China's BRI and EU Global Gateway Experiences with Public-Private Partnerships for Infrastructure Projects in Africa: Assessing Impact and Significance

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Abstract

Public-private partnerships (PPPs) are a type of contract allowing private parties to cooperate with government entities for the provision of public assets or services. They are considered important tools for addressing the existing "infrastructure gap" affecting developing economies. Connectivity plans such as the BRI and the Global Gateway, tied to transformative visions of the international order and economic development have been also relying on such type of contracts to deliver their objectives. This study examines Chinese and EU PPPs implemented within the frameworks of the BRI and the Global Gateway in Africa to assess whether these actors are capable to match their top-down narratives with effective infrastructure development in a continent of key strategic importance for both. In the case of China, this study finds that PPPs within the BRI framework continue to be affected by issues such as institutional opacity, delays in delivery, and ballooning costs, notwithstanding Beijing's effort to improve PPP regulations at home and to engage with UN agencies on these issues. In the case of the EU, it finds that, in contrast with the European Commission narrative about the Global Gateway, the existing involvement in PPPs for infrastructure is currently underwhelming for scope and value, as well as, at times, lacking transparency. As a result, rather than stimulating virtuous competition, the Global Gateway risks to further politicize the issue of connectivity without effectively delivering new infrastructure in developing countries.

Keywords:

China, European Union, EU Global Gateway, Belt and Road Initiative, public-private partnerships

Introduction

The Global Infrastructure Hub, a G20 initiative, estimated in 2018 a US$15 trillion gap between the investments needed for global infrastructure up to 2040 and the existing trends in infrastructure investment. While the former stood at US$94 trillion, the latter amounted only to US$79 trillion. The same forecast estimated an additional US$3.5 trillion needed to bridge this infrastructure gap in order to meet the United Nations Sustainable Development Goals (SDGs), bringing the total to US$18 trillion.[1] Since the mid-2010s, previous initiatives to meet this growing demand for infrastructure have given way to more concerted connectivity plans spanning across continents. These plans have been tied to ambitious visions powered by state-driven communication. They either aim to remake the "international rules-based order", as in the case of China's Belt and Road Initiative (BRI),[2] or they aim to revitalise it, as in the case of the various

[1] Global Infrastructure Outlook – A G20 Initiative, *Global Infrastructure Outlook: Infrastructure Investment Needs, 56 Countries, 7 Sectors to 2040* (Global Infrastructure Hub, 2018), p. 3.
[2] Nadège Rolland, *China's Eurasian Century? Political and Strategic Implications of the Belt and Road Initiative* (The National Bureau of Asian Research, 2017); Kent Calder, *Supercontinent: The Logic of Eurasian Integration* (Stanford University

initiatives launched by coalitions of like-minded countries that are members of clubs such as the Quad and the G7, as in the case of the Quality Infrastructure Partnership, the Blue Dot Network, the Partnership for Global Infrastructure Investment, and multiple ad hoc projects in South Asia. The European Union's (EU) Global Gateway initiative fits in this second category, while being pushed by a supranational organisation rather than by a state actor.[3]

Against this backdrop, this article examines whether the financing and building of new infrastructure within the frameworks of China's and the EU's respective connectivity plans reflect the ambitious visions and powerful narratives behind them. It does so by examining how the BRI and the Global Gateway have made use of public-private partnerships (PPPs) for infrastructure in Africa. PPPs can be defined as "long-term contract[s] between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility and remuneration is linked to performance".[4] The article's focus on PPPs and their use is motivated by [1] widespread support for these tools by international organisations, [2] broad appeal to developing economies, [3] use by Chinese actors before and after the launch of the BRI, [4] their relevant role in the narrativization of the EU Global Gateway. The focus on African cases is due to the continent's strategic relevance for both the EU and China, given its geographic proximity to the EU, its demographic trajectory and the consequent centrality Africa plays in the migratory flows towards Europe, the presence of natural resources critical to the green and the digital transitions for both the EU and China,[5] and the long-standing, capillary, and multidimensional Chinese presence in the continent.[6]

The article proceeds as follows. The first section provides a concise background on PPPs and their role in infrastructure financing, making use of recent grey literature provided by international institutions and organisations. The second section examines the evolution of Chinese PPPs practices both at home and abroad through secondary literature. The third section provides, for the first time in the academic literature, an account of the Chinese engagement with the United Nations Economic Commission for Europe (UNECE) – the UN institution tasked with the revision of PPP standards in light of the SDGs, connecting this effort to the diffusion of PPPs driven by Chinese business actors within the context of the BRI. The fourth section conducts a comparison of BRI and Global Gateway projects for infrastructure in Africa that have made use of PPPs, using both secondary literature and publicly available primary sources. The conclusion sums up the findings of this study, fleshing out the shortcomings of both BRI and Global Gateway PPPs in Africa and their significance in the context of the intense politicization of connectivity plans at an international level.

PPPs and the Infrastructure Gap

Press, 2019); Ray Silvius, "China's Belt and Road Initiative as Nascent World Order Structure and Concept? Between Sino-Centering and Sino-Deflecting," *Journal of Contemporary China* 30, n. 128 (2020): 314-329.

[3] Minister of Foreign Affairs of Japan, *Partnership for Quality Infrastructure: Investment for Asia's Future*, 2015; Gisela Grieger, "Towards a Joint Western Alternative to the Belt and Road Initiative?," *European Parliament Briefing*, 2021.

[4] World Bank, *Public-Private Partnerships Reference Guide. Version 3.0*, 2017, p. 1.

[5] See: Lesley Masters and Chris Landsberg, "Foreign Policy and EU-Africa Relations: From the European Security Strategy to the EU Global Strategy," in *The Routledge Handbook of EU-Africa Relations*, eds. Toni Haastrup, Luís Mah, Niall Duggan (Routledge, 2021), 70-79.

[6] Joshua Eisenman and David H. Shinn, *China's Relations with Africa: A New Era of Strategic Engagement* (Columbia University Press, 2023). On the triangular Africa-China-EU relation, see: Obert Hodzi, "The China Effect: African Agency, Derivative Power and the Renegotiation of EU-Africa Relations," in *The Routledge Handbook of EU-Africa Relations*, 256-265.

The financial and legal practices generally ascribed to the PPP toolbox have been gradually designed by American, European, and East Asian state actors, as well as by international and supranational organisations such as the World Bank and the EU, between the 1980s and the 2000s. PPPs, however, are not a turn-of-the-century disruptive innovation. Rather, they constitute a platform for the reintroduction of private business actors in the financing, construction, and maintenance of infrastructure for public use at a specific moment in history. Private business actors had been originally supplanted in the provision of these tasks following the dramatic expansion of state power and state capacity in the Western world between the 19th and mid-20th centuries.[7] Thus, since the late 20th century, PPPs have been considered a "go-to institutional answer" to address a wide range of social challenges and needs that could not be met effectively by the public sector, or its private counterpart, alone.[8] International organisations, in particular, have praised PPPs as mechanisms capable of providing a real contribution to bridging the infrastructure gaps in both developing and developed countries, and they have consequently disseminated grey literature and professional education tools aimed at sharing best practices and warning about potential pitfalls.[9]

It is thus possible to outline a PPP "model" championed by Western-led international institutions as it emerged in the era of late 20th/early 21st century globalisation. PPP contracts, for instance, are generally designed to last between 20 and 30 years – a duration considered sufficient for the private party to have an incentive to integrate considerations over service delivery cost throughout the project's design phase.[10] PPP contracts could involve either new assets or they could be related to the transfer of responsibility for upgrading and managing existing assets to a private company. Furthermore, they involve a combination of the following functions: design, building, rehabilitation, financing, maintenance, and operation of an asset. The contract nomenclature of projects involving new infrastructure, consequently, reflects their combination and sequencing, either by focusing on the type of functions transferred to the private actors, or by focusing on the legal ownership and control of the assets of a project. As a result, PPPs contracts on new infrastructure are generally known with acronyms such as DBFOM (design-build-finance-operate-maintain), BOT (build-operate-transfer), or BTO (build-transfer-operate).[11]

Within this context, PPP contracts generally entail the creation of a special purpose vehicle (SPV) by the private party, usually the infrastructure company and other equity investors, with lenders providing loans to it. This structure, in turn, allows them to hold all the assets and liabilities exclusively.[12] In addition, PPPs are broadly divided between "user-pay" mechanisms, in which the private party generates revenues by charging users for the service that it provides, and "government-pay" in which the private party relies exclusively on the government as a source of revenues. Grey literature on PPP emphasises however how the remuneration of the private party

[7] E. R. Yescombe, *Public-Private Partnerships: Principles of Policy and Finance* (Butterworth-Heinemann, 2007), p. 5. See also: Jürgen Osterhammel, *The Transformation of the World: A Global History of the Nineteenth Century* (Princeton University Press, 2014), pp. 572-636.
[8] Carmine Di Sibio, "How to Harness the Transformative Potential of Public-Private Partnership," *World Economic Forum*, 10 January 2022.
[9] UNECE, *Guidebook on Promoting Good Governance in Public-Private Partnerships*, 2007; UN ESCAP, *A Guidebook on Public-Private Partnership in Infrastructure*, 2011; World Bank, *Public-Private Partnerships Reference Guide Version 3.0*; UNECE, *Guiding Principles on Public-Private Partnerships in Support of the United Nations Sustainable Development Goals*, 2022.
[10] World Bank, p. 6.
[11] Ibid., pp. 7-8.
[12] Ibid., p. 8, 41; Yescombe, 108-109.

must always be "linked to performance", to provide an incentive to deliver a service reflecting the expectations of the procuring authority.[13] Typical examples of infrastructure delivered through PPP contracts involve transport (roads, tunnels, bridges, railways, mass transit systems, ports, and airports); water and waste, power (generation and distribution); and social and government infrastructure related to issues such as health, education, and housing.[14] These types of infrastructure require considerable amounts of capital, provide opportunities for corruption and bribery, and often fail to meet timeline, budget, and service delivery.[15] PPPs instead allow governments to mobilize additional sources of funding and financing for the projects and to overcome constraints either in short-term cash budgets or in public sector borrowing, providing a more effective "incentive framework" to guarantee the delivery of the services.[16] For these reasons PPPs are particularly appealing for both developed economies affected by a lack of fiscal latitude and/or high levels of systemic corruption, and for developing countries.[17]

Yet the very same grey literature on PPP warns against the numerous limitations and pitfalls inherent in this type of contracts. As PPPs can be treated as off-balance sheets, they may lead governments to accept even higher fiscal commitments and risks.[18] Furthermore, the establishment of publicly owned development banks and other finance institutions designed to provide financial products for PPPs by national governments, which can be capitalised by government themselves or gain access to concessional financing, may contribute to diluting the effectiveness of the approach, as they provide incentives to undermine due diligence or project structuring via political pressure.[19] In short, a PPP contract is not capable in itself to address institutional flaws in project planning, project selection, project implementation, and asset maintenance, nor can it guarantee success in fragile and conflict-afflicted states.[20]

China's Use of PPPs – Before and After the Introduction of the BRI

China's experience with PPPs began in the 1980s at a domestic level. Between 1984 and 2002, partnerships between foreign private parties and Chinese bureaucratic actors were established in the country to meet the demands of the country's ongoing economic modernisation.[21] A second phase occurred between 2003 and the beginning of the global financial crisis in 2008, during which Chinese SOEs began to gradually supplant foreign investors in the establishment of domestic PPPs with local governments.[22] The massive stimulus package launched by Beijing in response to the global crisis then gave way to a third phase between 2009 and 2013. In this phase, easy access to public money drove the emergence of a Chinese model of PPP, in which the role of "private parties" in the partnership was generally played by SOEs, which worked together with local governments and banks in order to provide public services and infrastructure.[23] Poor governance of the domestic PPP ecosystem in this period, however, greatly contributed to the explosion of hidden debts among Chinese local governments who, together with SOEs and banks,

[13] World Bank, p. 8.
[14] Ibid., p. 13.
[15] Ibid., p. 16, 20-21.
[16] Ibid., p. 16.
[17] UN ESCAP, p. 8.
[18] World Bank, p. 16.
[19] Ibid., p. 52.
[20] Ibid., pp. 23-30, Yescombe, pp. 27-28.
[21] Cheng Zhe et al., "Spatio-Temporal Dynamics of Public-Private Partnership Projects in China," *International Journal of Project Management* 34, no. 7 (2016): 1246-1247.
[22] Cheng Zhe et al., "Spatio-Temporal Dynamics," 1247.
[23] Cheng Zhe et al., "Spatio-Temporal Dynamics," 1247.

circumvented budgetary constraints.[24] As the next section of this chapter will show, Chinese business actors began to be involved in PPPs for infrastructure projects in the Global South already during this period, prior to or immediately after the launch of the BRI in 2013. Since 2014, the Chinese central government has then attempted to play a greater role in coordinating investments by Chinese business actors – whether SOEs or private businesses – involved in PPPs.[25] In particular, between 2014 and 2016, the central government issued a series of regulations and guidelines addressing the challenges that emerged since the late 2000s, requiring for instance mandatory value-for-money evaluations to verify whether PPPs are the most cost-efficient tool available for procurement, and introducing fiscal affordability assessments. Coupled with this new regulatory drive, a China PPP Centre (CPPPC) was also established in December 2014 to disseminate best practices in the field.[26]

The second half of the 2010s, thus, saw a Chinese attempt to fine-tune a PPP model at home characterised by the dominant role of SOEs, while at the same time exporting this model in foreign countries within the emergent framework of the BRI. Shifting the focus towards China's use of PPP in the BRI, it is necessary to take into account three major factors. The first and most immediate was the rising debt levels among BRI countries throughout the 2010s. Against this backdrop, BRI recipients have come to prefer PPPs because they allow them to move the projects' debt to the SPV and thus write it off national balance sheets.[27] The second factor has been China's own economic slow-down and reduction in the country's fiscal space, which has discouraged continuing massive investments from state banks such as China Development Bank and Export-Import Bank of China.[28] Finally, the third factor has been the ability of Chinese SOEs to move up the value chain "to operate, own, and invest in projects abroad",[29] a shift that has allowed them to expand their role from that of "contractors responsible for engineering, procurement, and construction" to that of investors via traditional BOT contracts, other forms of PPPs, and other types of stakeholdership such as integrated investment, construction, and operation (IICO).[30]

China's PPP-Related Engagement with UNECE and Its Aftermath

In January 2016, as China's earlier domestic regulatory drive on PPP was moving toward its final stage, UNECE signed a cooperation agreement together with two Chinese academic institutions, Tsinghua University in Beijing and City University of Hong Kong, for the establishment of the International PPP Specialist Centre of Excellence for Public Transport Logistics, with the direct support of the NDRC.[31] China's choice of UNECE, a UN regional commission originally tasked

[24] Ten years later, in 2024, Chinese local governments' total hidden debt has reached more than CNY70 trillion, equal to US$9.8 trillion Cheng Siwei et al., "In Depth: Why China's Efforts to Resolve Hidden Government Debt Could Fall Short," *Caixin Global*, 13 March 2024.

[25] Cheng Zhe et al., "Spatio-Temporal Dynamics," 1247-1248.

[26] Kied van Wieringen and Tim Zajontz, "From Loan-Financed to Privatised Infrastructure? Tracing China's Turn Towards Public–Private Partnerships in Africa," *Journal of Current Chinese Affairs* 52, no. 3 (2023): 441.

[27] Craig Sugden, "Belt and Road PPPs: Opportunities and Pitfalls," *The Interpreter*, 13 June 2017.

[28] Sugden, "Belt and Road PPPs". On Chinese budgetary constraint, see: Rogan Quinn and Logan Wirght, "The Myth of China's Fiscal Space," *Rhodium Group,* 29 August 2023.

[29] Wendy Leutert, "SOEs in Contemporary China," in *The Routledge Handbook of State Owned Enterprises*, eds. Luc Bernier, Massimo Florio and Philippe Bance (Routledge, 2020), pp. 208-209.

[30] Austin Strange, *China's Global Infrastructure* (Cambridge University Press, 2024), p. 11. IICO is a type of contract adopted by Chinese SOEs operating in the infrastructure sector that emerged in the second half of the 2010s. While BOT contracts, which guarantee an eventual transfer of ownership, IICO actor maintains equity into the project. See: Zhang Hong, "From Contractors to Investors? Evolving Engagement of Chinese State Capital in Global Infrastructure Development and the Case of Lekki Port in Nigeria," *China Africa Research Initiative Working Papers* 53 (Johns Hopkins University, 2023).

[31] UNECE, Cooperation Agreement Between the United Nations Economic Commission for Europe, City University Hong Kong, and Tsinghua University, 2016.

with facilitating economic integration and cooperation and promoting sustainable development and economic prosperity across Europe, was obviously not coincidental. The commission had been actively involved in researching and establishing standards, tools, and guides on PPP governance since the 2000s, but its work on the subject had ramped up in the wake of the launch of the UN SDGs in 2015. Indeed, in 2016, UNECE launched the first edition of its yearly International Public-Private Partnerships Forum,[32] and reorganised its Team of Specialists on Public-Private Partnerships into a broader Working Party on Public-Private Partnerships (WPPPP) – also holding yearly sessions – tasked with "identify international PPP best practices, develop international PPP standards and … contribute to the preparation, implementation and evaluation of a capacity-building and policy advisory programme for public and private sectors officials in low and middle income countries".[33] UNECE also began to publish compendia of PPP case studies from both the Forum and the WPPPP,[34] and, crucially, committed to the establishment of the UNECE PPP and Infrastructure Evaluation and Rating System (PIERS), a platform aiming "to assist governments, private sector and investors in designing and implementing projects that meet the PPP for the SDGs outcomes and comply with the SDGs".[35]

In the wake of these SDG-related developments, the NDRC conducted a field visit to study EU PPPs in Poland and Czechia in late 2016, and eventually announced the signature of a Memorandum of Understanding (MoU) with UNECE in May 2017. The MoU promised to "establish a sound PPP legal, regulatory and governance framework to attract investment in infrastructure projects", to "identify PPP projects that comply with the UNECE people-first principles"; to "identify 10 transformational PPP projects … to be used as best practice models"; and to establish a BRI "PPP international group of experts", and finally a "PPP dialogue mechanism" with UNECE itself.[36] As legal scholars would eventually point out, the wide diversity in PPP legal frameworks among the more than 100 countries that joined the BRI required, if not a single unified BRI PPP framework, at least a "separate parallel frameworks for particular regions or sectors".[37] Beijing followed suit with the MoU by participating to the second and third yearly sessions of the WPPPP, and to the third and fourth edition of the International PPP Forums between 2018 and 2019. The collaboration between UNECE platforms and the NDRC was articulated along three "pillars": a capacity-building programme in PPPs for member states of the UNECE who joined the BRI, a scheme for project facilitation and financing, and a five-stream international policy dialogue to obtain agreement on the foundations, common rules, and international best practices for delivering effective people-first PPPs.[38] In detail, the five streams of the dialogue concerned (1) the mobilisation of "new sources for prosperity" for BRI countries, as well as the promotion of a "common understanding" for (2) procurement practices", (3) risk allocation, (4) sustainability, and (5) gender empowerment in PPPs.[39]

The NDRC is the Chinese Party-State institution tasked with the "top-level design" (*dingceng sheji*)

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32 UNECE, International Public-Private Partnership Forum.
33 UNECE, Economic Cooperation and Integration, Public Private Partnerships (PPP), Terms of Reference.; UNECE, Working Party on Public-Private Partnerships.
34 UNECE, Case Studies.
35 UNECE, UNECE PPP and Infrastructure Evaluation and Rating System (PIERS): An Evaluation Methodology for the SDGs.
36 UNECE, Memorandum of Understanding between the United Nations Economic Commission for Europe and the National Development and Reform Commission of China, 2017.
37 August Dinwiddie, "China's Belt and Road Initiative: An Examination of Project Financing Issues and Alternatives," *Brooklyn Journal of International Law* 45, no. 2 (2020): 745-776.
38 UNECE, Scaling Up: Meeting the Challenges of the United Nations 2030 Agenda for Sustainable Development Through People-First Public-Private Partnerships, 2018, p. 11.
39 UNECE, *Scaling Up*, p .12.

of the BRI.[40] Its involvement with the UNECE's efforts to shape PPPs standards in line with the SDGs suggests a willingness to legitimise its model of PPP dominated by SOEs, if not to contribute directly to shaping PPP best practices – well before scholarship could assess the expansion of this type of partnerships among BRI projects. After all, UNECE's work aimed at establishing new PPP standards in railways, renewable energy, water supply and sanitation, roads, and health coverage, all fields that are virtually essential to BRI infrastructure-making.[41] However, China's involvement in the UNECE efforts to create a PPP playbook to meet the SDGs objectives ended abruptly after the beginning of the COVID-19 pandemic in 2020. The 2020 editions of UNECE's WPPPP and International PPP Forum did not see the participation of Chinese representatives. In fact, the report from the 2021 WPPPP stated:

> "The [US] representative cautioned the UNECE against promoting or taking actions that imply endorsement for the signature, global foreign policy platforms of one country, and against using the Belt and Road Initiative as a geographic indicator. The representative also urged the UNECE to avoid referencing this initiative in its programmes as it has no tangible bearing on the events and projects themselves and inappropriately implies support for that signature, global foreign policy platform."[42]

The stern US rebuke of NDRC's involvement with UNECE in drafting new standards for PPP was followed by a complete Chinese disengagement from the following editions of the WPPPP and the Forum. In addition, no visible Chinese contribution appeared in the PIERS platform eventually launched in 2021, and the MoU that Tsinghua and City University of Hong Kong had signed with UNECE in 2016 was not renewed in 2021, causing the closure of the joint centre of Centre of Excellence launched five years earlier. Details about the breakdown of cooperation between UNECE and the NDRC are not publicly available, but the breakdown itself suggests a failed Chinese attempt to shape the UN agenda over PPP in the context of the launch of the SDGs.

Chronologically following the disengagement with UNECE, as well as the outbreak of the COVID-19 pandemic and its broad economic impact, Beijing signalled the intention to shift *away* from megaprojects on hard infrastructure backed by Chinese state finance, and *towards* sustainable projects focused on soft infrastructure (even in the digital realms and health sector), alternative forms of connectivity (such as "financial integration" and "people-to-people connectivity"), and renewable energies, backed by PPP contracts and co-financing with international institutions. This shift was ultimately codified in the 14th Five-Year Plan published in 2021, under the banner of "high quality development" (*gaozhi fazhan*).[43]Notwithstanding continuing regulatory efforts by Chinese institutions since the mid-2010s, PPPs for infrastructure projects within the BRI framework have continued to be plagued by hidden financial liabilities for both recipient countries and China, as noted by a IISS study published in 2022.[44] The case of the Jakarta-Bandung Highspeed Railway is exemplary of the many of ineffective PPP governance. The project's SPV, PT Kereta Cepat Indonesia China, was created by Indonesian and Chinese SOEs with a US$4 billion loan by China Development Bank (CDB), with SPV owners supposed to cover the remaining project costs via equity contributions. Yet, as overall cost ballooned to approximately US$6 billion, the Indonesian government had to reverse a previous decree prohibiting the use of government funds for the project to allow a bailout.[45] Specifically in the case of China, the

[40] On "top-level design" in Chinese governance, see: Anna L. Ahlers, "Introduction: Chinese Governance in the Era of 'Top-Level Design'," *Journal of Chinese Governance* 3, no. 3 (2018): 263-367.
[41] UNECE, *Scaling Up*, p. 20.
[42] UNECE, Report of the Working Party on Public-Private Partnerships on Its Fourth Session, 2021.
[43] Jacob Mardell, "What Does the 14th Five-Year Plan Mean for the Belt and Road?," *MERICS Global China Inc. Tracker* 1 (2021): 12.
[44] IISS, *China's Belt and Road Initiative: A Geopolitical and Geo-Economic Assessment* (Routledge, 2022), pp. 69-70.
[45] Mercy A. Kuo, "China's BRI Lending: $385 Billion in 'Hidden Debts'," *The Diplomat*, 29 November 2021.

proliferation of PPPs contracts complicates the Ministry of Finance's oversight of BRI projects and the initiative's claimed pivot towards financial sustainability.[46] Within this context, it is worth noting that Beijing's order to local governments to cut existing exposure to PPPs in November 2023 in order to contrast continuing ballooning debts,[47] as well as a new revision of PPP mechanisms announced by the NDRC in December of the same year,[48] while primarily concerning the critical state of its domestic economy, is indirect evidence of continuing concerns over accountability and sustainability in the Chinese PPP toolbox, notwithstanding regulatory oversupply.

The EU Global Gateway, the Chinese Experience, and PPPs for Infrastructure in Africa

A flagship initiative of the von der Leyen Commission, the Global Gateway was launched in December 2021 with the objective to "boost smart, clean and secure connections in digital, energy and transport sectors, and to strengthen health, education and research systems across the world".[49] The initiative aims to do so by comprehensively mobilising "existing development policy programs, loan guarantees, and 'crowd in' private investment."[50] However, recent journalistic investigations show that its first years have been extremely troubled, mainly because of internal conflicts between a pro-active von der Leyen Commission, willing to weaponise connectivity as a "foreign policy tool", on one side, and a number of EU member states on the other, who remain concerned about the potential damage that a connectivity initiative effectively designed to compete with China may have on their critical economic ties with Beijing.[51] Furthermore, since its announcement, the Global Gateway's credibility has been affected by the perceived mismatch between its ambitious agenda and the overall €300 billion budget for the 2021-2027 period, compared to the US$1.05 trillion cumulatively invested in BRI projects between 2013 and 2023.[52]

The existing issues with inadequate funding, in turn, explain why the EU has put the involvement of the private sector in the launching of new infrastructure projects front and centre in the design, implementation, and communication of the Global Gateway since its very beginning. Even though Global Gateway grey literature targeting the general public avoids direct references to PPPs, it does emphasise the need for "catalysing the private sector", of "blending [public and private] sectors, markets and operations", and of addressing the "gap in private and public funding for digital connectivity infrastructure".[53] Indeed, Brussels' advertised embrace of the private sector to finance and build infrastructure in third countries appears central to what Heldt defined as an EU "paradigm shift" from development aid to infrastructure investment.[54] Central to this potential shift is the fact that Global Gateway projects making use of PPPs can rely on the extensive expertise of EU actors such as the European PPP Expertise Centre of the European Investment Bank, established in 2008,[55] as well as the experience of single member states.[56] These potential

[46] IISS, *China's Belt and Road Initiative*, p. 70.
[47] Kevin Yao and Ziyi Tang, "China Orders Local Governments to Cut Exposure to Public-Private Projects as Debt Risks Rise," *Reuters*, 14 November 2023.
[48] Feng Fan, "NDRC To Revise PPP Mechanism to Boost Private Investment," *Global Times*, 19 December 2023.
[49] European Commission, *Global Gateway*.
[50] Eugénia C. Heldt, "Europe's Global Gateway: A New Instrument of Geopolitics," *Politics and Governance* 11, no. 4 (2023): 223.
[51] Finn Bermingham, "4 Lost Years: How the EU Fumbled Its Response to China's Belt and Road with Global Gateway Strategy," *South China Morning Post*, 24 October 2023.
[52] Christoph Nedopil, *China Belt and Road Initiative (BRI) Investment Report 2023* (Griffith Asia Institute, 2024), p. 1.
[53] European Commission, "Global Gateway Overview: What Is the Global Gateway?"
[54] Heldt, "Europe's Global Gateway," 225.
[55] EPEC, EPEC Guide to Public-Private Partnerships, 2021.
[56] Bundesministerium der Finanzen [Federal Ministry of Finance, Germany], *The Market for Public-Private Partnerships in Germany*, 2008; Stéphane Saussier and Phuong Tra Tran, "L'efficacité des contrats de partenariat en France: une

advantages were not lost on the President of the European Commission Ursula von der Leyen, who as soon as the Global Gateway was launched flatly stated:

> Countries made their experience with Chinese investment. And they need better and different offers … They know we are transparent; they know it is accompanied by good governance, they know there will be no unsustainable debt left over, they know this is with the country itself inclusively that we design the project…and we bring on top of that the private sector with us, a private sector that in such a way does not exist in China. So, it is a true alternative.[57]

Crucially, Von der Leyen's words indirectly echoed the accusations of Chinese "debt trap diplomacy that had emerged in the late 2010s following the case of the controversial case of the port of Hambantota in Sri Lanka,[58] highlighting the opacity surrounding many BRI deals and the role that the symbiotic relation between the Chinese central government and the country's companies plays in shaping unsustainable projects. In other words, the launch of the Global Gateway was cautiously, yet consciously framed as a competition between the EU and China for better governance in the design, construction, and operation of infrastructure projects, further highlighting the relevance of PPPs.

Against this backdrop, an examination of ongoing BRI and Global Gateway PPPs for infrastructure projects in Africa provides an early data point to assess the extent to which EU narratives about its connectivity plan, as well as the von der Leyen commission's timid attempts to frame a competition between the Global Gateway itself and the BRI, reflect the reality on the ground. The two tables below list relevant BRI and Global Gateway PPPs for infrastructure projects in Africa, making use of both Chinese and EU information portals,[59] and existing secondary literature.[60] In the case of infrastructure projects within the BRI framework, projects that became operational after the launch of the initiative in 2013 have been included. In these specific cases, the negotiations surrounding these PPPs, as well as their design and implementation, may have preceded the actual launch of the BRI. Their inclusion, however, reflects their own incorporation within the initiative by Chinese actors, and more broadly the fact that the BRI, rather than emerging *ex novo*, is the result of an evolutionary process in the country's domestic economic development and in its foreign policy.[61]

première évaluation quantitative," *Revue d'économie industrielle* 0, no. 4 (2010): 81-110; Ministero dell'Economia e delle Finanze [Ministry of Economics and Finance, Italy], *A Focus on PPPs in Italy*, 2015.

[57] European Commission, *Read-out of the College meeting / press conference by European Commission President Ursula von der LEYEN and Commissioners Jutta URPILAINEN and Olivér VÁRHELYI (online) on the Global Gateway*, 1 December 2021.

[58] Deborah Brautigam, "A Critical Look at Chinese 'Debt-Trap Diplomacy': The Rise of a Meme," A*rea Development and Policy* 5, no. 1 (2020): 1-14; Aurelio Insisa and Giulio Pugliese, "The Free and Open Indo-Pacific Versus the Belt and Road Initiative: Spheres of Influence and Sino-Japanese Relations," *The Pacific Review* 35, no. 3 (2022): 563-564.

[59] Government of the PRC, *Belt and Road Portal – BRI Official Website*; Council of the European Union, *List of Global Gateway Flagship Projects for 2024*, 2023; European Union, *Global Gateway: EU-Africa Flagship Projects*, 2023.

[60] Van Wieringen and Zajontz, "From Loan-Financed to Privatised Infrastructure?," 448.

[61] Christopher K. Jonhson, "President Xi Jinping's 'Belt and Road Initiative': A Practical Assessment of the Chinese Communist Party's Roadmap for China's Global Resurgence," *CSIS Freeman Chair in China Studies Reports*, 2016, pp. 2-3.

RECIPIENT COUNTRY	PROJECT	PPP ACTORS	CONTRACT VALUE	CONTRACT LENGTH	STATUS
Cameroon	Kribi deep-sea port	CHEC*	US$1.3 bn	25 years	Operational since 2014
Cameroon	Kribi-Lolabe highway	CHEC*	US$425 mn	Details n/a	Operational since 2020
DR Congo	Kinshasa-Matadi highway	CRSG*	US$130 mn	Until paid off	Operational, date n/a
DR Congo	Katanga highway	CRSG*	US$140 mn	Until paid off	Operational since 2013
DR Congo	Sicomines	CRSG*, Sinohydro*	US$6.7 bn	25 years	Operational since 2015
DR Congo	Busanga hydroelectric power plant	CRRG*	US$660 mn	30 years	Operational since 2021. Franchise period started in 2023
Egypt	Cairo Light Rail Transit	AVIC International, CRG*	US$1.2 bn	Details n/a	Operational since 2022
Ethiopia	Unspecified "transmission project"	CETC*	US$2 bn	Details n/a	Contract signed in 2019. Uncertain.
Ethiopia	Gada Special Economic Zone	CCECC*	Details n/a	Details n/a	Details n/a
Guinea	Amaria hydropower plant	TBEA	US$1.15 bn	40 years	Under construction (2025)
Kenya	Menengai I Geothermal Power Station	Kaishan Renewable Energy Development	US$ 400 mn	25 years	Under construction (2026)
Kenya	Nairobi Expressway	CCCC*, CRBC*	US$ 668 mn	27 years	Operational since 2023
Madagascar	Antananarivo-Ivato Airport Highway	CRBC*	US$143 mn	25 years	Operational since 2016
Nigeria	Lekki deep-sea port	CHEC*	US$ 1.67 bn	45 years	Operational since 2016
Rep. of Congo	Number 1 Highway	CSCC*	US$ 2.89 bn	30 years	Operational since 2020
Sierra Leone	China-Sierra Leone Friendship Highway	CRSG*	US$160 mn	25 years	Operational since 2014
South Africa	Windpower projects	Goldwind	US$220 mn	Details n/a	Operational since 2015
Tanzania	K3 natural gas power station	CPIC*, SEPC*	US$513 mn	20 years	Operational since 2016
Zambia	Lusaka-Ndola dual carriageway	CJC*	US$ 1.2bn	Details n/a	Cancelled

The symbol [*] indicates that the company is a Chinese SOE.
Sources: *Belt and Road Portal*; van Wieringen and Zajontz, "From Loan-Financed to Privatised Infrastructure?," 448.

RECIPIENT COUNTRY	PROJECT	EU INVOLVEMENT WITHIN THE GLOBAL GATEWAY FRAMEWORK
Angola	Lobito Transportation Corridor	Project listed in the EU-Africa Global Gateway Investments Package. The European Commission signed a MoU for developing the project together with US, the governments of DR Congo, Angola and Zambia, African Development Bank and Africa Finance Corporation in 2023. No details are available on the configuration of EU investment in relation to the project's consortium, consisting of the Singaporean company Trafigura, and of two EU companies: Mota-Engils (partially owned by the Chinese SOE CCCC) and Vectoris.
Cameroon	Nachtigal hydroelectric dam	Project included EU-Africa Global Gateway Investments Package. Details on the amount to be invested, and on the relation with Nachtigal Hydro Power Company, the SPV responsible for the project (which includes EU companies such as EDF, Société Générale, and Stoa Infra & Energy), are not available.
Cabo Verde	Wind farm expansion project	EU and EIB announced in 2023 a €149 mn investment package in the pre-existing SPV of the project, Cabeólica.
Cabo Verde	Mindelo Port Expansion	Project included EU-Africa Global Gateway Investments Package. EU and EIB signed a €246 mn investment package for the port expansion. An SPV for the project should be launched in 2024 according to World Bank sources.
DR Congo	Ruzizi III power plant	EU, EIB, AfDB, KfW, and AFD, EU-AITF announced a total investment of €400 mn circa. No details are available on the configuration of the EU and EU member states actors' investment in relation to the existing project's SPV, Ruzizi III Energy Limited, originally established in 2017. The main shareholders of this SPV are Industrial Promotion Services and SN Power.
Ethiopia	Cool Port Addis	The details about the EU proposed investment are not available. The SPV responsible for the project currently includes a number of Dutch shareholders, the main one being the Flying Swans consortium.
Ethiopia	Tulu Moye Geothermal Power Station	The details about the EU proposed investment are not available. The controlling company of the project's SPV, Tulu Moye Geothermal Operations PLC, is owned by Meridiam Infrastructure Africa Fund (itself partially funded by the EIB) and Reykjavik Geothermal.
Gambia	Port of Banjul expansion and rehabilitation	The EIB has proposed a €60 mn investment in the project. The SPV of the project is controlled by the Gambian Port Authority, details about its composition are not available.
Nigeria	Jigawa Solar photovoltaic project	The details about the EU proposed investment are not available. The SPV of the project is the Nova Scotia Power Development Ltd. Details on the SPV structure are not available.
Rep. of Congo	Port of Pointe-Noire extension and infrastructure upgrade	The details about the EU proposed investment are not available. The SPV behind the project involves both the Congolese government and AD Ports.
Senegal	Port of Ziguinchor	The details about the EU proposed investment are not available. The government of Senegal has announced the future creation of PPP for the project.
Senegal	Dakar Bus Public Transport Network	EIB, AFD, and KfW announced a total investment of €340 mn. No details are available on the configuration of the EU and EU member states actors' investment in relation to the existing project's SPV, Dakar Bus Rapid Transit, which is partially owned by Meridiam.
Tunisia	ELMED interconnection	The details about the EU proposed investment are not available. The controlling company of the project's SPV is Elmed Etudes, controlled by Italy's Terna and Tunisia's STEG.

Sources: Council of the European Union, *List of Global Gateway Flagship Projects for 2024*, 2023; European Union, *Global Gateway: EU-Africa Flagship Projects*, 2023.

In the case of the BRI, it is possible to appreciate four trends. First, the dominant role of Chinese SOEs. Only 3 out of the 19 cases selected do not involve them. Second, the concentration in the second half of the 2010s, in lockstep with China's temporary involvement with the UNECE's efforts to shape international PPP standards. Third, the relative lack of information concerning the details of the PPP contracts, as the deadlines of the franchise period for 6 out of 19 projects are not available. Furthermore, the franchise of two PPPs projects concerning transportation in the Democratic Republic of Congo will last "until paid off". Both projects, in fact, have been marred with accusations of systematic corruption.[62] Another transportation project in Zambia, worth US$1.2 billion, was instead eventually cancelled after a change in the central administration of the southern African country,[63] while the status of a US$2 billion project in Ethiopia remains uncertain. Fourth, new PPPs for projects which either became operational after the outbreak of the COVID-19 pandemic or have yet to become operational, have seen the increasing participation of Chinese companies that are not SOEs. This has been the case of AVIC International in the Cairo Light Rail Transit, of Kaishan's involvement in the Menengai I Geothermal Power Station in Kenya, of Goldwind in the wind power projects in South Africa, and of TBEA in the Amaria hydropower plant in Guinea. Fifth, the value of the projects: 8 out of the 19 projects selected amounted to more than US$1 billion.

These trends, in turn, provide useful benchmarks for a comparison with the Global Gateway, while keeping in mind the much longer span of time covered by Beijing's initiative. Of the 13 projects listed, only 4 present information on the value of EU investments. Furthermore, none of them amounts to more than US$1 billion. EU, EIB, or member states' development agencies and banks have invested in 11 of the 13 projects listed. In addition, there is no available information on how investments from EU actors are configured within the respective SPVs of these projects. In fact, as of mid-2024, only the projected expansions of the Mindelo Port in Cabo Verde and of the Ziguinchor Port in Senegal will see the creation from scratch of SPVs that may include private companies based in the EU – supposedly a key selling point of the Global Gateway. Overall, an examination of publicly available information on PPPs for infrastructure projects in Africa highlights multiple shortcomings. The involvement of private sector actors based in EU in these projects is scarce, in stark contrast with the narrative disseminated from Brussels, and tellingly even with post-pandemic developments in BRI projects, which have seen an increase in the participation of Chinese private businesses in lieu of SOEs. Many projects listed in the EU databases provide little to no information available on nature and entity of EU investments. The scopes and values of the project fail to match the supposed transformative character of the Global Gateway. In short, current efforts do not appear capable to provide a viable alternative to Chinese PPPs in the continent.

Conclusion

PPPs have been touted as effective tools to meet the imposing global infrastructure gap. In a scenario where state actors like China and supranational actors like the EU have used connectivity plans to narrativize widely divergent views of the future of the international order, the ability to build and operate effective infrastructure projects through PPPs, especially in the Global South, may provide a powerful tool to match the expectations created by state-driven communication and the reality on the ground. Yet a closer scrutiny of PPP implementation in Africa does not bode well for either Beijing or Brussels. In the Chinese case, the adoption of PPPs has seen the emergence of issues long identified in the grey literature over this type of contracts: in particular

[62] William Clowes and Michael J. Kavanagh, "China Built Congo a Toll Road That Led Straight to the Ruling Family," *Bloomberg*, 3 February 2022.
[63] Chiwoyu Sinyangwe, "Zambia Cancels $1.2bn Chinese Road Project Linking Lusaka and Ndola," *The Africa Report*, 21 March 2022.

the risk of hidden debts and unexpected costs. In detail, the current indebtedness of many BRI recipient countries, and the dominant role of Chinese SOEs (with the consequent political dimension inherent to them) in these projects appear to be the major obstacles for an effective shift away from the BRI's earlier reliance on funding backed by Beijing. The EU and its member states, however, do not appear capable of taking advantage of Chinese shortcomings. Notwithstanding the quality of EU's regulatory frameworks and a less politicized relation with key local companies involved in infrastructure projects, the Global Gateway's approach to PPPs appears quite underwhelming. As of late-2024, the Global Gateway has not facilitated a wave of new PPPs for infrastructure led by EU private business. Rather, it has broadly limited itself to inject investments in already existing PPPs for relatively small-scale projects, without proactively contributing to shape more effective regulatory frameworks. By missing these developments, the Global Gateway may simply further contribute to a toxic politicization of connectivity in international politics, advancing narratives of competition vis-à-vis the BRI without actually contributing to solving the infrastructure gap issue still plaguing the global economy.

List of Acronyms

AfDB African Development Bank
AFD Agence Française de Développement
BOT build-operate-transfer
BTO build-transfer-operate
BRI Belt and Road Initiative
CCCC China Communication Construction Company
CCECC China Civil Engineering Construction Corporation
CETC China Energy Technology Corp
CHEC China Harbour Engineering Company
CJC China Jiangxi Corporation
COFIDES Compañía Española de Financiación del Desarrollo
CPIC China Power Investment Corporation
CPPPC China PPP Centre
CRBC China Road and Bridge Company
CRRG China Railway Resources Group
CRSG China Railway Seventh Group
CSCC China State Construction Company
DBFOM design-build-finance-operate-maintain
EIB European Investment Bank
EU European Union
EU-AITF EU-Africa Infrastructure Trust Fund
GG Global Gateway
KfW Kreditanstalt für Wiederaufbau
NDRC National Development and Reforms Commission of China
PIERS PPP and Infrastructure Evaluation and Rating System
PPP public-private Partnership
SDG Sustainable Development Goals
SEPC Shanghai Electric Power Company
SOE state-owned enterprise
SOFID Sociedade para o Financiamento do Desenvolvimento
SPV special purpose vehicle
STEG Société tunisienne de l'électricité et du gaz
STOA Société de Transports et d'Aménagement des Infrastructure
UNECE United Nations Economic Commission for Europe
WPPPP Working Party on Public-Private Partnerships

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