractiveness and business potential of the region. While more than half of the companies regarded 1-2 years as the best duration for an investment project, many other companies preferred long-term investments of over 10 years.

High debt ratio and low credit ratings were selected by the companies as the two most important obstacles in getting loans from domestic financial institutions. As for possible motivations for seeking financing overseas, almost all companies mentioned “lower interest rates”. Many companies also highlight “more convenient environment for financing and investment” and “strength of international financial institutions” as important advantages of getting loans abroad.

In the section that deals with investment risks and obstacles, 62% of all respondents

assigned the highest risk level to “political risks of the host country”, followed by “overly restricted environmental and labour protection conditions in host countries”. On the other hand, “undeveloped laws and regulations in emerging financial markets along the Belt and Road” and “exchange rate risks” were assigned a risk level of 4 or lower by most respondents. Last but not least, two-thirds of the companies identified “active promoting by the Chinese government” and “participation and support from the host country” as the most critical factors in the success of a BRI project, which matches another common opinion from the survey that having a government background and being favoured by current policies are key in getting support from financial institutions.

Table VIII Main risks and obstacles along the Belt and Road identified in the survey

RISK RATING (1-5)	Disputes over investment and financing standards	Political risks	Environmental and labour conditions	Cost for local employees
1	11%	0%	6%	19%
2	19%	8%	9%	19%
3	23%	11%	25%	34%
4	19%	19%	43%	26%
5	26%	62%	17%	2%
NA	2%	0%	0%	0%

* 1 is the lowest, 5 is the highest.

Annex 5 Financing the 2030 Agenda: The Addis Ababa Action Agenda

The AAAA defined a new global framework for financing sustainable development in July 2015. It aligns various forms of financing and related policies with the economic, social and environmental priorities expressed in the SDGs. It aims to hold governments accountable for sound policies, as a prerequisite to financing the global goals. Governments need to provide public funding, set the framework for financial stability and place sustainability as their core priority, and that of the global financial system.

The Agenda contains the following provisions related to sustainable financing and investment:

- Adhering to social and environmental safeguards for financing sustainable infrastructure by development banks, particularly where commercial banks are not engaged.
- Standards to encourage measured risk taking and robust risk control in long term investments.
- Improved recipient-country policies to reduce the financing gap to attain the SDGs by enlarging fiscal space, strengthening private sector incentives and addressing market failures. Embedding resilient and quality infrastructure investment plans in national sustainable development strategies.
- Encouraging the private sector to pursue sustainable corporate practices, including reporting on environmental, social and governance (ESG) standards and considering their impact.
- Collaboration of creditors and debtors to avoid and resolve unsustainable debts: *“Maintaining sustainable debt levels is the responsibility of the borrowing countries, however, lenders also have a responsibility to lend in a way that does not undermine a country’s debt sustainability.”*

The implementation of the AAAA is regularly monitored by a Task Force commissioned by the UN. The latest report, April 2018, identifies weaknesses regarding progress in sustainable investment and finance. The report highlights the lack of clear: (1) definitions of investment criteria as well as adequate monitoring and reporting mechanisms; (i) definition of SDG targets that can be translated into private investment criteria; and (in) rules for ESG disclosures to facilitate reporting, benchmarking, and comparison of the impact of such investing.

Annex 6 SINOSURE 2018 Handbook of Country Risk

In 2018, SINOSURE (China Export and Credit Insurance Corporation), China's state policy-oriented insurer, published a country risk report of 65 countries along the Belt and Road.²⁶⁹ The risks included four types: political, economic, business environment, and legal, using 17 primary indicators and 53 secondary indicators. Political risks were highlighted as the most severe forms of risk. Table XIV below summarizes the country risk rankings in the SINOSURE Report. Syrian Arab Republic and Afghanistan were ranked as the highest risk countries for Chinese investment.

**Table XIV Country risk rankings in the SINOSURE
2018 Handbook**

RANKING	COUNTRIES	RISK LEVEL
1	Singapore	Relatively low
3	3 countries including United Arab Emirates	Medium low
4	11 countries including Kuwait	Medium high
5	20 countries including Russian Federation and Kazakhstan	Relatively high
6	16 countries including Iran (Islamic Republic of), Egypt, Maldives, Viet Nam	Relatively high
7	4 countries including Iran (Islamic Republic of) Bangladesh, Cambodia	Approaching high
8	7 countries including Myanmar, Yemen, Nepal, Ukraine	Very high
9	Syrian Arab Republic and Afghanistan	Highest

Source: SINOSURE (2018). Handbook of Country Risk.

²⁶⁹ China Export & Credit Insurance Corporation. SINOSURE released the Handbook of Country Risk in 2018.

Annex 7 China's Outbound Mergers and Acquisitions (M&A) and Grant-based Funds

China's Outbound Mergers and Acquisitions (M&A)

Chinese firms still trail significantly behind European and American counterparts in their share of global M&As. European companies account for around one-third of global M&As, and US companies for over 20%. The share of Chinese companies hovered between 5 to 9% between 2008 and 2018, only surpassing 10% during the 2016 peak, although there is an overall upward trend.²⁷⁰

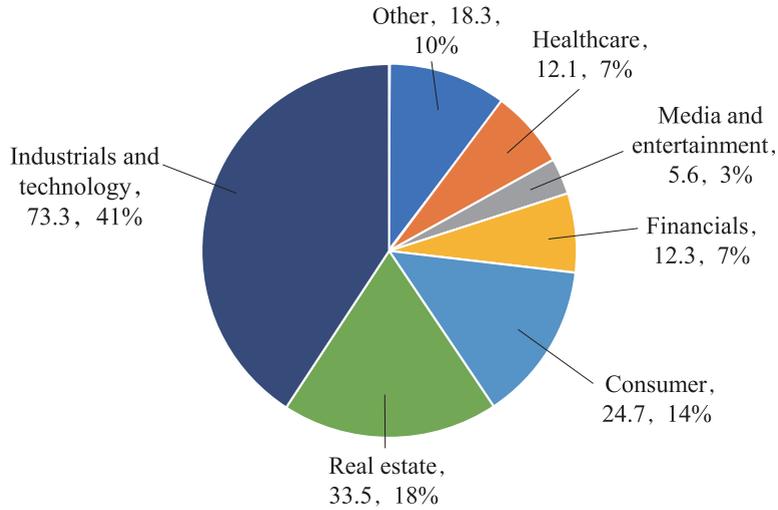
In terms of M&A as a share of GDP, China is moving closer to the US share, but still trails Europe. Again, with the exception of 2016 (1.8%), Chinese companies have typically spent around 0.6% of GDP on outbound acquisitions, with the figure closer to 0.9% in recent years. In contrast, EU companies spent 2% and US companies 1.3% of GDP on M&A in 2015.²⁷¹

The sectoral composition of Chinese outbound M&As has shifted away from energy, mining, and utilities in the years prior to the BRI toward high technology and real estate after the launch of the BRI. Industrials have remained a top sector in the number of deals, still accounting for 16% of M&A operations in 2017.

270 Wu, K. and Chatterjee, S. (2017, August 16). Exclusive: China's Belt and Road acquisitions surge despite the outbound capital crackdown. Reuters Business News.

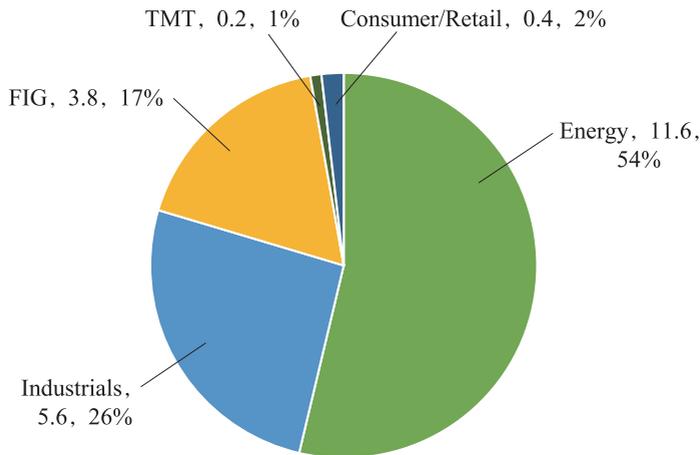
271 Cogman, D., Gao, P. and Leung, N. (2017, July). Making sense of Chinese outbound M&A. McKinsey & Company.

Figure IV China's outbound M&A by sector in million USD, 2017



Source: M&A Review and 2018 Outlook.

Figure V China's outbound M&A by sector in million USD, 2005-2010



TMT: Technology, Media and Telecommunications

FIG: Financial Institutions Group

Source: J.P. Morgan (2017): China's Increasing Outbound M&A and PwC (2017)

Although M&A trends show congruence with stated policy priorities, the Chinese state is not the only, or even necessarily the main, player in financing Chinese firms' M&A activities. Chinese firms looking to acquire overseas counterparts can readily access financing from both domestic and international commercial financial entities and investment funds (although it should be noted that the former are predominantly state-owned). Chinese firms have shown a willingness to incur debt in order to finance acquisitions, and this has been well matched with

an appetite by domestic and foreign private equity funds and banks to provide the financing, often in consortium with one another or with state-owned enterprises and other strategic partners.²⁷²

There is significant potential for state-backed financing for Chinese M&A activities, although the degree to which it has been actively sought varies considerably. With the relaxation of rules and guidelines in 2015 on the loan-to-value and other requirements on financing for acquisitions by the China Bank Regulatory Commission,²⁷³ Chinese commercial banks are in a better position to offer M&A financing to domestic buyers. There is also important support coming from state banks and investment funds, which have in some cases provided 50% or more of the required funding to close multi-billion-dollar deals.²⁷⁴ Capital that could potentially be used to finance M&A also exists in investment funds managed by the central government, such as the China-Africa Development Fund, China Investment Corporation (CIC), and the SRF.

In practice, however, the government rarely uses these funds to co-invest with corporations for mergers and acquisitions. The SRF, for example, has, to date, only invested in one company for this purpose, compared with dozens of project-financing deals. The only government-linked fund that has financed numerous M&A investments in foreign companies is CIC. However, these deals are motivated by CIC's mission to maximize returns on China's sovereign assets rather than by policy.

China's outbound M&A was historically dominated by state-owned enterprises with a focus on energy and natural resources. The recent wave of M&As has been characterized by a broader range of buyers, including companies looking to expand beyond their initial sector focus, domestic private equity firms, and A-share listed companies.²⁷⁵ In the first half of 2016, privately owned enterprises accounted for over 60% of the largest outbound acquisitions.²⁷⁶

Grant-based funds

Examples of environmentally focused funds that, although they are not specific to the BRI, provide grants (and sometimes loans) to BRI partner countries:

272 Cogman, D., Gao, P. and Leung, N. (2017, July). Making sense of Chinese outbound M&A. McKinsey & Company.

273 Ibid.

274 Deloitte (2017, July). China M&A round-up: keeping pace, marking milestones.

275 Ibid.

276 PricewaterhouseCoopers (2016, August 10). China outbound M&A surges to US\$134 bn. in the first half of 2016-almost four times the total for the previous six months. PwC Press release.

- Clean Technology Fund (CTF) is an indispensable part of the Climate Investment Funds, serving as a large-scale financing source for low carbon technologies and industries in developing countries. As of May 2017, CTF has funded 16 projects from 15 countries and leveraged USD 5 billion for clean technology, renewable and affordable energy, and efficient transportation projects.
- International: Green Climate Fund (GCF) is a financial mechanism established by the United Nations Framework Convention on Climate Change (UNFCCC) to support and sustain low-carbon footprint projects. The fund underscores five major investment priorities that can effectively contribute to the course of climate change mitigation and adaptation, including transforming energy generation and access, creating climate-compatible cities, encouraging low-emission and climate-resilient agriculture, scaling up finance for forests and climate change, and enhancing resilience in Small Island Developing States (SIDS).²⁷⁷
- Global Environment Facility (GEF) provides grants and concessional funding to empower the transformation from traditional projects into eco-friendly ones. Since 2002, an aggregate of more than 120 projects covering 55 countries has been funded by the GEF, with a total grant investment value of USD 466 million.²⁷⁸ In an effort to address pressing environmental challenges, the GEF mainly concentrates on biodiversity, chemicals and waste, climate change, forests, international waters, ozone protection and land degradation.

277 African Development Bank Group. Green climate fund.

278 Food and Agriculture Organization of the United Nations. Global Environmental Facility.

Annex 8 International conventions, agreements and principles relevant to the BRI

Sector	Convention/Agreement
Environment and Health	Rio Declaration of Environment and Development
	Kyoto Protocol
	Paris Agreement on Climate Change
	UNECE Conventions, Protocols, particularly Espoo Convention on Environmental Impact Assessment and Protocol on Strategic Environmental Assessment
	UN Guidelines on Consumer Policy
	International Health Regulations (WHO, 2005)
	ISO 14001
Social and Labour Issues	ILO 1998 Declaration of Fundamental Principles and Rights at Work
	8 ILO fundamental Conventions
	UN Guiding Principles on Business and Human Rights
	International Bill of Human Rights
	UN Global Compact
	FAO/IFAD/UNCTAD/WB Principles on Responsible Agricultural Investment
	CFS Principles for Responsible Investment in Agriculture and Food Systems
	UN Global Compact for Safe, Orderly and Regular Migration
	1995 World Conference on Women, Beijing Declaration and Platform for Action
	SA 8000 and ISO 26000
Transparency	Paris Declaration on Aid Effectiveness
	International Aid Transparency Initiative standards
Procurement	WTO GPA
	UNCITRAL Model Law on Public Procurement
	UN Convention Against Corruption
	Paris Declaration on Aid Effectiveness

(Continued)

Sector	Convention/Agreement
Investment and Dispute Settlements	Finance for Development Addis Ababa Agenda for Action
	Convention on the Settlement of Investment Disputes Between States and Nationals of Another State
	WTO Dispute Settlement
	International Centre for Settlement of Investment Disputes Convention, Regulations and Rules
	UNCITRAL Arbitration Rules
	New York Convention on Recognition and Enforcement of Foreign Arbitral Awards
	UNCITRAL Conciliation Rules
	UN Convention Against Corruption
	UN Guiding Principles on Business and Human Rights
	FAO/IFAD/UNCTAD/WB Principles on Responsible Agricultural Investment
	Voluntary Corporate Responsibility Codes
	UN Global Compact
	G20 Guiding Principles on Global Investment Policymaking
	International Bill of Human Rights
Infrastructure	UNOPS Evidence-Based Infrastructure (EBI) approach
	Cost-Benefit Analysis and Economy-wide Impact Assessment
	UNECE Conventions, Agreements including Unified Rail Law; OTIF, OSJD standards
Trade	WTO-GATT, GATS, TRIPS
	WTO Trade Facilitation Agreement
	WCO Conventions
	Regional Agreements, FTAs, BTAs
	UN Convention on the Law of the Sea
	Transports Internationaux Routiers (TIR) Convention
	UNECE Conventions and Recommendations
	European Agreement on the International Carriage of Dangerous Goods by Road
	International Convention on the Harmonization of Frontier Controls of Goods
	IMO, ICAO and ITU standards

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