
**DISCUSSION
PAPER**

MTI Global Practice

No. 10
December 2018

Tania Ghossein
Bernard Hoekman
Anirudh Shingal

Public Procurement in the Belt and Road Initiative

This series is produced by the Macroeconomics, Trade, and Investment (MTI) Global Practice of the World Bank. The papers in this series aim to provide a vehicle for publishing preliminary results on MTI topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character.

For information regarding the MTI Discussion Paper Series, please contact the Editor, Ivailo Izvorski, at iizvorski@worldbank.org.

© 2018 The International Bank for Reconstruction and Development / The World Bank
1818 H Street, NW Washington, DC 20433
All rights reserved

Abstract

China's "Belt and Road Initiative" (BRI) includes major infrastructure investment projects – roads, ports, railways – that aim to improve connectivity along a number of transport corridors spanning 71 countries. In this paper we find that notwithstanding the large scale of the initiative, relatively little systematic data exists on the practices being followed by the different, primarily Chinese, entities that finance BRI-related contracts and how firms are being selected to execute projects. The limited available data however indicate that Chinese companies account for the majority of BRI-procurement, even in light of their high share of total infrastructure projects in developing countries. We discuss the limited publicly available evidence on the procurement of BRI projects and specific dimensions of the institutional features pertaining to public procurement regimes of BRI countries, including China, both as embedded in domestic regulations and in international agreements that countries may be part of. Finally, we discuss the efforts that BRI countries can take -individually or as part of an international agreement- to improve procurement practices for BRI projects.

Corresponding author(s): tghossein@ifc.org;

JEL Classification: F10, F13, H57

Keywords: Trade, Trade Policy, Public Procurement, Belt and Road Initiative

Public Procurement in the Belt and Road Initiative

Tania Ghossein, Bernard Hoekman and Anirudh Shingal¹

1. Introduction

The “Belt and Road Initiative” (BRI) was announced by the Chinese government in 2013. The initiative now spans 71 countries including China that jointly account for two-thirds of the world’s population and one third of global GDP (Chin and He, 2016).² The BRI includes major infrastructure investment projects – roads, ports, railways – that aim to improve connectivity along a number of transport corridors,³ as well as measures to promote trade and investment that will utilize this infrastructure. The latter include trade and transport agreements with China, trade promotion programs, economic and trade cooperation zones, projects to enhance production capacity in partner countries as well as cultural exchange and business-visa facilitation programs. To date, the major financiers of BRI projects have been Chinese policy banks (e.g., China Development Bank, the Export Import Bank of China), the major state-owned commercial banks,⁴ and the Silk Road Fund (set up in 2014 with an initial total capital of \$40bn) (Chan, 2017).

The limited available data indicate that Chinese companies account for the majority of BRI-procurement, even in light of their high share of total infrastructure projects in developing countries.⁵ Chinese firms have become very competitive globally. This is reflected, for example, in the fact that of all procurement contracts awarded by the World Bank to Chinese firms, over 70 percent are for projects outside China. As of 2013, Chinese companies accounted for 42 percent of the total dollar amount of civil works contracts funded by the World Bank in the Africa region (Zhang and Gutman, 2015). Multilateral development banks in Eurasia report that Chinese companies account for somewhat less than one-third of projects (Hillman, 2018). In the case of BRI projects, the share of Chinese firms seems substantially higher. Data

¹ Emails: tghossein@ifc.org; bernard.hoekman@eui.eu; anirudh.shingal@eui.eu. William Nielsen (Cornell University) contributed to this paper. The authors are grateful to Elmas Arisoy, Kofi Awanyo, Bekele Debele, Caroline Freund, Bert Hofman, Michele Ruta and Xinquan Tu for helpful suggestions on earlier drafts. Anirudh would also like to thank Subhashini Abeysinghe for sharing information on Sri Lanka’s BRI experience and Kalpana Tokas for helping with the desk research.

² The countries include China, Mongolia, Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Palestine, Syria, United Arab Emirates, Yemen, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka, Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, and Ukraine. <http://english.gov.cn/beltAndRoad/>.

³ The initiative prioritizes the Maritime Silk Road and six international ‘land corridors’: ‘The new Eurasia land bridge’; ‘The China-Mongolia-Russia economic corridor’; ‘China-Central Asia-West Asia economic corridor’; ‘China-Indochina Peninsular economic corridor’; ‘China-Pakistan economic corridor’; and ‘Bangladesh-China-India-Myanmar economic corridor’. <http://english.gov.cn/beltAndRoad/>.

⁴ Bank of China, Industrial & Commercial Bank of China, and China Construction Bank are the leading players.

⁵ In this paper when we speak of BRI procurement this pertains to projects funded by Chinese entities under the umbrella of the BRI initiative. It does not comprise projects funded by MDBs or other bilateral donors executed in BRI countries.

compiled by the Center for Strategic and International Studies (CSIS) for a limited sample of BRI projects for which this can be determined (see below) suggest that more than 60 percent of Chinese-funded BRI projects are allocated to Chinese companies.

Information and data on BRI procurement practices and procedures is sparse. Little is known about the processes through which firms are selected to execute projects,⁶ e.g. the extent to which there is international competitive bidding on BRI projects or, insofar as Chinese-government-funded BRI projects are earmarked for Chinese suppliers, whether there is competition among potential Chinese suppliers. A basic challenge in generating a better picture of what is done under the framework of the BRI is that the program spans a large number of very heterogeneous countries and that different Chinese financing entities are involved that do not necessarily follow identical approaches in awarding contracts.

In this paper, we discuss the limited publicly available evidence on public procurement associated with BRI projects and specific dimensions of the institutional features pertaining to public procurement regimes of BRI countries, including China. Procurement regulation is a national matter. In principle the regulations and practices of both host countries and the major provider of funding for BRI projects, China, are relevant in assessing what is being done in BRI projects. They are also relevant in determining how BRI-related procurement can conform more closely to international good practices. Doing so is important for borrowing/host countries, as they have a strong interest in ensuring that they obtain the best value for money. It is also important for China and the financial institutions that fund BRI projects, as adoption of international good procurement practice can help ensure the integrity of projects and their financial performance.

Implementing good procurement practices is a challenge for all governments, but especially for countries with weak administrative capacity. Given that the BRI is to a large extent focused on trade-related investments and seeks to expand commercial exchanges among BRI countries and between BRI countries and China, we also discuss whether trade agreements can be instruments to provide a framework for public procurement matters. These offer a mechanism to BRI nations to agree on principles and rules of the game for BRI procurement as well as procurement practice more generally.

2. Distribution of BRI projects

Comprehensive and comparable cross-country data permitting analysis of BRI-related procurement do not exist. The limited publicly accessible information suggests that Chinese suppliers/contractors win the majority of BRI projects. Chinese SOEs have invested or participated in at least 1,700 projects in BRI countries since 2014 (Baker McKenzie 2017). According to DBS (2017), Chinese contractors signed contracts in BRI countries in 2016 worth \$126 bn. This value was 36% higher than in 2015 and accounted for 52% of total Chinese overseas projects in 2016. In value terms, China Communications Construction Company and China Railway Construction Corporation are among the major contractors.

⁶ One problem in this regard is that there is no agreed-upon definition of what qualifies as a BRI project.

The CSIS ‘Reconnecting Asia’ project maintains a database of infrastructure and other projects funded by national and multilateral donors.⁷ This database has information on both the source of funding and the winning supplier. It includes data on 124 projects that the CSIS classifies as BRI-related with a combined reported cost of \$265 billion in current US dollars. The starting date is reported for only 93 of these projects, of which 32 commenced before 2013 (the year in which the BRI was announced by the Chinese government).⁸ The source of funding is identified for 44 of these projects, of which 34 were funded by Chinese sources. Twenty-one of those projects were awarded solely to Chinese suppliers.⁹ Thus, of the limited sample of Chinese-funded contracts, as reported in the CSIS database, three-fifths (21/34) were allocated to Chinese firms only. In comparison, only three of the ten non-Chinese funded projects in the dataset were awarded exclusively to Chinese suppliers. These data suggest that if the source of funding is Chinese, contractors are more likely to be of Chinese origin. Makocki (2017) also notes that infrastructure financing on BRI projects often is tied to the provision of equipment or services by Chinese suppliers.

While Chinese firms are very competitive and often are lower cost suppliers than non-Chinese firms, their dominance in BRI projects reflects policy as well as a willingness to invest in projects and areas that firms of other nationality may find too risky or challenging. The source of financing has been a major determinant of how BRI projects are allocated to contractors. It has been estimated that about half of a total of \$292bn of funding for BRI projects (comprising outstanding loans or equity investment) was provided by the big four state-owned commercial banks. China Development Bank, the Export-Import Bank of China and the Silk Road Fund have provided much of the rest.¹⁰ Funding by these entities involves both explicit and implicit preferences for Chinese suppliers,¹¹ reflecting the fact that funding often has a concessional or preferential element as well as policy objectives that restrict the financing to Chinese contractors (Zhang and Gutman, 2015).

Box 1 provides some texture, drawing on interviews undertaken for this paper focusing on experience with BRI projects in Pakistan.

⁷ <https://reconnectingasia.csis.org/database/initiatives/one-belt-one-road/fb5c5a09-2dba-48b9-9c2d-4434511893c8/>.

⁸ The remaining 61 projects are listed in Annex Table 1.

⁹ Thirteen of these involved road projects. Two other projects, construction of the \$98 million Lianyungang Logistics Terminal between China and Kazakhstan, and electrification of the \$2.6 billion Tehran-Mashhad Railway in Iran, had both Chinese and local/international contractors. The contractors of the remaining 11 [13? 34 minus 21 equals 13 minus 2 = 11] Chinese-funded BRI projects are not reported in the CSIS database.

¹⁰ Gabriel Wildau, Nan Ma (2017) In Charts: China’s Belt and Road Initiative. Financial Times, May 11. <https://www.ft.com/content/18db2e80-3571-11e7-bce4-9023f8c0fd2e>

¹¹ Implicit preferences may arise as a corollary of the procurement process, e.g., foreign firms having more difficulty in obtaining timely and accurate information relative to Chinese firms, which affects their ability to submit bids on time.

Box 1: Procurement for China Pakistan Economic Corridor projects

This box is based on interviews with Pakistani implementing/government agencies using Chinese funding in implementing China-Pakistan Economic Corridor (CPEC) projects, as well as information provided on the CPEC website.¹² Annex 2 offers a detailed description of the procurement process under CPEC Financing Agreement / Memorandum of Understanding (FA/MOU) arrangements.

According to the interviews, procurement of high-value CPEC projects financed through the EXIM Bank of China is restricted to Chinese contractors. The Chinese CPEC authorities nominate three Chinese firms for bidding purposes. Procuring entities then issue the bidding documents to the three nominated Chinese contractors, seeking bids for the contract. Contracts make allowance for domestic contractors to collaborate with Chinese counterparts via joint ventures. The processes used during the initial selection of the three Chinese contractors were not known, impeding an assessment of the extent to which possibilities for collusive practices are controlled for in the process of selecting the winning contractor. The feasibility of domestic construction firms being able to obtain sub-contracting work is left to the Chinese contractors, and the extent to which the government of Pakistan is willing and able to pursue ‘local content’ objectives when negotiating BRI projects. The CPEC agreement between Pakistan and China allows for sub-contracting up to a maximum of 30% of the contract value, subject to the procuring entity’s agreement. The perception of interviewees is that Chinese contractors use their own labor and that BRI procurement contracts are not very helpful in providing employment opportunities within the country. This is consistent with other assessments that even if local capacity exists, Chinese labor and equipment are generally used for BRI projects (Saalman and Dethlefsen, 2017).

The interviews revealed that although requirements in the procurement of CPEC projects to provide bank guarantees are met, amendments were made to the agreed bidding documents through addenda. These resulted from pre-bid meetings and were suggested by the three pre-selected bidders. For instance, liquidated damages for delays were reduced from 10% to 5% and the bonus for early completion was also changed. This is indicative of the nominated contractors’ influence on the procurement process. Moreover, the Instruction to Bidder Clause describing the procuring entity’s right to accept any bid and reject any or all bids was amended to make an explicit provision for negotiations. The amendment stipulates that after evaluation of bids, the technical proposal may be discussed and adjusted to obtain the desired project objectives, with associated price adjustments to be made with mutual consent. This can constitute good practice but there were no independent probity assurance providers involved in these negotiations and transparency in such negotiations/discussions cannot therefore be guaranteed. The procurement for CPEC projects suggest the importance of greater transparency in the award of contracts.

¹² <http://cpec.gov.pk/index>

Interviews for this study with Chinese scholars suggest there tend to be two phases of BRI-project award. The first phase pertains to the selection of a general contractor/supplier by lead Chinese financial institutions. Given that financing generally has some concessional or subsidy elements (e.g., below market interest rates) reflecting the policy objective of the policy banks - including expanding China's exports and commercial footprint in overseas markets in the case of the Export-Import Bank, independent of requirements to tie sourcing of goods and services to Chinese firms - Chinese financial institutions prefer domestic suppliers to reduce technical, financial and political risks they incur. The suppliers (contractors) may be selected through a single tendering process or be chosen from a small set of potential suppliers as in the case described above (Box 1). The contractor takes on the operational risk of each BRI project. In general, contractors – including SOEs – are expected to operate on a commercial basis and thus to generate an adequate rate of return on investment. SOE senior management may face disciplinary action if projects go bad (Deloitte, 2018).

The rate of return will depend in part on the efficiency of procurement by the selected lead contractor, which will need to buy equipment, materials, and services. It is at this second stage that the biggest opportunities arise for foreign participation to supply products to Chinese contractors. Although Chinese firms obtain most BRI contracts, there are opportunities for non-Chinese companies to participate in BRI-related projects. Nearly 30% of companies in a 2017 survey by the German Chamber of Commerce and Industry reported being active in or considering to engage in BRI projects.¹³ Studies by international consulting/accounting firms also highlight the potential opportunities to participate in providing financial and professional services, conducting feasibility studies, infrastructure development and planning, and investment in energy- and engineering-related projects.¹⁴ Partnerships with both local and international engineering and construction firms have been initiated on BRI projects.¹⁵

¹³ http://china.ahk.de/news/single-view/artikel/belt-and-road-initiative-more-than-one-third-of-german-companies-in-china-see-positive-effect-on-their-future-business/?no_cache=1&cHash=ed1c52a43628c6345537c283359488cd. Noteworthy is that the survey by the German Chamber of Commerce suggested that regulations governing projects supported by the BRI are sufficiently clear and transparent to allow the participation of German companies. Only 8.9% of the survey respondents not considering pursuit of BRI projects cited “lack of transparency in public procurement and tendering” as a reason for their non-engagement. This may reflect the sample of firms and their sector of activity. The most important reason for non-engagement in BRI projects was “no relevance to own industry/business model” (54.7% of survey respondents). See <http://www.oboreurope.com/en/european-companies-bri/>.

¹⁴ For instance, Alstom rebuilt a turbine factory to supply materials for the Three Gorges Dam; General Electric has supplied power-plant related equipment for projects in the China-Pakistan Economic Corridor (CPEC); British Petroleum is engaged in the Rumaila oilfield in southern Iraq; and Caterpillar has supplied machinery, training and maintenance services to CCCC in the construction of the Zbrobin–Bobruisk expressway in Belarus. Qatar’s Al-Mirqab Capital partnered with Sinohydro Resources, taking a 49% share in the construction of a thermal power plant in Port Qasim, Pakistan under the \$46 bn CPEC. APM Terminals, has been working with CCCC to build a port in Tema, Ghana, and has awarded lead contractor status to a subsidiary of CCCC (PwC, 2017). UK-based Amec Foster Wheeler secured a three-year project management contract with Shenhua Ningxia Coal Industry Group in 2015 to provide engineering, commercial procurement and quality control services to a coal chemical by-product processing plant (Wijeratne et al. 2018).

¹⁵ For example, GE China collaborates with Sinomach in Africa, supplying technology to the company and jointly bidding for procurement opportunities. KazMunayGas (KMG), a Kazahstani oil and gas company has a joint venture with the CEFC China Energy Company to develop oil refining and gas station networks in Silk Road countries (PwC, 2017). ABB has several engineering deals with Chinese firms on BRI projects (Deloitte,

The scope for enhancing foreign and local participation depends on the processes used by China and by host countries to define procurement needs and award contracts. Sections 4 and 5 below discuss public procurement regulation in China and in BRI countries, respectively. Before turning to this, we briefly discuss core elements of international good practices in public procurement policy to provide a benchmark.

3. Internationally accepted good procurement practices

The basic features of good practices in public procurement are well known. They are embedded in the procurement guidelines used by multilateral development banks, the provisions of the WTO Government Procurement Agreement (GPA) and international model laws developed by UNCITRAL. They include ensuring transparency and encouraging the use of competition in the allocation of contracts through open tendering, measures to promote competition and prevent collusion between bidders, clarity on the evaluation criteria that will be used to determine the winning bid, including the relative weight that will be given to price as opposed to qualitative criteria or technical quality and whether there will be a preference given to (certain types of) domestic firms, providing feedback to bidders why they were not selected and domestic review and complaints mechanisms permitting firms to contest perceived non-compliance by procuring entities with domestic law and procurement regulations.

Large and complex contracts – either those above a certain minimum threshold or requiring specialized technical expertise or skill – should be subject to international competitive bidding (ICB) procedures. National law should specify what the thresholds are. Implementing regulations should specify whether procuring entities may (or must) treat domestic bids more favorably than those from foreign companies or consortia, what such treatment comprises and the criteria that apply.

Transparency is critical both to make firms aware of opportunities – entailing publication of notices, ensuring there is sufficient time to prepare bids, making clear what the performance requirements are. One way of doing is to utilize e-procurement, especially for contracts above a certain minimum threshold. Transparency is also critical to permit firms to contest procurement decisions and assure there is accountability and integrity. Domestic review and bid-protest ‘challenge’ mechanisms are particularly important for accountability of procurement outcomes. Requirements that call for tenders to be published, that bids are opened in public, that procuring entities must award contracts to the lowest bidder who satisfies the technical criteria, and so forth, are much less relevant to firms if there is no effective recourse to situations where entities do not follow the rules. Another good practice relating to transparency is to publish data on both procurement processes and outcomes to allow for ex post analysis. This is a precondition for evaluation of the effects of processes and learning about how they might be improved.

2018) as do General Electric and Siemens

(<http://www.chinadaily.com.cn/a/201801/15/WS5a5bf304a3102c394518f247.html>). Such partnerships may be more difficult to establish in developing countries, and especially in Africa, where a greater imbalance between Chinese and local firms has been observed. In Kenya, local firms have reportedly found it hard to compete with Chinese firms, and some have cut back their operations since the country opened up to Chinese projects. See <https://www.business.hsbc.com/belt-and-road/participation-of-foreign-firms-in-the-bri>.

As in any area of regulation, different countries may pursue different approaches to procurement. Although there is a strong presumption that principles such as transparency and competition are important features of good procurement regimes, there is no one-size-fits-all optimal procurement mechanism that is appropriate for all situations and all countries. For procurement projects involving long-lived infrastructure projects, new technologies or outsourcing of public services, learning from experience through feedback mechanisms and international cooperation is of great importance. For example, until relatively recently, the basic presumption in the procurement literature was that the type of arms-length international competitive bidding procedures regarded as good practice would, as a rule of thumb, generate efficient outcomes by awarding contracts to the lowest cost supplier able to meet the technical project requirements. However, especially for more complex projects, efficiency may require procuring entities to engage in negotiations and to interact with potential suppliers (see e.g., Spiller, 2009). Such ‘competitive dialogue’ permits companies to engage with procuring entities, allows the latter to consider alternative solutions and technologies and to determine what would be most appropriate in addressing their specific needs. Insofar as Chinese practice under BRI projects involves host countries negotiating with selected companies this is a feature of the process that may enhance the final outcome. Another good practice is to incorporate “benchmarking” of costs into the process, i.e., comparing the cost of projects implemented by Chinese enterprises versus others given equivalent technical requirements and quality standards.

The WTO Government Procurement Agreement: A code of international good practice

The GPA is one of only two Plurilateral Agreements in the WTO.¹⁶ It applies only to those WTO members that decide to sign it. Under the GPA, all foreign affiliates established in a signatory are to be treated the same as national firms. GPA signatories are required to “...conduct covered procurement in a transparent and impartial manner that is consistent with the Agreement, using methods such as open tendering, selective tendering and limited tendering; avoids conflicts of interest and prevents corrupt practices” (Art. IV:4).¹⁷ There is an implicit preference for competitive procurement methods, reflected in requirements that notices of intended or planned procurement be published (including information on timeframe, technical requirements, and terms of payment), and in disciplines on treatment of tenders and contract awards.

Price-preference policies, local content requirements, offsets and similar discriminatory policies are in principle prohibited by the GPA, but exclusions are built in to grandfather domestic content requirements for small businesses – e.g., US federal procurement preferences for small businesses owned by women or socially disadvantaged businesspeople. Art. V GPA gives developing countries the right to adopt or retain price-preference policies and offset

¹⁶ Government procurement was excluded from the precursor of the WTO, the 1947 General Agreement on Tariffs and Trade. This continues to be the case under the WTO: countries are free to discriminate against foreign products when buying products for public consumption if they decide not to sign the GPA. At the time of writing, there are 45 parties to the GPA, including the 28 members of the EU. The agreement binds only signatories.

¹⁷ Open tendering is any method that allows any supplier to bid (e.g., international competitive bidding). Selective tendering is a method where only suppliers that satisfy specific criteria for participation may bid (usually prequalified suppliers). Limited tendering is non-competitive and usually involves a procuring entity approaching one or more potential suppliers of its choice.

requirements on a transitional basis and delay the implementation of any and all provisions other than MFN for up to 3 years (5 years for a LDC).

The GPA provisions cover different aspects of non-discrimination (especially national treatment), transparency (both ex-ante and ex-post) and dispute settlement, all of which would help enhance transparency and potentially improve procurement outcomes.¹⁸ We return to this discussion in Section 6.

4. Public procurement law and regulation in China

An important factor in assessing the economic implications of BRI projects is whether there is competition among potential suppliers in the award of BRI-related procurement contracts. Even if a majority of BRI projects are awarded to Chinese suppliers as a result of a desire by China that Chinese-funded BRI projects be allocated to Chinese firms, ensuring that contracts are allocated through a competitive process can provide some assurance to borrowing countries that value for money objectives are seriously considered. Ideally, BRI projects that exceed a certain value threshold or require a specific technical/skill expertise should be allocated through international competition, as is generally accepted good practice, so as to increase the probability that the firms that are best placed to satisfy the technical criteria at the lowest possible cost are selected. In principle, BRI projects allocated to Chinese firms should conform with the regulatory framework that applies to publicly funded procurement projects in China, given that Chinese public funds are allocated to Chinese firms. What follows briefly summarizes the government procurement legislation and practices in China.¹⁹

Two pieces of legislation govern public procurement in China, the Government Procurement Law (GPL) and the Bidding Law (BL) (Cao and Zhou, 2017). Since 2003, the GPL is overseen by the Ministry of Finance. It applies to government procurement of goods, construction and services conducted with fiscal funds at all administrative levels²⁰ above certain thresholds. It does not pertain to SOEs, an issue that has been a key factor in GPA accession negotiations (Tu and Sun, 2017). A revised GPL Implementing Regulation became effective in 2015.

Article 26 of the GPL stipulates the following procurement procedures: public tendering, selective tendering, competitive negotiation, request for quotation and single source procurement. The BL, which has been effective since 2000, is overseen by the National Development and Reform Commission, and governs procurement activities of both public and private entities (including SOEs) relating to large publicly funded infrastructure works and related supplies and services. These projects can be financed or co-financed by the government, state financing, loans and aid funds from international organizations or foreign governments. Article 10 of the BL stipulates procurement may be on the basis of both open and selective tendering. In 2013 over 80 percent of government procurement contracts in China were allocated through open bidding procedures (Cao and Zhou, 2017). Under both laws the implementing regulations specify threshold values that determine if they apply. For individual

¹⁸ Recent research by Tas et al. (2018) suggests that the GPA is effective in promoting non-discriminatory, open, transparent, competitive, and cost-effective government procurement.

¹⁹ See European Parliament (2016), European Commission (2017), Cao and Zhou (2017) and Tu and Sun (2017).

²⁰ Military procurement is not subject to the GPL.

construction contracts, the threshold in the BL is RMB 2 million; for supply contracts RMB 1 million.

While the legislation and implementing guidelines seeks to improve the effectiveness of public procurement in China, the allocation of contracts under these rules is not always necessarily open. Preferential treatment of domestic over foreign enterprises is enshrined in Article 10 of the GPL, which has explicit '*buy Chinese*' provisions. Government agencies are required to source from Chinese companies unless domestic firms are at least 20 percent more costly than foreign firms. Ensuing distortions (as a result of limited competition) may be reflected in higher award prices or reductions in the range and quality of goods and services on offer. Of relevance to the BRI, the GPL provides an exception to the buy Chinese requirement if goods or services are for use outside China (Grieger, 2016). This suggests that the GPL does not constrain Chinese funding agencies from requiring competitive tendering for BRI projects.

What matters more for the BRI is the BL, which is the primary law regulating procurement by public utilities and for infrastructure works. This does not explicitly require '*buy Chinese*', but there is significant scope for sub-central government bodies to exercise discretion through local content requirements. Certain practices, including licensing requirements, preferences for holders of indigenous patents and exclusions of consortia, may skew the process in favor of Chinese enterprises. Such practices are prevalent in sectors such as energy, construction and engineering.

Article 9 of the GPL and Article 6 of the Implementation Rules of the GPL provide that public procurement facilitate the achievement of goals designated by state policies. Given the undefined nature of these goals, there is broad scope for interpretation by decision-making bodies in justifying a discriminatory allocation of contracts. Ambiguous definitions of domestic enterprises (e.g. whether they include foreign-invested enterprises), a lack of clear or effective remedial systems to address challenges and complaints (the BL does not make provision for remedies), overlaps and opaque provisions existing in both sets of relevant governing legislation may be deterrents to foreign suppliers bidding for public procurement contracts in China.

This brief overview of the public procurement system in China pertains to projects implemented in China, not to projects executed in foreign countries by Chinese firms with Chinese funding. It suggests, however, that Chinese law supports award of BRI contracts to preferred Chinese suppliers. However, current legislation also suggests that the discretion built into the provisions of the GPL permit the government to make explicit that buy Chinese provisions do not apply to BRI procurement if it were to decide to make BRI procurement more transparent and competitive. As mentioned, the GPL already appears to allow this for procurement of goods and services for use outside China. Whether this can be applied to procurement covered by the BL, the instrument applying to infrastructure projects, is an open question.

A general challenge in this regard is that SOEs and sub-central governments account for most infrastructure spending – the central government accounts for only 5 percent of total procurement (Grieger, 2016). What matters for BRI projects specifically are the processes applied by Chinese funding entities. The fact that lending by China's policy banks is often conditional on agreement that Chinese contractors will play a leading role in the implementation of the projects they finance implies that they have significant scope to impose

specific procurement requirements. In practice, the policy banks already require borrowers to include the bank in the procurement process, including bidding and tendering activities. More broadly, foreign investment by Chinese enterprises is subject to approvals by Chinese government bodies such as the National Development and Reform Commission, the Ministry of Commerce and the State-owned Assets Supervision Commission of the State Council. MOFCOM has a mandate to coordinate delivery of large projects in partner countries, working with relevant ministries, policy banks and relevant SOEs. For projects that have a concessional finance element the ministry has a mandate to oversee the associated procurement processes, creating opportunities for it to influence these (Hoare et al., 2018).

As part of its efforts to accede to the WTO GPA, China is reportedly engaged in revising its procurement system.²¹ This offers a prospect for aligning BRI procurement processes with international good practices. The focus of the government in its engagement with other countries on procurement matters has primarily been on the GPA accession negotiations. These reflect market access considerations, as this is the main focus of the WTO. Chinese representatives have indicated that China will present a revised and improved proposal to GPA members that would expand what it is willing to commit to, including more of the procurement undertaken by sub-central government bodies and SOEs. While China has an interest in negotiating with GPA members to get the best possible market access deal when acceding to the GPA, it has the discretion to apply GPA-consistent international good practices to BRI projects unilaterally. The GPA negotiations focus on procurement in China, not on what China does in third countries. However, insofar as Chinese policy banks finance BRI projects there is no legal or technical reason why it is not possible to apply disciplines on their foreign activities (i.e., BRI projects). The same is true for sub-central government entities and SOEs.

5. National procurement law and practice in BRI countries

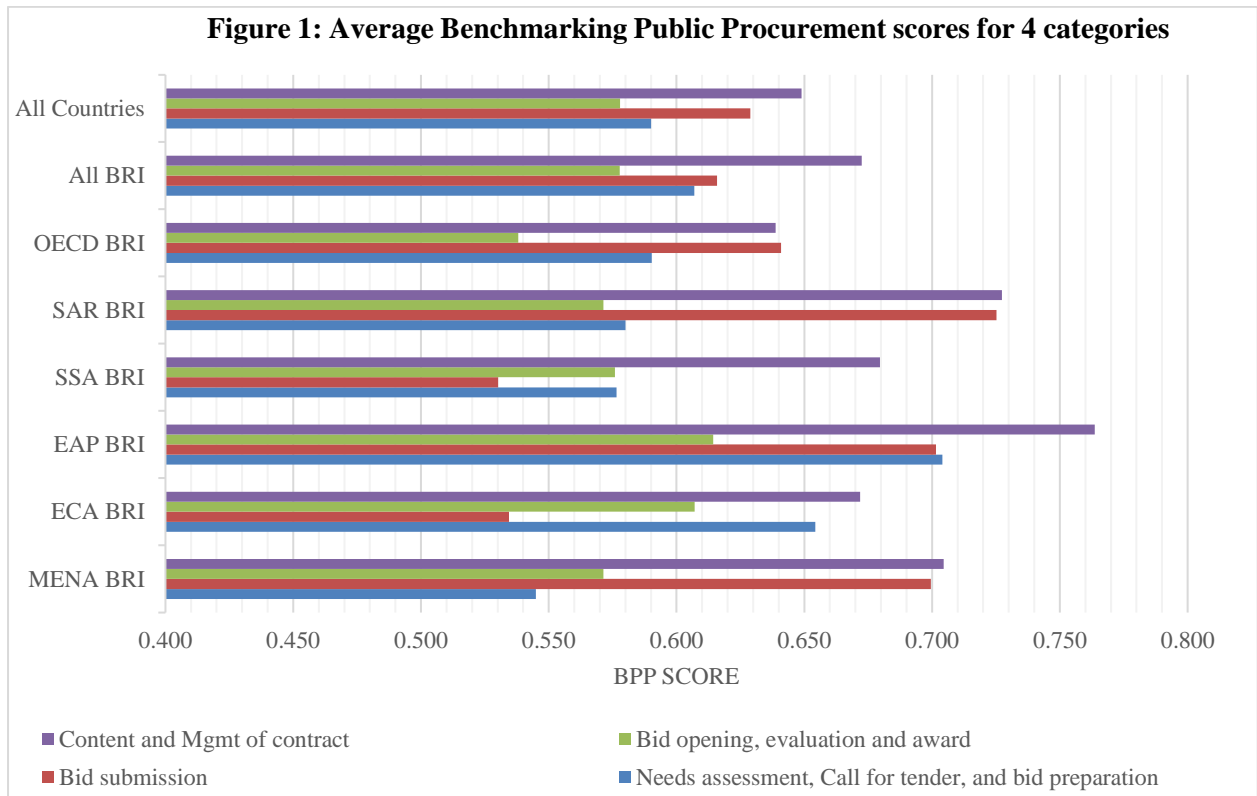
This section provides a brief analysis of national procurement laws and practices followed in BRI countries to assess whether and to what extent these practices differ in the award of BRI versus non-BRI projects. In principle, because BRI countries borrow for BRI projects, national procurement regulations are pertinent. A complementary track in improving procurement processes is through action by BRI partner/borrowing countries. The following discussion derives from the World Bank's Benchmarking Public Procurement (BPP) database (World Bank, 2016) which reports data and analysis examining the legal and regulatory environment affecting the ability of private sector companies to do business with governments.²²

A comparison of BRI countries, both as a single group and regionally, against all 180 economies included in the BPP database reveals that BRI countries do not stand out as having public procurement processes that are significantly different from non-BRI economies (Figure 1). Countries are grouped by geographical region, using the World Bank classification system. The data reveal significant variation across regions in average scores for different dimensions of procurement regimes. Scoring lower on one category does not necessarily mean a lower

²¹ <https://trade.djaghe.com/?p=4934>

²² The BPP data were last collected on June 1, 2016. For more information, see <http://pubdocs.worldbank.org/en/121001523554026106/BPP17-e-version-Final-compressed-v2.pdf>.

score on others as well. East Asia Pacific (EAP) BRI countries generally have higher average scores.²³



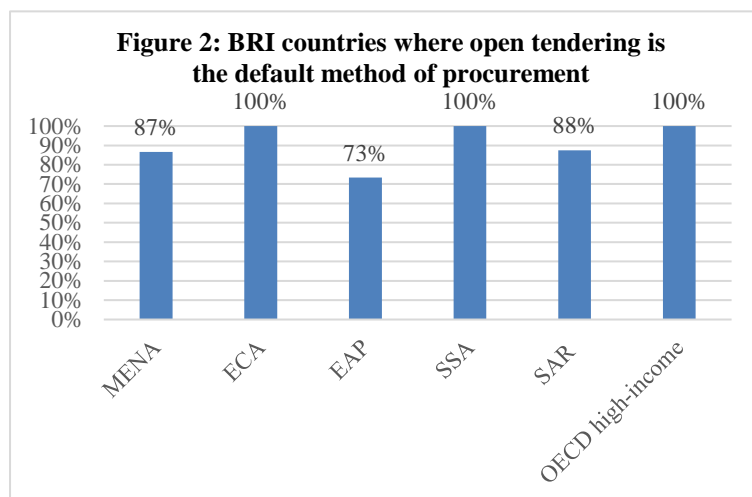
Note: Higher scores denote that a country/region is applying better practices.

Source: World Bank Benchmarking Public Procurement 2017

We next look at various attributes of procurement practice in BRI countries in more detail, focusing on dimensions generally regarded as constituting good practice.

²³ It should be noted that there can be substantial variation across countries within regions on some dimensions of procurement regulation, reflecting differences in per capita incomes and the quality of economic governance.

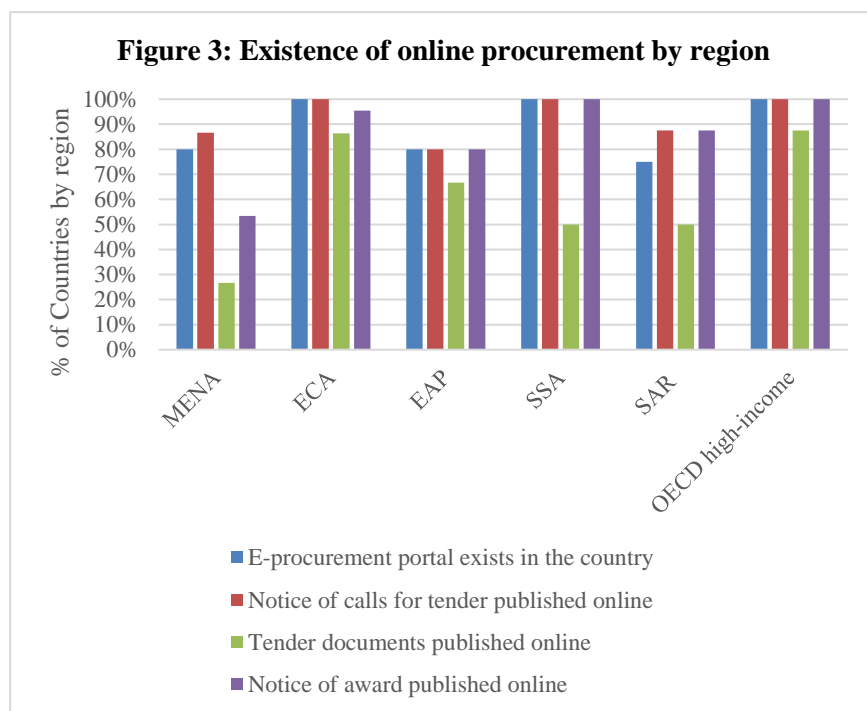
(a) Open tendering



The vast majority of BRI countries have open tendering as their default method of procurement (90%) and in 3 of the 6 regions represented (Figure 2), 100% of BRI countries use open tendering.²⁴ BRI countries in EAP lag behind in this category, although the region still has approximately 73% of countries (11/15) claiming to use an open tendering process.

(b) Online procurement

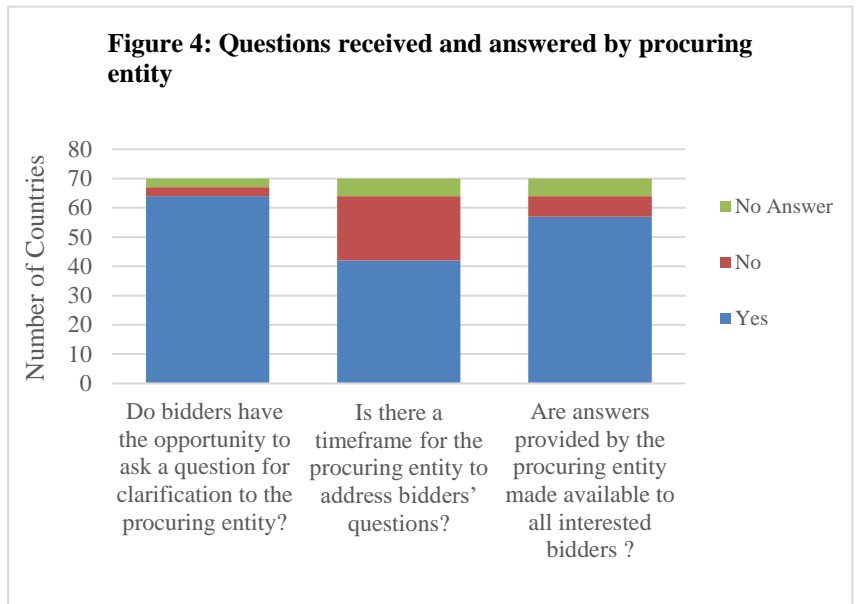
Public procurement portals online have become an increasingly common tool used around the world and can significantly decrease the costs of information as well as enable access to bidding opportunities otherwise limited by proximity. Their use in BRI countries, as shown in Figure 3, is widespread, particularly in Europe & Central Asia and in OECD high-income economies. However, the least common component included online is the tender documents themselves.



²⁴ *Open tendering* is a method of procurement involving public and unrestricted solicitation under which all interested suppliers can submit a bid. The fact that countries have open tendering as their default procurement method does not necessarily mean that such foreign firms are de facto eligible to submit bids.

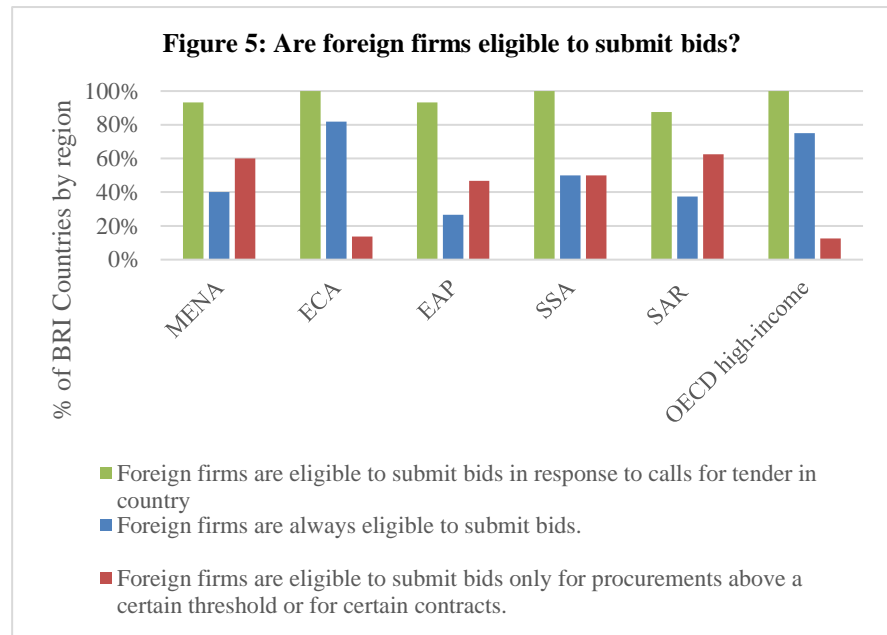
(c) Information and transparency

A firm’s ability to ask the procuring entity specific questions and learn what others are asking can help all bidders provide better informed and tailored bids. If only certain bidders, especially large bidders, have access to the information many others will automatically be left behind, despite their potential ability to submit competitive bids. This is relevant not only for small vs. large bidders, but also foreign vs. domestic bidders. In most cases (~91% of BRI countries), bidders have the opportunity to ask clarifying questions (Figure 4). Having a timeframe for the procuring entity to address those questions and sharing answers with all bidders are less common practices, although still observed in a majority of countries.



(d) Participation by foreign firms

Restrictions on participation in procurement opportunities by foreign firms is common in many countries. In almost all BRI countries foreign firms are eligible to submit bids in response to calls for tender, but there may be restrictions in terms of types or size of



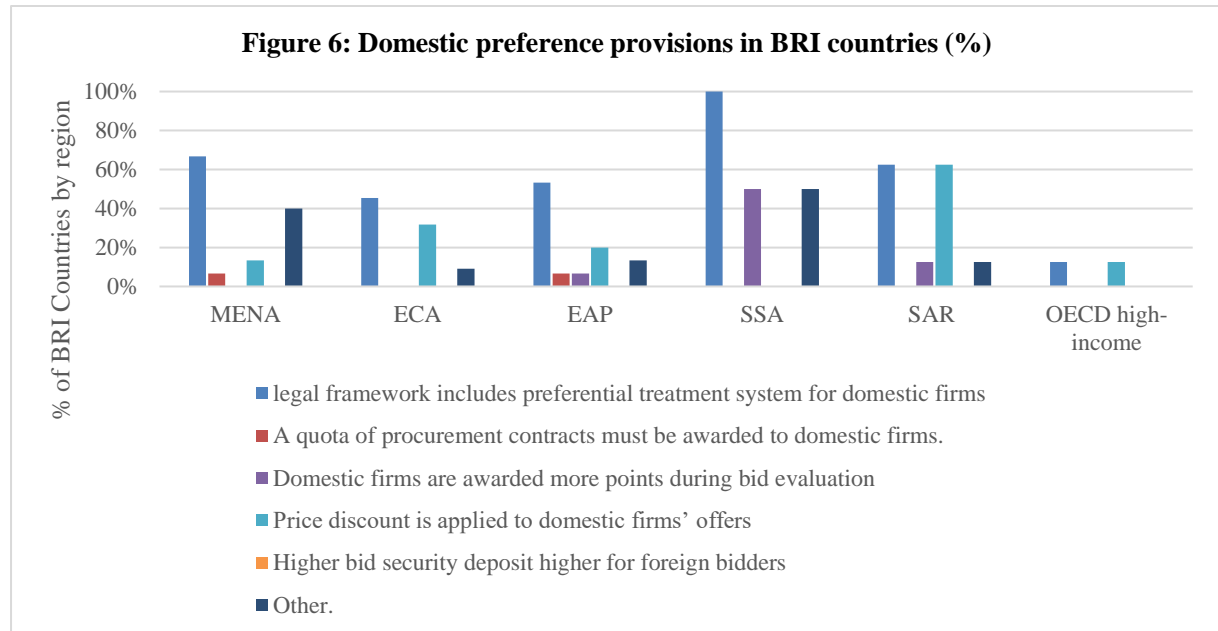
procurement contracts. Such limitations are observed in 40 percent of all BRI countries. There is significant variation across regions in this regard (Figure 5). In OECD high-income economies, 75 percent of countries always permit foreign firms to submit bids; in the EAP region, this is the case for only 25 percent of countries.

There is also substantial variation between countries where regulatory provisions explicitly safeguard foreign firms’ access to public procurement as opposed to countries where the law is silent on this issue. In some countries, the procuring entity is granted discretion whether to impose barriers and limit entry of foreign firms, but the law requires that this be specified in the notice of procurement. Such overt but transparent impediments to foreign participation in tenders is observed in a number of countries, including Indonesia, Iran, Pakistan and Turkey. Examples of such provisions include set-aside programs or an obligation to supply products with only local inputs. Overt barriers may be complemented by covert restrictions that are not published and thus are not transparent.

(e) Preferences for local bidders

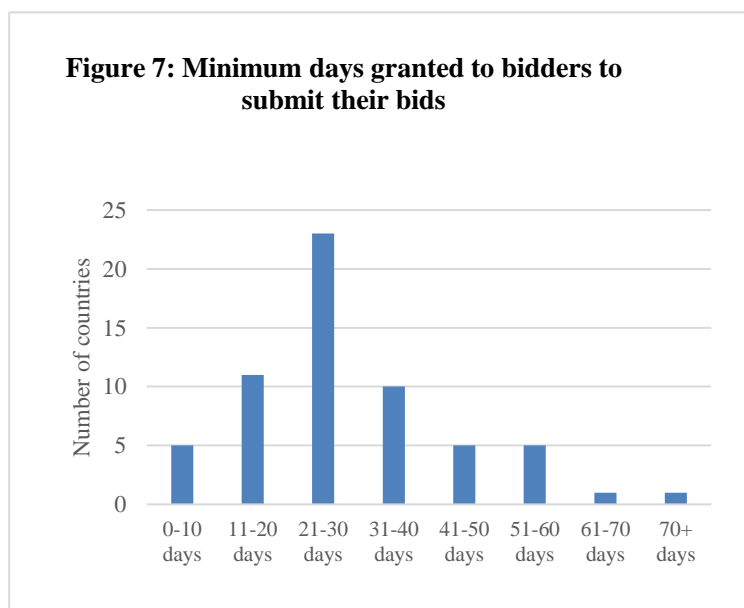
Another relevant attribute of procurement practices in BRI countries is the extent to which the country where the project is to be executed can give preference to domestic firms over foreign firms. The underlying goal motivating such provisions is usually a desire to use government resources to support domestic employment, investment and learning. The main rationale supporting the use of domestic preference is that businesses, especially in developing countries, are at a disadvantage when competing with foreign firms, as the latter may have better access to technology, finance, and have already realized economies of scale that increases productivity and lowers production costs. As a result, domestic firms may be unable to compete with foreign firms. Granting a preference to local bidders, for example requiring procuring entities to grant a contract to a local firm if the bid does not exceed the lowest foreign bid by a specified percentage (often 15 percent) is an example of a commonly observed domestic preference scheme. Awarding contracts to local firms may have efficiency benefits by allowing firms to realize scale economies and permitting them to make investments that increase productivity and generate greater social and economic benefit to local communities than otherwise. But it

also comes at a cost for procuring entities which must be considered in the design of preference schemes. In principle using the price mechanism will be superior to approaches that require a set proportion of procurement contracts to be allocated to local firms. As can be seen in Figure 6, many countries provide some form of preferential treatment to domestic firms via their legal framework, but there is significant variation in the method by which preferences is provided.



(f) Promotion of competition

Granting suppliers enough time to prepare and submit their bids can ensure fairness, especially for SMEs as preparing a bid in the case of infrastructure and other projects can require hiring consultants, preparing plans, producing samples and performing other time-consuming tasks. If the timeframe to do so is too short, smaller companies have less chance to meet the deadline and submit a solid proposal. But a longer timeframe to submit a bid is not necessarily better, leaving policymakers with the task of



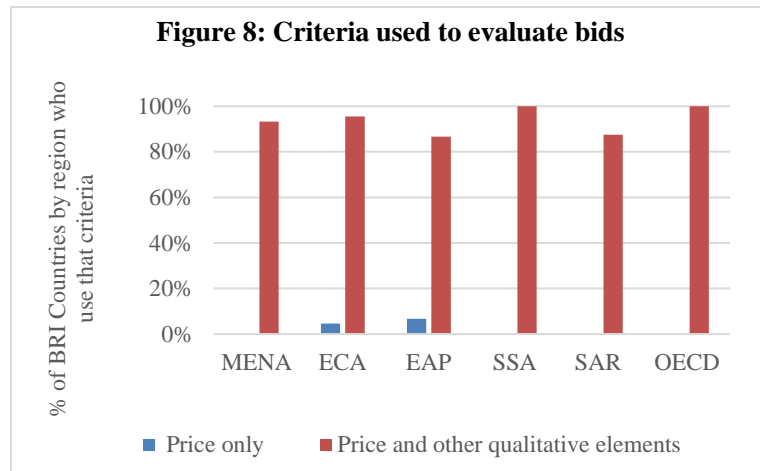
balancing between fairness and efficiency. The 2014 European Union directive on public procurement, for example, lowered the minimum time for suppliers to submit a bid for above threshold procurement from 52 days (as in the previous directive) to 35.

Most BRI countries (87%) specify a minimum time period that a procuring entity must grant bidders to submit their bids. The length of this period varies substantially (Figure 7). The most commonly observed period ranges between 21-30 days. Countries with very short submission

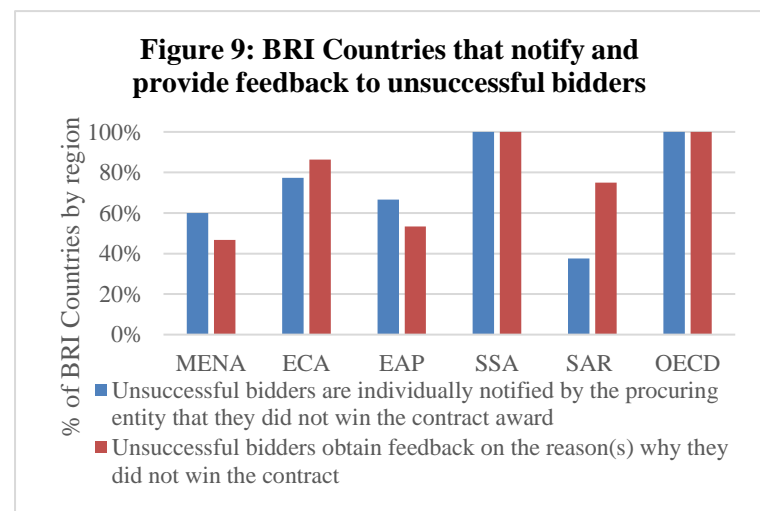
times include Indonesia, Iran and Tajikistan (10 days or less). At the other end of the spectrum, Philippines and Qatar apply 65 and 90-day periods, respectively.

(g) Evaluation criteria: Price vs. qualitative measures

Almost universally, BRI countries do not rely solely on price to evaluate a bid, often including price as criteria alongside other qualitative elements.



price as criteria alongside other qualitative elements. Only two BRI countries (Philippines and Macedonia FYR) report that price alone is used to evaluate a bid. A combination of price and qualitative criteria is used to evaluate bids in all other countries (Figure 8).

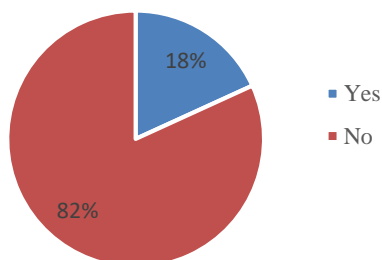


(h) Availability of feedback

In order for bidders to learn from failure to win tenders and improve their chances in future bidding opportunities, it is important for procuring entities to share the results of the tender but more importantly, the reasons for not winning the contract. Approximately 75% of BRI countries report that they notify unsuccessful bidders as to whether they won the contract or

not. Approximately the same percentage also provide feedback to unsuccessful bidders. Inter-regional variation is significant, however (Figure 9).

Figure 10: Unilateral modification of contracts by the procuring entity



(i) Contract management and modification

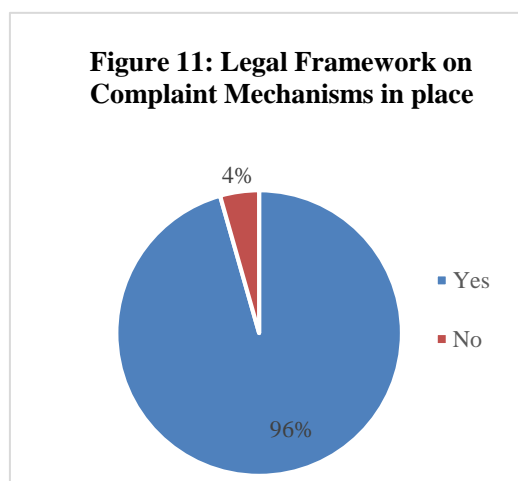
Awarding the contract marks the “end” of the formal procurement process but the contract must still be managed to ensure successful execution and the supplier must be paid in return for its performance. The management of the procurement contract is as important as the bidding process. Many procurement systems do not cover this phase of the procurement life cycle. Procurement models that embody internationally accepted good practices – such as the WTO GPA and the UNCITRAL Model Law on Public Procurement – do not provide guidance for contract

management and execution. Procurement contracts must be managed in a prompt and transparent way, and with sufficient safeguards to protect suppliers from unilateral decisions and actions by the procuring entity.

One aspect of transparency of the way procurement processes are taking place relates to contract modification. The extent to which the contract can change following its signing and the extent of discretion and disclosure followed could influence a contractor’s desire to do business with the government. While predictability is important for all parties to an agreement, especially in infrastructure and works projects, a degree of flexibility is just as crucial. When elements of the procured project evolve, this flexibility should allow for those changes to be addressed, preferably within the clearly defined internal mechanisms established in the contracts or, when absolutely necessary, by amending the agreement accordingly. Nonetheless, modification of the main terms of the procurement contract should be limited to prevent opportunistic behavior. In the case of BRI countries, only 12 economies permit procuring entities to unilaterally modify the terms of the contract during the implementation phase (after the contract has been signed) (Figure 10). In some of these countries, the entities are not required to publish post-award contract variations. This is the case for example in Bahrain, Arab Republic of Egypt, Kyrgyz Republic and Sri Lanka, among others.

(j) Complaint and domestic review mechanisms

Complaint mechanisms introduce a relatively low-cost form of accountability into procurement markets by providing an opportunity for suppliers, and even citizens to hold public officials involved in tendering accountable for their decisions and behavior. The existence of a legal framework governing complaints bestows confidence in the process because it increases the likelihood that the procurement will be carried out in a more impartial and transparent manner (Schooner 2002). Enhanced trust in the system will not only preserve the integrity of the process but can act as an incentive that triggers increased participation of suppliers in public tenders, thus boosting competition, better value for money and as a result improving the quality of goods, works, and services (Gordon 2013). This is particularly important in markets where access to information and transparency is limited.



As shown in Figure 11, most BRI countries (96%) have a legal framework in place governing complaint mechanisms. Malaysia and Myanmar are among the few countries that do not have explicit regulatory provisions governing complaints and do not offer a three-tier review for pre-award complaints. Pre-award complaints are important as they provide an opportunity for the tendering authorities to take corrective measures when the process is flawed or unfair. Three types of review bodies through which bidders can bring complaints are observed in BRI countries: the procuring entities themselves; independent administrative review bodies; and national courts. While there is no defined international good practice as to which the first-tier review body should be, the type of body in charge of conducting a review of complaints may affect the timeliness of decisions and the corrective measures that can be granted. A complaint review procedure is usually faster and less costly when submitted before the procuring entity, especially before the contract has been awarded and in cases where a mistake rather than a breach of public procurement law is the reason for protesting. The BPP data indicate that the higher the level of development, the more likely independent administrative review bodies will be available as an additional recourse forum for suppliers.

Summing up, while national procurement laws and practices in many BRI countries can be improved to enhance competition and transparency, many countries have regimes that are broadly aligned with international good practice on some dimensions, including in terms of permitting participation by foreign bidders and domestic review of the procurement process and awards. An implication is that insofar as BRI projects in these countries are earmarked for Chinese firms or are characterized by an absence of transparency as to how contracts have been allocated, this is likely to be inconsistent with national procurement law and regulations.

6. Procurement provisions in trade agreements spanning BRI countries

Trade agreements are an important potential instrument that BRI countries can use to move BRI procurement closer towards international good practice. There are two types of trade agreements that can be used for this purpose: the WTO (multilateral) and preferential trade agreements (PTAs). The latter generally are less comprehensive than the WTO GPA – briefly discussed in Section 3 above – in terms of substantive disciplines and scope of coverage. Both types of agreement can help BRI governments increase the prospects that BRI projects are allocated to firms that are best placed to implement them in terms of value for money and quality of services provided. They can do so by providing a mechanism to promote competition between firms interested in participating in procurement opportunities. Such mechanisms are relevant even if firms located in a BRI country have limited ability to engage in procurement processes or to supply services competitively. This is because they create an avenue for foreign firms to challenge instances where projects are allocated on a non-competitive basis. An example of such dynamics at work is a BRI project in Hungary that was deemed to violate EU procurement legislation. In 2017, the award of a BRI contract for a railway between Belgrade and Budapest was rescinded following a determination that the procurement practices employed were inconsistent with EU procurement regulations mandating open tendering.

Only one-third of all BRI countries are a member of the GPA (Table 1). The GPA is designed to ensure open, fair and transparent conditions of competition in the government procurement markets and recent research suggests that it may be attaining this objective (see Tas et al. 2018). Membership would help promote the use of transparent, value-for-money oriented procurement processes in BRI countries regardless of their application to BRI-specific projects. China is not a member of the GPA but has been engaged in accession talks for over a decade, incrementally making more comprehensive offers to GPA members in terms of the coverage of sub-central entities and lowering the value thresholds determining when the agreement would apply (Tu and Sun, 2017). Accession to the GPA would have direct benefits for all BRI countries and the likelihood that BRI projects are allocated to the most efficient, cost-competitive companies that satisfy the performance standards specified for a given project.

PTAs involving BRI countries

PTAs can also be valuable and offer a complementary path towards adoption of GPA-type disciplines on procurement practices. A key factor making PTAs potentially more palatable as mechanisms to make procurement-related commitments is that they provide market access benefits in other areas. Many BRI countries have not signed PTAs that encompass procurement. China has not done so to date in any of its PTAs, having made clear that it first wants to conclude the negotiations on accession to the GPA (Cao and Zhou, 2017). Nonetheless, the recent conclusion of the Comprehensive and Progressive Agreement on Trans-Pacific Partnership (CPTPP) negotiations demonstrates that this can be a viable path for non-GPA members to make procurement commitments. What follows discusses the coverage of PTAs involving BRI countries, as there is extensive analysis of the GPA and its provisions (e.g., Arrowsmith, 2011; Davies, 2017).

Table 1: BRI countries and the GPA

Non-GPA BRI country	GPA Party + BRI country	GPA Observer + BRI country
Azerbaijan	Armenia	Afghanistan
Bhutan	Bulgaria	Albania*
Bosnia and Herzegovina	Croatia	Bahrain
Brunei Darussalam	Czech Republic	Belarus
Cambodia	Estonia	China *
Djibouti	Greece	Georgia *
Egypt, Arab Rep.	Hong Kong, China	India
Iran, Islamic Rep.	Hungary	Indonesia
Iraq	Israel	Jordan *
Kenya	Latvia	Kazakhstan
Kuwait	Lithuania	Kyrgyz Republic *
Lao PDR	Moldova, Republic of	Malaysia
Lebanon	Montenegro	Mongolia
Maldives	Poland	Oman *
Myanmar	Romania	Pakistan
Nepal	Slovak Republic	Russian Federation *
Philippines	Slovenia	Saudi Arabia
Qatar	Singapore	Sri Lanka
Serbia	Ukraine	Tajikistan*
Sri Lanka		Thailand
Syrian Arab Republic		FYR Macedonia*
Taiwan, China		Turkey
Tanzania		Vietnam
Timor-Leste		
United Arab Emirates		
Uzbekistan		
West Bank and Gaza		
Yemen, Rep.		

*Note: * Negotiating accession*

Source: WTO.

We focus on the coverage of government procurement in PTAs where either one or both parties to a trade agreement are BRI countries. It is based on a new methodology developed by Shingal et al. (2018) that enables classification of agreements at the extensive margin (based on binary responses to procurement questions – e.g., “does a PTA have a detailed government procurement chapter/provisions?”) and the intensive margin (based on more detailed consideration of the salient features of government procurement chapters/provisions in a PTA). The classification is based on eight broad themes incorporating around one hundred questions, which cover the salient features of government procurement chapters/provisions found in PTAs and represent desirable characteristics that proscribe discrimination in the award of public contracts and/or lead to better value of money for the government. The eight broad themes include overview; non-discrimination; coverage; ex-ante transparency; procedural disciplines; ex-post transparency; dispute settlement; and new issues.²⁵

²⁵ For details see Shingal et al. 2018.

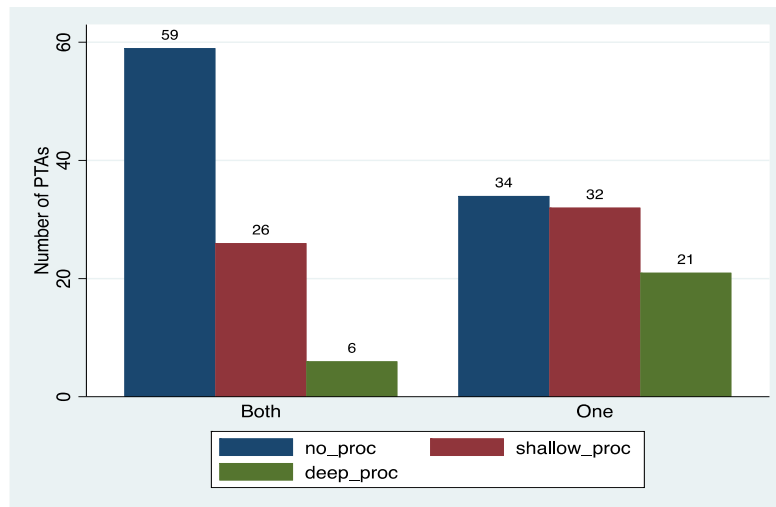
Of the 283 PTAs analyzed by Shingal et al. (2018), 178 agreements involve at least one BRI country. More than 50% of these 178 agreements (n=93) have no provisions covering government procurement, while in another 58 PTAs (33%), the coverage of government procurement is “shallow” in the sense that they do not include specific commitments that are enforceable. Only 27 of the PTAs (15%) are “deep” in their coverage of government procurement in that they include legally binding specific commitments that can be enforced. We will refer to these as Deep Procurement Agreements (DPAs) in what follows. The full list of PTAs involving BRI countries is reported in Annex Table 3.

Figure 12 provides a breakdown of the 178 PTAs based on procurement coverage and depending on whether one or more PTA members are BRI countries. This breakdown reveals that nearly two-thirds of the PTAs negotiated between BRI countries (59 out of 91) do not have any provisions covering government procurement; in another 26 agreements, the coverage is shallow; and only six are DPAs. In contrast, the distribution of procurement-coverage in PTAs that involve only one BRI country is more even: 39% (34 out of 87) agreements do not cover government procurement; in another 37% (32 PTAs), the coverage is shallow; and the remaining 24% (21 PTAs) are DPAs. Thus, a majority of the DPAs that have been concluded involve only one BRI country, while most PTAs between BRI countries do not include any provisions on government procurement.

Of the 27 DPAs, six have been negotiated among BRI countries; these include the European Economic Area (EEA), the Eurasian Economic Union (EAEU), and PTAs between EU-Georgia, EU-Moldova, EU-Ukraine and GCC-Singapore. In the remaining 21 DPAs²⁶, Israel is one of the partners in three agreements (Canada-Israel, Israel-Mexico, Israel-USA); Singapore is one of the signatories in ten PTAs; five other agreements include the EU; and Bahrain, Oman and Ukraine each have one agreement to their name. Thus, the majority of the PTAs involving BRI countries that have a deep coverage of government procurement include either Singapore, the EU or the Gulf countries. There is no geographical representation in DPAs involving BRI countries from Central or South Asia or even from South-east Asia, with the exception of Singapore.

²⁶ These include US-Israel, Canada-Israel, Israel-Mexico, New Zealand-Singapore, Japan-Singapore, EFTA-Singapore, Singapore-Australia, USA-Singapore, EU-Chile, Korea-Singapore, US-Bahrain, Panama-Singapore, EU-CARIFORUM, US-Oman, Peru-Singapore, EU-Korea, EFTA-Ukraine, EU-Colombia, Peru, EU-Central America, Costa Rica-Singapore, and Singapore-Chinese Taipei.

Figure 12: Breakdown of PTAs involving BRI countries by procurement-coverage

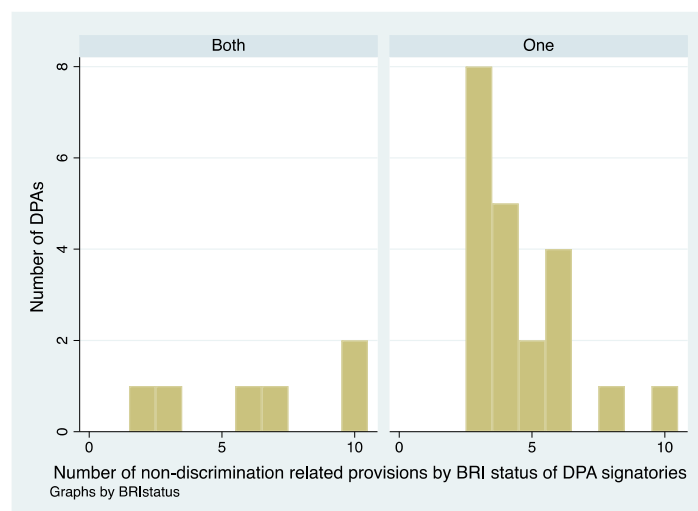


Source: Authors' calculations

Of interest for this paper is the degree to which these 27 DPAs include international good practices that in principle should apply to BRI projects. We consider four dimensions: requirements prohibiting discrimination; product/entity coverage; transparency provisions and dispute settlement.

(a) Non-discrimination: Figure 13 shows the frequency distribution of non-discrimination provisions in the 27 DPAs. No single DPA involving BRI countries covers all 14 aspects of non-discrimination that were used to classify agreements within this theme. In fact, 15 of the 21 DPAs involving one BRI country include only 4 or 5 non-discrimination provisions related to procurement. The maximum “score” of 10 is observed in two DPAs (EU-Moldova and EU-Ukraine) and in one DPA involving one BRI country (EU-Central America).

Figure 13: Non-discrimination provisions in DPAs involving BRI nations

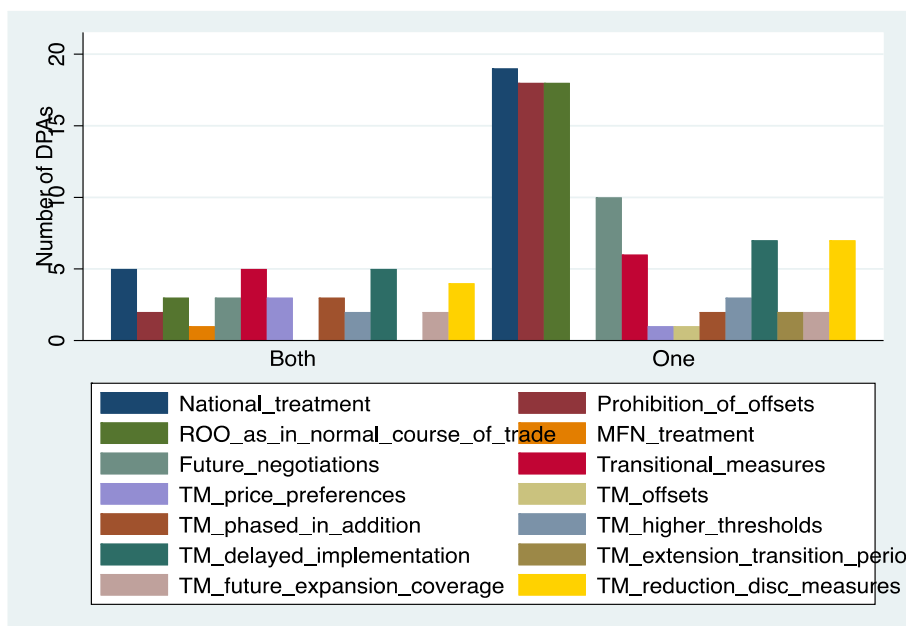


Source: Authors' calculations

The most frequently observed non-discrimination provisions in DPAs between BRI countries relate to national treatment and transitional measures allowing for a delayed implementation

period (Figure 14). Five of the six DPAs between BRI countries include these provisions. In contrast, the most frequently covered non-discrimination provisions in DPAs involving only one BRI country concern national treatment, prohibition of offsets and non-discriminatory rules of origin. Eighteen of the 21 DPAs involving only one BRI country include these provisions.

Figure 14: Frequency distribution of non-discrimination provisions in DPAs involving BRI countries



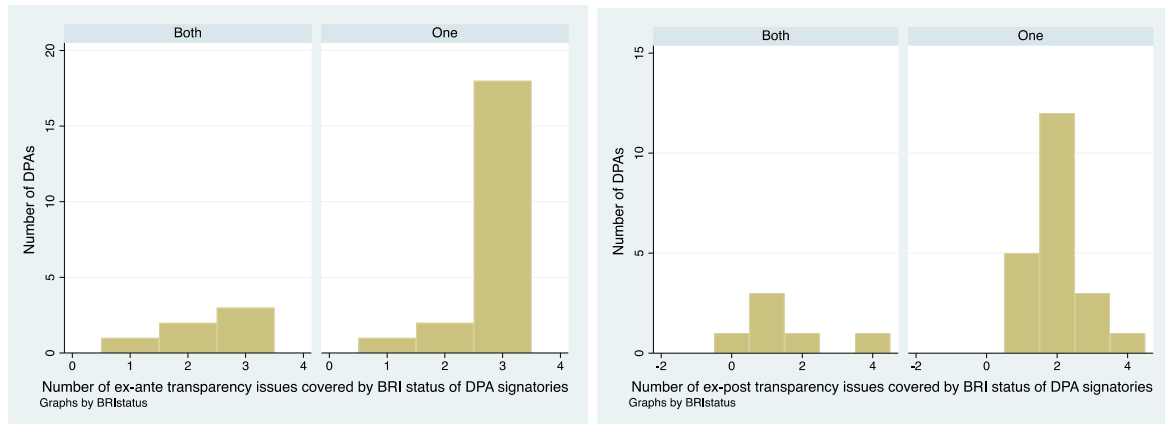
Source: Authors' calculations

(b) Coverage: Three of the 27 DPAs cover only central government entities (EU-Georgia, Australia-Singapore and EU-CARIFORUM), nine cover both central and sub-central government entities, and 17 also include other procuring entities such as utilities. Thresholds for goods and services procurement by central government entities are lower than those stipulated in the GPA for seven of the 27 DPAs (USA-Israel, New Zealand-Singapore, Japan-Singapore, USA-Singapore, USA-Bahrain, Singapore-Chinese Taipei and EU-Georgia). The thresholds were identical to those of the GPA in the other 20 DPAs. For goods and services procurement by sub-central government entities, three DPAs, USA-Singapore, Peru-Singapore, and EU-Georgia, have thresholds that are below those stipulated under the GPA; the thresholds were equal to GPA-stipulated thresholds for the remaining 24 DPAs. Thresholds for goods and services procurement by entities other than central or sub-central government bodies was also found to be lower than the GPA-stipulated thresholds for three of the 27 DPAs – USA-Singapore, USA-Bahrain and EU-Georgia. Thus, two DPAs – EU-Georgia and USA-Singapore - have lower-than-GPA threshold values across all measured aspects i.e. goods, services and construction services procured by all types of entities. In contrast, 20 of the 27 DPAs involving BRI countries have thresholds that are the same as those for the GPA.

(c) Transparency (ex-ante and ex-post) and dispute settlement: Figure 15 shows the frequency distribution of ex-ante (left panel) and ex-post (right panel) transparency issues in the 27 DPAs by BRI status and reveals that 21 of the 27 DPAs cover all three issues of ex-ante transparency

though only 2 DPAs (EEA and EU-Korea) cover all four issues of ex-post transparency. Meanwhile, 13 of the 27 DPAs cover only 2 issues of ex-post transparency.

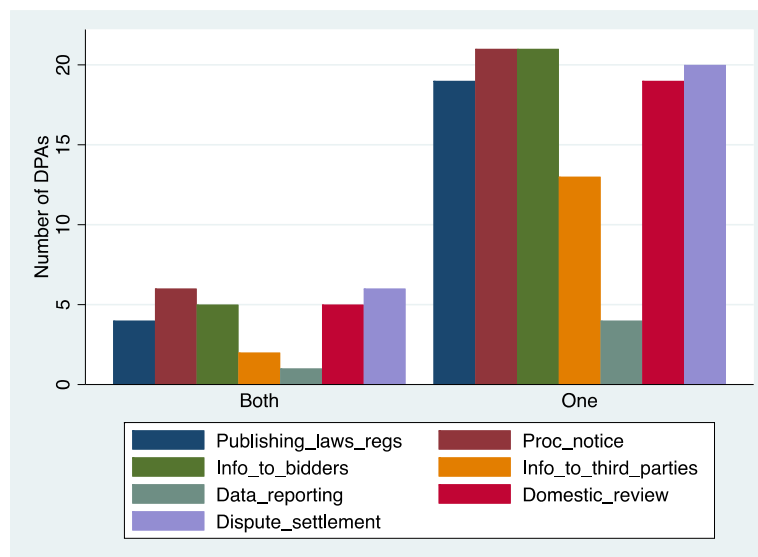
Figure 15: Transparency-related provisions in DPAs involving BRI countries



Source: Authors' calculations

The most frequently covered transparency provisions include those related to publishing procurement laws and regulations (23/27 DPAs), publishing the notice of the intended/planned procurement (27/27 DPAs) and providing information to bidders (26/27 DPAs) (Figure 16). In contrast, the least common provision relates to the collection and reporting of statistics, which is included in only 5 of the DPAs. Thus, a very important element of ex-post transparency is largely ignored by signatories involving BRI countries.

Figure 16: Transparency and dispute settlement mechanisms in DPAs



Source: Authors' calculations

Most of the DPAs cover all four issues related to dispute settlement; three of these are agreements between BRI countries (EU-Moldova, EU-Ukraine and GCC-Singapore) while the remaining 18 DPAs involve one BRI country. Within this distribution, provisions on domestic review are included in 24/26 DPAs while 26/27 DPAs cover provisions on dispute settlement (Figure 17). The sole exception is the Korea-Singapore agreement.

In sum, the analysis of procurement provisions in PTAs involving BRI countries reveals that only 15% of the 178 agreements have a deep coverage of government procurement and 21 of these 27 DPAs involve only one BRI country as a partner. The majority of the DPAs involving BRI countries include either Singapore, the EU or the Gulf countries; there is no geographical representation from Central or South Asia or even from South-east Asia, except for Singapore. Meanwhile, most PTAs between BRI countries do not include any provisions on government procurement.

7. Options for moving forward

Although most public procurement systems aim to achieve “value for money” by requiring procuring entities to seek competitive bids for contracts above a minimum threshold value, in practice procurement is often characterized by a strong ‘home bias’: most contracts are awarded to national companies (Shingal, 2015). This reflects preferences by governments to spend domestic tax revenues at home as well as the pursuit of economic development and/or social objectives (e.g., to support small and medium-sized enterprises, minorities or disadvantaged communities) (Breton and Salmon, 1995).

In itself, there is nothing remarkable earmarking the award of BRI projects funded by Chinese entities to Chinese firms. Other countries do the same. Thus, financing from national export-import banks or export credit guarantee institutions generally is earmarked for national companies given the preferential or concessional nature of the associated financial support. The question is whether this constitutes good practice. In the development finance context, many countries have agreed that the answer is no. This is reflected in the 2005 Paris Declaration on Aid Effectiveness calling on donor countries to move away from tying aid to sourcing goods and services from national firms. A similar decision by China with regard to the BRI would provide greater assurance that BRI procurement awards go to the firms best placed to execute a project. Given the competitive strengths demonstrated by Chinese companies in procurement contests around the world this may not in practice result in a major shift in the share of contracts going to Chinese firms, but it would provide greater assurance that winning firms are in fact those that have put forward the strongest bids.

Efforts to improve procurement practices can follow three tracks. One involves actions by hosts (BRI partner countries). The other involves action by China. The third has a multilateral dimension, using international agreements as a mechanism to apply a set of jointly agreed public procurement processes for BRI projects. Whether governments are willing to consider taking action is a matter for them to determine. What follows is simply intended to sketch out possible paths that could be pursued.

Focusing first on what China might do, the most straightforward path would be a unilateral decision that BRI projects financed by public Chinese entities would utilize international good practices on competition and transparency. First best would be to specify that all Chinese-funded BRI projects exceeding a certain value threshold would employ international competitive bidding (ICB). Doing so could utilize and build on the scope that reportedly already exists in China’s government procurement legislation not to apply ‘buy Chinese’ requirements in cases where goods and services are procured for use outside China. The applicable thresholds could be those that China has already suggested in its most recent GPA offer, or those that apply in the GPL and BL to domestic procurement. This is a matter that China can determine for itself when passing the required implementing regulation pertaining

to the relevant public Chinese entities that finance BRI projects. An advantage of a unilateral initiative to this effect is that it would facilitate participation by the multilateral development banks (MDBs) in BRI-related projects. To date, the role of MDBs in the overall BRI has been very limited.²⁷ That said, six MDBs (ADB, AIIB, EBRD, EIB, NDB and the WBG) have recently (in May 2017) signed a memorandum of understanding with the Chinese government to collaborate in areas of common interest in the context of the BRI. To operationalize this collaboration, the Chinese government and the six MDBs are establishing a Multilateral Center for Development Finance (MCDF). This offers an opportunity, among other things, to foster greater transparency and harmonization of rules and standards, including procurement, and aligning them with MDBs' own procedures and guidelines, which are consistent with internationally accepted good practices, to investments under BRI.

Another option would be for BRI projects above a threshold to be awarded through open national competition among Chinese companies, including foreign-invested enterprises. This may be second best from an economic efficiency perspective, as it is not necessarily the case that China-domiciled firms will offer the best price-quality at all times, but open competition would be an improvement over limited or selective tendering procedures. A process that is restricted to open intra-China competition arguably also is second best from the perspective of the realizing the vision and underlying foreign policy objectives that motivate the BRI insofar as it may lower the credibility of the claim that the BRI's aim is to promote economic development and international cooperation. Putting greater emphasis on open national competition is not a very big step as this is the norm under applicable domestic law and regulation for public procurement in China. Reportedly, over 80 percent of domestic public procurement contracts are awarded via open tendering procedures (Cao and Zhou, 2017).

A third option, which does not entail any change to current processes and procedures, to which we return below, would be to put in place (multilateral) systems to enhance the transparency of BRI procurement processes, including through regular reporting on tenders issued, number of bids received, and other procedural dimensions of project procurement.

Turning to the second path, borrowing countries can consider options to make BRI procurement processes more inclusive and competitive. They can seek to apply national procurement laws to BRI procurement and negotiate offsets and set local content targets as part of BRI projects that they borrow for. Projects, for example, can be framed to include incentives for considering sub-contracting to local firms. As noted previously, many countries include provisions to this effect in their procurement regulations. This may not be efficient – in principle it may be better for the government to address factors that impede the ability of SMEs to participate in procurement opportunities (Evenett and Hoekman, 2013). But a stronger focus on 'local content' elements in the award of BRI projects may help to enhance the domestic development impact of BRI projects.

More generally, a push towards the use of host countries' national procurement system can be considered in instances where these systems align with international good practices and adhere to recognized core principles such as value for money, transparency, efficiency, integrity, economy, and fit-for-purpose. In practice, as demonstrated by the brief review of national procurement regimes in BRI countries in Section 5, these may not fully conform to

²⁷ <https://www.cgdev.org/sites/default/files/examining-debt-implications-belt-and-road-initiative-policy-perspective.pdf>

international good practice in some countries. A first step could be to use diagnostics pertaining to national procurement systems’ “readiness” with pre-tendering due diligence before deciding which procurement rules to apply. Notwithstanding its limitation in thematic scope – it does not cover all the relevant dimensions of procurement processes – the BPP database presents a good tool to identify shortcomings in national procurement systems. By providing a cross-comparative analysis, it could promote peer-to-peer learning and identify successful reform stories, especially when it comes to BRI-related practices.

Both China and its BRI partner countries are interested in using the BRI to promote national economic activity. This gives rise to potential tension between what the different players want. For BRI countries, there is a presumption that BRI projects will promote national development prospects by improving connectivity through infrastructure improvements, although this obviously depends on whether projects address priority constraints and the quality of the social and economic cost–benefit analysis that underpins the decision to borrow for a given project. Attaining value for money is an important factor in this regard, and ICB is one dimension of international best practice that will help ensure that projects are implemented at lowest possible cost.

It can be difficult for governments consistently to apply procurement procedures that are transparent, open and competitive. Political economy pressures invariably arise that may impede implementation of international good practices or to apply the processes that are specified in national law and regulation. Multilateral cooperation among BRI countries can help to provide potential solutions – or elements of solutions – to this problem, including through joint investment in mechanisms to generate the information needed to allow analysis of processes and resulting outcomes, and using international agreements to commit to the use of transparent, competitive procurement practices.

A basic takeaway from the discussion in this paper is that it would be of benefit to all parties participating in the BRI to have better information about the public procurement processes associated with BRI projects. The absence of comprehensive and comparable data makes it difficult to determine the effect of applied policies and processes on outcomes. Better knowledge on procurement will help in assessments of the impacts of BRI projects, both in the construction phase and thereafter, helping to inform evaluation of the effectiveness of procurement processes used to award contracts in attaining value for money objectives.

One possibility that could be considered as a means to enhance transparency and generate more information on BRI procurement is to mobilize resources to document the practices used in the award of projects across countries. Greater transparency and the ability to assess the process of procurement associated with BRI projects will have the added benefit of facilitating future co-funding of projects with multilateral development agencies or other sources of financing. A BRI-wide platform to encourage monitoring and provision of feedback by procuring entities can support learning and identify areas where practices can be improved. A potential model is the Public Procurement Knowledge Exchange Forum, an initiative started in the early 2000s,

co-sponsored by multilateral development banks supporting countries in the Balkans and Central Asia, as well as deeper interactions with the private sector.²⁸

China has shown awareness of the need to improve governance and the integrity in BRI projects as reflected in the statement by President Xi that China "...will also strengthen international cooperation on anticorruption in order to build the Belt and Road Initiative with integrity."²⁹ A BRI platform that acts as a mechanism to support data collection, provides technical assistance and financial resources to do so, and is designed to encourage analysis of the effects of procurement processes can help improve knowledge and awareness of what is being done and address concerns whether and how the BRI supports sustainable development goals.

An element of such mechanisms could be the implementation of the Open Contracting Partnership Standard (OCDS),³⁰ which enables disclosure of data and documents at all stages of the contracting process by defining a common data model. As a global, non-proprietary data standard structured to reflect the complete contracting cycle, it enables users and partners around the world to publish shareable, reusable, machine-readable data, to augment that data with their own information, and to create tools to analyse or share information. Adopting the OCDS could help deliver better value for money for governments and drive higher-quality goods, works, and services for communities. For private suppliers, it can create fairer competition and a level playing field, especially smaller firms, hence curbing fraud and corruption.

Greater use of trade agreements is another multilateral avenue through which BRI governments can increase the likelihood that good procurement practices are applied. Accession to the GPA is perhaps the most straightforward step that is available to China to complement possible unilateral actions to change BRI procurement practices, as this will enhance the credibility of decisions move towards the application of international good practices for Chinese-funded BRI projects. The GPA provides a strong basis for transparency, both ex-ante and ex-post, and credibility of commitments given potential recourse to conflict resolution mechanisms. The latter are not limited to formal WTO dispute settlement. More important in practice are the regular meetings of the GPA committee where issues can be raised, and the GPA requirements to establish effective domestic review procedures. Since only one-third of BRI countries are GPA members, acceding to the GPA would also provide the remaining BRI countries the same-level playing field in terms of participation in bids, transparency of process and recourse to the WTO's dispute settlement vis-à-vis procurement of BRI projects as other GPA signatories. From that perspective, the BRI could work as an incentive for non-GPA member countries to join the GPA.

²⁸ Gelderman, Ghijsen and Schoonen (2010) argue that encouragement of interaction and engagement between stakeholders can also help to improve compliance with procurement rules. Such interaction is also important in developing a common view on what constitutes good procurement practice and why.

²⁹ <https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html>

³⁰ <https://www.open-contracting.org/>

8. Concluding remarks

The BRI is an ambitious initiative spanning many countries in several regions that seek to improve connectivity through a network of roads, railways and ports across different parts of Africa, Asia, Middle East and Central and Eastern European countries, complemented with investments to enhance productive capacity and cross-border movement of goods, services and people. Notwithstanding the large scale of the initiative, relatively little systematic data exists on the practices being followed by the different, primarily Chinese, entities that finance BRI-related contracts and the associated procurement of goods, services and works for BRI projects.

Ensuring the use of internationally accepted good procurement practices in awarding BRI projects would benefit all BRI partners. Both China and BRI partner countries can take steps to apply such practices in BRI projects and to strengthen procurement processes in areas where there are gaps – as documented for example by the World Bank benchmarking procurement exercise (World Bank, 2016).

Our analysis of the PTAs involving BRI countries reveals that most extant trade agreements do not include substantive disciplines on public procurement. This points to the potential for BRI countries to negotiate procurement agreements among each other. However, such a strategy is less preferable than joining the GPA, given the much larger benefits that GPA accession would provide. Joining the GPA and using PTAs more effectively offer complementary channels to improve BRI procurement processes. Doing so can help address political economy-related constraints that may impede the consistent application of good procurement practice.

Unilateral actions that can be taken to provide greater assurances that projects are awarded to the most competitive firms with the requisite technical capacity include opening BRI projects above a specified threshold to international competition, or, less ambitiously, to require open national competition between Chinese enterprises, including foreign-invested enterprises that have been established in China.

A unilateral decision by China to increase transparency in the award of BRI projects can be done rapidly. The same is true for actions by borrowing countries to call for international good procurement practices to be applied in BRI projects. We suggest two recommendations that can be implemented in the short run. First, MDBs can help to raise awareness in BRI countries regarding what they can do to improve public procurement. The second is to engage in a concerted and cooperative effort to collect data on current BRI procurement processes along the lines proposed in the previous Section. China's [announcement earlier this year of an International Development Cooperation Agency](#) meant to enhance coordination and supervision of BRI projects is an important step signaling China's positive intentions in this respect.³¹

In closing, it is important to note that tying of concessional funding for BRI projects to execution by Chinese firms is not unique to China. As mentioned, export-import banks and development finance institutions worldwide tend to tie funding to national firms or entities. The Government of India, for example, applies very similar conditions to projects that its

³¹ <https://knect365.com/superreturn/article/7f745141-8747-4380-90c5-dad51e8a0776/more-than-a-belt-more-than-a-road-paul-haenle-on-the-chinese-initiative>

Export-Import funds in developing countries, with even higher ‘buy India’ requirements than applied by China (Zhang and Gutman, 2015). It may be that the financial and other terms offered by Chinese policy banks for BRI projects outweigh any downsides for borrowing countries from limited competition between suppliers for contracts and procurement of goods and services. Indeed, it may be the case that Chinese firms are the most competitive suppliers of goods and services, independent of whatever subsidy dimension is associated with BRI financing. Governments need sufficient information to make such determinations. That requires first and foremost improving the transparency of BRI-related procurement.

References

- Arrowsmith, S. (2011). The Revised Agreement on Government Procurement: Changes to the Procedural Rules and Other Transparency Provisions, in S. Arrowsmith and R. Anderson (eds.), *The WTO Regime on Government Procurement: Challenge and Reform*, 285–336 (Cambridge University Press).
- Baker McKenzie (2017). Belt & Road: Opportunity and Risk. At: https://www.bakermckenzie.com/-/media/files/insight/publications/2017/10/belt-road/baker_mckenzie_belt_road_report_2017.pdf?la=en
- Breton, A. and P. Salmon (1995). Are Discriminatory Procurement Policies Motivated by Protectionism? *Kyklos*, 49: 47-68.
- Cao, F. and F. Zhou (2017). Internationalization of Government Procurement Law and Relevance of International Norms and Frameworks: The Case of China. In A. Georgopoulos, B. Hoekman and P. Mavroidis (eds.) *The Internationalization of Government Procurement Regulation*. Oxford University Press.
- Chan, S. (2017), The Belt and Road Initiative: Implications for China and East Asian Economies. *Copenhagen Journal of Asian Studies*, 35(2): 52-78.
- Chin, H. and W. He (2016). The Belt and Road Initiative: 65 countries and beyond. *Global Sourcing*. Fung Business Intelligence Centre.
- Davies, A. (2017). The Evolving GPA: Lessons of Experience and Prospects for the Future, in A. Georgopoulos, B. Hoekman and P. Mavroidis (eds.) *The Internationalization of Government Procurement Regulation*. Oxford University Press.
- DBS (2017). One Belt One Road Infrastructure Sector. Asian Insights. DBS Group Research. At: https://www.dbs.com/aics/pdfController.page?pdfpath=/content/article/pdf/AIO/072017/170724_insights_one_belt_one_road_moving_faster_than_expected.pdf
- Deloitte (2018). Embracing the BRI ecosystem in 2018: navigating pitfalls and seizing opportunities. Deloitte Insights. At: https://www2.deloitte.com/content/dam/insights/us/articles/4406_Belt-and-road-initiative/4406_Embracing-the-BRI-ecosystem.pdf
- European Commission (2017). Commission Staff Working Document on “Significant distortions in the economy of the People’s Republic of China for the purposes of trade defence investigations”. At: <http://trade.ec.europa.eu/doclib/html/156474.htm>
- Evenett, S. and B. Hoekman (2013). International Disciplines on Government Procurement, in A. Lukauskas, R. Stern and G. Zanini (eds.), *Handbook of Trade Policy for Development*. Oxford: Oxford University Press.
- Gelderman, K., P. Ghijsen and J. Schoonen (2010). Explaining Non-Compliance with European Union Procurement Directives: A Multidisciplinary Perspective, *Journal of Common Market Studies*, 48(2): 243–64.

Gordon, D. (2013). Bid Protests: The Costs are Real, But the Benefits Outweigh Them. GWU Legal Studies Research Paper No. 2013-41, GWU Law School Public Law Research Paper No. 2013-41, George Washington University, Washington, DC.

Grieger, Gisela. (2016). Why China's public procurement is an EU issue. European Parliamentary Research Service. At: [http://www.europarl.europa.eu/RegData/etudes/ATAG/2016/593571/EPRS_ATA\(2016\)593571_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/ATAG/2016/593571/EPRS_ATA(2016)593571_EN.pdf).

Hillman, J. (2018). China's Belt and Road Initiative: Five years later. Statement before the US-China Economic and Security Review Commission. Centre for Strategic and International Studies. At: <https://www.csis.org/analysis/chinas-belt-and-road-initiative-five-years-later-0>

Hoare, A. L. Hong and J. Hein. (2018). The Role of Investors in Promoting Sustainable Infrastructure Under the Belt and Road Initiative. Chatham House (May).

LehmanBrown International Accountants (2017). The Belt and Road Initiative. <https://www.lehmanbrown.com/wp-content/uploads/2017/08/The-Belt-and-Road-Initiative.pdf>

Makocki, M. (2017). China's road: into Eastern Europe. European Union Institute for Security Studies. Brief issue 4. 2017.

PwC (2017). Repaving the ancient Silk Routes. PwC growth markets centre: realizing opportunities along the Belt and Road. June 2017. <https://www.pwc.com/gx/en/growth-markets-centre/assets/pdf/pwc-gmc-repaving-the-ancient-silk-routes-web.pdf>

Saalman, L. and K. Dethlefsen (2017). Following the forum: China's Belt and Road Initiative and the EU. Singapore: Friedrich Ebert Stiftung. <http://library.fes.de/pdf-files/bueros/singapur/13565.pdf>

Schooner, S. (2002). Desiderata: Objectives for a System of Government Contract Law. At https://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=1101&context=faculty_publications

Shingal, A. (2015). Econometric Analyses of Home Bias in Government Procurement, *Review of International Economics*, 23: 188–219.

Shingal, A., V. Ereshchenko and A. Mattoo (2018). Mapping government procurement provisions in preferential trade agreements: evidence from a new classification. Mimeo.

Spiller P. (2009). An Institutional Theory of Public Contracts: Regulatory Implications, in C. Menard and M. Ghertman (eds.), *Regulation, Deregulation, Reregulation: Institutional Perspectives*, Cheltenham: Edward Elgar.

Taş, B.K.O., K. Dawar, P. Holmes and S. Togan (2018). Does the WTO Government Procurement Agreement deliver what it promises? *World Trade Review* (forthcoming).

Tu, X. and N. Sun (2017). Government Procurement in TPP and Its Implications for China's GPA Accession Negotiation. In J. Chaisse et al. (eds), *Paradigm Shift in International Economic Law Rule-Making*, Singapore: Springer Nature.

Wijeratne, D., M. Rathbone, and G. Wong (2018). A Strategist's Guide to China's Belt and Road Initiative. Strategy-Business, PwC. At: <https://www.strategy-business.com/feature/A-Strategists-Guide-to-Chinas-Belt-and-Road-Initiative?gko=a98e0>.

World Bank. (2016). *Benchmarking Public Procurement 2017: Assessing Public Procurement Regulatory Systems in 180 Economies*. Washington, DC: World Bank. <http://pubdocs.worldbank.org/en/121001523554026106/BPP17-e-version-Final-compressed-v2.pdf>

Zhang, C. and J. Gutman. 2015. "Aid Procurement and the Development of Local Industry: A Question for Africa," Brooking Institution Global Economy and Development Working Paper 88.

Annex Table 1: List of BRI projects, as classified in the CSIS database

Name	Location	Type	Status	Cost in \$mn	Start date	Contractor	Funder
Alternative North-South Highway Kyzyl-Jyldyz - Aral and Karzarm - Jalal-Abad (Rehabilitation)	Kyrgyzstan	Road	Completed	400	2013	China Road and Bridge Corporation	EXIM Bank of China
Budapest-Belgrade High-Speed Railway - Hungarian Section (Construction)	Hungary	Rail	Started	1966	2013		EXIM Bank of China, Hungarian Development Bank
Gwadar Port Breakwater (Construction)	Pakistan	Seaport	Completed	123	2013		China
Khorgos Dry Port	Kazakhstan	Intermodal	Completed	0.23	2013	Basis-A Construction Company, Kalmar	Sovereign Wealth Fund Samruk-Kazyna JSC(38,400,000,000 KZT) Kazakhstan Temir Zholy(40,400,000,000
Lianyungang Port	China,Kazakhstan	Seaport	Under constr	98	2013	Kazakhstan Temir Zholy,Lianyungang Port Company	Kazakhstan Temir Zholy Lianyungang People's Government
MAV "Vo Ring Rail Line" Budapest	Hungary	Rail	Announced/Under Negotiation	1165	2013	Chinese State Railway Company	China Railway Construction Corporation
Moscow-Kazan High Speed Railway	Russia	Rail	Preparatory Works	21400	2013		China Railway International Group(400,000,000 RUB)
Payra Deep Sea Port (Construction)	Bangladesh	Seaport	Announced/Under Negotiation		2013	China Harbour Engineering Company,China state construction engineering Corporation (CSCEC),Jan De Nul Group	Bangladesh India
Tavan Tolgoi-Gashuun Sukhait Rail (Construction)	Mongolia	Rail	Under constr	1000	2013		Shenhua Group, Sumitomo Corporation
Thakot - Raikot Karakoram Highway (Upgrade)	Pakistan	Road	Started	66	2013	China Railway No. 17 Bureau Group Co., Ltd	
Upgrade of Kalanki-Koteshwor section of Katmandu Ring Road	nepal	Road	Under constr	47	2013	Shanghai Construction Group Co. LTD	
Banja Luka - MiniSte Highway	Bosnia and Herzegovina	Road	Announced/Under Negotiation	1632	2014		EXIM Bank of China (€1.4 bn)
Bar-Bojare Motorway (Section of European Motorway XI)	Montenegro	Road	Under constr	940	2014	China Communications Construction Company, China Road and Bridge Corporation	EXIM Bank of China (€687 mn), Government of Montenegro (€120 mn)
Corridor XI motorway (Obrenovac-Ub and Lajkovac-Ljig sections)	Serbia	Road	Under constr	334	2014	Shandong HI-Speed Group	EXIM Bank of China (\$301 mn), Serbia (\$32.7 mn)
East West Corridor	Qatar	Road	Under constr	632	2014	China Harbor Engineering Company, Joannou & Paraskevaldes (Overseas)	QAR2.23 bn
Golmud-Korla Railway	China	Rail	Under constr	5784	2014		
Hami-Ejin Railway Ejin-Hami Part (Construction)	China	Rail	Completed	1523	2014	China Railway No.14 Bureau Group Co., Ltd	
Kicevo-Ohrid Highway (Construction)	Macedonia	Road	Under constr	437	2014	sinohydro	The Export-Import Bank of China
Male-Hulhule Bridge (Construction)	Maldives	Road	Completed	210	2014	CCCC Second Harbour Engineering Company Limited (CCCC2Harbour)	Maldives (\$12.6 mn), China (\$126 mn)
Melaka (Malacca) Gateway	Malaysia	Seaport	Under constr	1998	2014		
Miladinovi-Štip highway	Macedonia	Road	Under constr	240	2014	Sinohydro	The Export-Import Bank of China(206,000,000 EUR)
National Trade Corridor Highway Tranche 2	Pakistan	Road	Under constr	238	2014	JV China Gezhouba Group Co., Ltd/Ameer Muhammad Associates	Asian Development Bank (ADB)(117,600,000 USD) Pakistan(38,000,000 USD) Department for Internation
New Doha Port Navy Wharf Project	Qatar	Seaport	Announced/Under Negotiation	170	2014	China Communications Construction Co. Ltd	170,000,000 USD
Orange Line Metro Train Project	Pakistan	Rail	Under constr	1570	2014	China Railway Corporation,China North Industries Corporation	The Export-Import Bank of China(1,550,000,000 USD) Industrial and Commercial Bank of China(20,000,0
Sichuan-Tibet Railway (Construction)	china	Rail	Under constr		2014		
Sitakunda-Cox's Bazar Expressway (Construction)	Bangladesh	Road	Started	2800	2014	China Harbor Engineering Company	Bank of China
Stublenica Industrial, Commercial, and Technology Park	Serbia	Intermodal	Started	1398	2014		China Development Bank
Xinjiang International Logistics Park	china	Intermodal	Under constr	769	2014	Xinjiang Land Port Investment Co. Ltd.	Port of Duisberg 1,000,000,000 CNY Urumqi Economic and Technological Development Zone(4,000,000,0
Zarubino Port Construction	Russia	Seaport	Preparatory Works	3000	2014	China Merchants Holding International Company Ltd., Summa Group	Summa Group(1,200,000,000 USD)
Alternative North-South Road Aral - Kazarm (Construction)	Kyrgyzstan	Road	Under constr	299	2015	China Road and Bridge Corporation	EXIM Bank of China (\$298.8 mn)
Astana Light Rail	Kazakhstan	Road	Under constr	1800	2015	Beijing State-Owned Assets Management Company, China Railway International Gro	China Development Bank (\$1.8 bn)
CPEC Karachi - Hyderabad Motorway (Upgradation)	Pakistan	Road	Under constr	296	2015	Frontier Works Organization (FWO),Pakistan National Highway Authority (NHA)	
Dammam Riyadh Freight Line Phase 2	Saudi Arabia	Rail	Under constr	43	2015	China Railway Construction Corporation	China
G3012 Turpan-Hotan Expressway	China	Road	Under constr	538	2015		
Haifa Bay Port (Construction)	Israel	Seaport	Started	1109	2015	Ashtrom International Ltd., Shapir Civil and Marine Engineering	
Havelian - Thakot Karakoram Highway Phase II (Construction)	Pakistan	Road	Under constr	1300	2015	China Communications Construction Company, China Road and Bridge Corporation	China, EXIM Bank of China
Karnaphuli Tunnel	Bangladesh	Road	Preparatory Works		2015	China Communications Construction Company	
Khojend-Isfara Highway (Rehabilitation)	Tajikistan	Road	Under constr	54	2015	China Railway Group	The Export-Import Bank of China
Nizhneleninskoye-Tongliang Rail Bridge (Construction)	China, Russia	Rail	Under constr	40	2015	Giprostromost Institute, Third Railway Survey and Design Institute Group Corporati	Tajikistan(9,000,000 USD), International Development Association (IDA) (World Bank)(38,250,000 USD) I
Peshawar-Karachi Motorway Multan-Sukkur Section (Construction)	Pakistan	Road	Under constr	2800	2015	China State Construction Engineering Corporation (CSCEC)	OISCFar East Development Fund (RUB2.5 bn), Petropavlovsk PLC, Russia-China Investment Fund, Rubico
Vientiane-Boten Railway	Laos	Rail	Under constr	5800	2015	China Rly Group Ltd., China Rly Nos. 2, 5, 8 Engng Group	China
Kolasin-Kos Railway Upgrade (Part of Bar-Belgrade Railway Reconstruction Project)	Montenegro	Rail	Started	6.9	2015	China Civil Engineering Construction Corporation	EXIM Bank of China
NR55 (Construction)	Cambodia	Road	Under constr	133	2015	China Road and Bridge Corporation	European Bank for Reconstruction and Development (EBRD) 5,900,000 EUR
Belgrade Bypass	Serbia	Road	Started	241	2016	Power Construction Corporation of China	China
Chakdara-Chitral-Shandora-Gilgit Road (Construction)	Pakistan	Road	Announced/Under Negotiation	422	2016		China, Pak
Chittagong Karnaphuli River Tunnel (Construction)	Bangladesh	Intermodal	Under constr	1100	2016	China Communications Construction Company	The Export-Import Bank of China Bangladesh(36,472,000,000 BDT)
Dhaka-Jessore Rail Line Construction	Bangladesh	Rail	Preparatory Works	3100	2016	China Railway Construction Corporation Ltd.	China, Bangladesh
G6 Beijing-Lhasa Expressway	China	Road	Under constr	104	2016		
Hakla-Dera Ismail Khan Motorway (Construction)	Pakistan	Road	Under constr	1200	2016	Limak Holding A.S. (TUR), Zahir Khan & Brothers (ZKB) (PAK)	Pak (\$94.4 mn), China (none)
Mirpur-Muzaffarabad-Mansehra Road (Construction)	Pakistan	Road	Preparatory Works	2500	2016		China(264,000,000,000 PKR),Pakistan
Nordshore Multi-Modal Logistics Terminal at Muuga	Estonia	Seaport	Started		2016		
Zhob - Mughalkot Road (Rehabilitation)	Pakistan	Road	Under constr	85	2016		Pak, China, ADB
Bangkok to Nakhon Ratchasima High-Speed Railway (Phase 1)	Thailand	Rail	Preparatory Works	5428	2017	Thailand Department of Highways	
Tehran-Mashhad Railway (Electrification)	Iran	Rail	Started	2600	2017	MAPNA Group, Su Power Technology, RZD International LLC	The Export-Import Bank of China(1,500,000,000 USD), Iran(200,000,000 USD) China Export & Credit Ins.
Budapest-Belgrade High-Speed Railway - Serbian Section (Construction)	Serbia	Rail	Under constr	1800	2017		EXIM Bank of China (\$297.6 mn)
Cirebon-Kroya Rail (Construction)	Indonesia	Rail	Under constr	105	2017	PT Kereta Api (Persero)	
Gwadar Port East Bay Expressway (Construction)	Pakistan	Road	Under constr	161	2017	China Communications Construction Company	China (\$13 mn), Pak
Kuala Lumpur-Tumpat Railway (Construction)	Malaysia	Rail	Under constr	13739	2017	China Communications Construction Company	EXIM Bank of China (MYR55 bn)
Phnom Penh - Sihanoukville Expressway	cambodia	Road	Announced/Under Negotiation	1900	2017	China Communications Construction Company	
Purukcahu-Bangkuang Rail (Construction)	Indonesia	Rail	Preparatory Works	5475	2018		
Kosice-Vienna Railway (Construction)	Austria, Slovakia	Rail	Announced/Under Negotiation	7575	2024		

Source: CSIS database; authors' compilation

Annex 2. Procurement under CPEC Financing Agreement / Memorandum of Understanding (FA/MOU) arrangements

Procurements under FA/MOU arrangement is carried out by each implementing agency within their relevant operational areas. The typical procurement arrangements as followed are briefed described below:

- i. Feasibility studies and PC-I (Planning Commission Proforma I) are prepared which are prerequisite for any project implementation irrespective of the source of financing. The PC-I contains an estimated value of the procurement and these estimates are usually based on schedule of rates updated to capture the current market prices of materials etc.;
- ii. For all CPEC infrastructure projects, the Feasibility Study and PC-I are prepared and approved by the relevant forums of the government of Pakistan;
- iii. The Feasibility Studies are then shared with relevant authorities (both Pakistan and China) for financing purposes;
- iv. Once the implementing agency gets the approvals for source of funding (CPEC), bidding document is prepared. The bidding documents are based on the standard bidding documents issued by the Pakistan Engineering Council;
- v. Considering control on time and cost overruns, the project entities are the *Engineer, Procure, Construct* contract conditions of the International Federation of Consulting Engineers (FIDIC EPC), modified to suit the need. The bidding document contains outline design and the employer's requirements including the preferred design codes etc. All these contracts are lumpsum with no provision for time extensions;
- vi. The instructions to bidders require a bid security (2% of the bid value) in the form of a bank guarantee issued by a Pakistani scheduled bank acceptable to the Employer or from a foreign bank countered guaranteed by a local scheduled bank acceptable to the Employer. The same principle applies to the Performance Guarantee which is equivalent to the 10% of the contract amount;
- vii. Once the bidding document is agreed with the Financier, the Inter-Government Framework Agreement is made;
- viii. The procurements opportunities are available to the Chinese contractors only;
- ix. In accordance with the FA/MOU, the Chinese authorities nominate three Chinese contractors for the bidding purposes. The procuring entities, then, issue the bidding documents to the three nominated Chinese contractors seeking bids for the contract;
- x. There is opportunity for the Pakistani contractors to make joint ventures with their Chinese counterparts. There is a provision for sub-contracting (maximum 30% of the contract value) subject to the Employer's agreement;

- xi. Bids are invited by the procuring entities based on single stage two envelop system;
- xii. Sixty (60) days are given to the bidders to prepare and submit their bids;
- xiii. During the pre-bid meeting, the bidders' concerns are reviewed, and Addendums are issued;
- xiv. The procuring entity reviews the "Technical" Proposals contained in the first envelope. At this stage, the qualifications of the bidders are not checked, and no due diligence is carried out as it is assumed that the bidders are qualified being nominated by the Chinese authorities;
- xv. The "Financial" Proposal is then opened, and recommendation of award is made based on the lowest evaluated cost;
- xvi. A commercial contract is then signed with the most advantageous bidder;
- xvii. This contract is made under the Pakistani Laws and the governing language is the English which is the official language of Pakistan;
- xviii. After this a Financing Agreement (Loan Agreement) is then signed between the Pakistani authorities and Chinese Bank;
- xix. Once the Loan agreement is signed, the procuring entity starts implementing the contract.
- xx. All payments are made directly to the Chinese contractor upon certification by the Employer/procuring entity;
- xxi. Disputes, if any, are settled through a Dispute Adjudication Board (DAB) which consists of three members. If there are disagreements in appointing the DAB, then the DAB appointing authority is the Chairman, Pakistan Engineering Council;
- xxii. In the event of disagreement with the DAB, either party can invoke Arbitration. The contract contains a provision to conduct this arbitration under the Pakistan Arbitration Act 1940. The venue of arbitration is Islamabad, Pakistan. The minimum number of arbitrators are two and each party is required to propose a qualified arbitrator. The two arbitrators will then propose and appoint an Umpire as stipulated under the applicable arbitration act;
- xxiii. There is a provision made in the contract for direct payment to the sub-contractors. This provision is used in the event when the sub-contractor's due payments are not made by the main contractor.

Annex Table 3: PTAs involving BRI countries

	One BRI country signatory	PTAs between BRI countries
Agreements that do not include any provisions on public procurement	ASEAN-Australia/New Zealand, ASEAN-Japan, ASEAN-Korea, Canada-Jordan, Chile-India, Chile-Malaysia, Chile-Vietnam, China-Costa Rica, China-Hong Kong, Macao-New Zealand EU-Faroe Islands, EU-Andorra, EU-Cote d'Ivoire, EU-Iceland, EU-OCT, EU-Papua New Guinea-Fiji, EU-San Marino, EU-Switzerland/Lichtenstein, EU-Norway, Japan-Malaysia, Japan-Indonesia, Korea-Vietnam, Korea-India, Korea-Turkey, MERCOSUR-India, Malaysia-Australia, Mauritius-Pakistan, New Zealand-Malaysia, Peru-China, SAFTA, Thailand-New Zealand, Turkey-Chile, Turkey-Mauritius	APTA, APTA-Accession of China, ASEAN FTA, ASEAN-India, ASEAN-China, Agadir Agreement, Armenia-Kazakhstan, Armenia-Moldova, Armenia-Turkmenistan, Armenia-Ukraine, COMESA, China-Singapore, EAEU-Kyrgyz Republic, EAEU-Armenia, EC Enlargement 25, EC Enlargement 27, ECO, EU-Syria, EU-Albania, EU-Macedonia, EU-Lebanon, GCC, Georgia-Turkmenistan, Georgia-Armenia, Georgia-Azerbaijan, Georgia-Kazakhstan, Georgia-Russia, Georgia-Ukraine, India-Afghanistan, India-Singapore, India-Bhutan, India-Malaysia, India-Nepal, India-Sri Lanka, Kyrgyz Republic-Armenia, Kyrgyz Republic-Uzbekistan, Kyrgyz Republic-Kazakhstan, Kyrgyz Republic-Moldova, Kyrgyz Republic-Ukraine, Laos-Thailand, PAFTA, Pakistan-Malaysia, Pakistan-Sri Lanka, Russian Federation-Serbia, Russian Federation-Tajikistan, Russian Federation-Turkmenistan, Russian Federation-Uzbekistan, Russian Federation-Azerbaijan, Russian Federation-Belarus/Kazakhstan, SAFTA-Accession of Afghanistan, SAPTA, Turkey-Albania, Ukraine-Azerbaijan, Ukraine-Belarus, Ukraine-Kazakhstan, Ukraine-Montenegro, Ukraine-Tajikistan, Ukraine-Turkmenistan, Ukraine-Uzbekistan
Agreements that include procurement provisions that are not enforceable ('shallow' agreements)	Australia-China, Chile-China, China-Korea, China-Switzerland, EFTA-Albania, EFTA-Bosnia and Herzegovina, EFTA-Macedonia, EFTA-Israel, EFTA-Jordan,	CEFTA, CIS, EU-Bosnia and Herzegovina, EU-Egypt, EU-Enlargement, EU-Israel, EU-Jordan, EU-Montenegro, EU-Palestine, EU-Serbia, EU-Turkey,

	<p>EFTA-Lebanon, EFTA-Montenegro, EFTA-Palestine, EFTA-Serbia, EFTA-Turkey, EU-Algeria, EU-Cameroon, EU-Eastern and Southern Africa states</p> <p>Interim EPA, EU-Mexico, EU-Morocco, EU-South Africa, EU-Tunisia, Egypt-EFTA, Iceland-China, India-Japan, Japan-Mongolia, Japan-Philippines, Japan-Thailand, Japan-Vietnam, Thailand-Australia, Turkey-Morocco, Turkey-Tunisia, US-Jordan</p>	<p>Egypt-Turkey, Jordan-Singapore, Pakistan-China, Turkey-Syria, Turkey-Bosnia and Herzegovina, Turkey-Macedonia, Turkey-Georgia, Turkey-Israel, Turkey-Jordan, Turkey-Montenegro, Turkey-Palestine, Turkey-Serbia, Ukraine-Macedonia, Ukraine-Moldova</p>
<p>Agreements that include binding, enforceable provisions on public procurement ('deep' agreements)</p>	<p>Canada-Israel, Costa Rica-Singapore, EFTA-Singapore, EFTA-Ukraine, EU-CARIFORUM, EU-Central America, EU-Chile, EU-Colombia/Peru, EU-Korea, Israel-Mexico, Japan-Singapore, Korea-Singapore, New Zealand-Singapore, Panama-Singapore, Peru-Singapore, Singapore-Australia, Singapore-Chinese Taipei, US-Bahrain, US-Israel, US-Oman, US-SGP</p>	<p>EAEU, EU-Georgia, EU-Moldova, EU-Ukraine, EEA, GCC-Singapore</p>

Source: Authors' compilation based on Shingal et al. (2018).