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A Strategic Competition Between China and Japan in the Indo-Pacific: Case From The Whoosh High-Speed Train Projects in Indonesia

印太地区中日战略竞争：以印尼 Whoosh 高速列车项目为案例

Ali Akbar Anggara

Department of Management, Faculty of Economics and Business, Universitas Muhammadiyah Purwokerto, Central Java, Indonesia 53182

Corresponding Author: Ali Akbar Anggara, aliakbarang@ump.ac.id

Abstract. China's launch of the Belt and Road Initiative (2013) and Japan's subsequent Partnership for Quality Infrastructure (2015) have intensified their rivalry over infrastructure exports across Asia. Existing scholarship largely contrasts these initiatives in terms of competition and norm diffusion, but pays less attention to the underlying forces shaping their policy designs. This article proposes a framework in which great-power rivalry and cross-national policy learning jointly guide how infrastructure strategies are formulated. Strategic competition encourages each country to differentiate itself and claim particular market and political spaces, whereas learning from one another's practices gradually pushes their approaches closer together. We examine these dynamics along three dimensions: how the initiatives are defined, how state-backed support is structured, and how far they rely on multilateral versus bilateral arrangements. Using Indonesian railway projects as a paired case, we show how China, as a relative latecomer, leveraged political and financial innovation to enter a field long dominated by Japan, and how both sides subsequently adjusted their policies after the Jakarta–Bandung high-speed rail tender and the second phase of the Jakarta mass rapid transit project.

Keywords: Belt and Road Initiative, Partnership for Quality Infrastructure, Infrastructure export strategies Policy learning and competition Indonesian railway projects

摘要: 2013 年中国提出“一带一路”倡议，2015 年日本推出“高质量基础设施伙伴关系”，两国由此在亚洲基础设施输出领域展开激烈竞争。既有研究多从竞争与规范扩散的角度比较这两项倡议，但较少深入探讨究竟是什么力量塑造了基础设施政策的具体设计。本文构建了一个分析框架，认为大国博弈与跨国政策学习共同推动基础设施战略的形成。前者促使中日通过差异化定位来争夺特定市场与战略空间，后者则通过相互借鉴和调整，使双方的政策实践逐步趋同。文章从三个方面比较“一带一路”和“高质量基础设施伙伴关系”：倡议的界定方式、国家支持工具的配置方式，以及依赖多边还是双边安排的程度。以上述框架为基础，本文进一步以印尼铁路项目为实证案例，展示中国如何在日本长期占据优势的领域中，以新型政治与金融安排作为后发进入路径，并揭示在雅万高铁招标及雅加达地铁二期推进过程中，两国如何在竞争之后表现出政策学习与策略调整。

关键词: 一带一路倡议; 高质量基础设施伙伴关系; 基础设施出口战略; 政策学习与竞争; 印尼铁路项目

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1. Introduction

In Asia, infrastructure has become the arena of an intense race, fuelled by persistent financing gaps and the renewed belief that building physical infrastructure is central to economic development (Rüland, 2020). The Asian Development Bank (ADB) estimates that between 2016 and 2030 the average annual investment shortfall reaches about US$33 billion in Central Asia, US$919 billion in East Asia, US$365 billion in South Asia, and US$184 billion in Southeast Asia (Asian Development Bank, 2017). Only around 15–20% of projects are financed by private capital, and multilateral development banks cannot cover the remaining needs (Asian Development Bank, 2017). As a result, national governments have increasingly stepped forward as the principal actors attempting to close these gaps.

Japan was the primary external driver of infrastructure development in Asia in the decades after the Second World War, initially as part of its war reparations programme to restore assets destroyed during the Japanese occupation (Arase, 1995). From the 1970s, infrastructure investment became a cornerstone of Japan's own urbanisation and industrialisation, as well as a tool for supporting the overseas expansion of Japanese manufacturing (Liao & Katada, 2021). By the 1980s Japan had come to exemplify a mercantilist, export-oriented official development assistance (ODA) model (Jiang, 2019). It rose to become the world's leading aid donor in the early 1990s, before its ODA volume declined from the late 1990s onwards (Arase, 1995). During the same period, China emerged as a new infrastructure provider through its 1999 "Going Out" strategy, which encouraged domestic firms to operate abroad and drew inspiration from Japan's earlier experience. In parallel with selectively learning from Japan, China began to promote a distinct "China model," popularised by former World Bank Vice President Justin Lin. The Belt and Road Initiative (BRI), launched in 2013 with infrastructure at its core, became the flagship of this approach. To safeguard its longstanding position in Asian infrastructure (Zhao, 2018), Japan consolidated and rebranded its support in the 2015 Partnership for Quality Infrastructure (PQI). These developments subsequently triggered a wave of new or revamped connectivity schemes by the United States, the European Union, the G7, India and South Korea.

Among this crowded field, the rivalry between China and Japan remains the most prominent. Although a growing body of work compares their overseas infrastructure activities, it has yet to fully explain what drives the pattern of initial differentiation followed by gradual convergence between their connectivity strategies. Existing studies largely focus on strategic competition (Jiang, 2019; Yoshimatsu, 2018; Zhao, 2018). PQI, for example, is often portrayed as Japan's response to the BRI, emphasising "quality" infrastructure to distinguish itself from China (Jiang, 2019; Pascha, 2020). These accounts, however, seldom specify how competitive pressures translate into particular design features. At the same time, scholars note that the BRI itself borrows heavily from earlier Japanese export-promotion practices (Jiang, 2019; Liao & Katada, 2021), and that Chinese initiatives have in turn prompted Japan to recalibrate its infrastructure strategy (Jiang, 2019). Pascha (2020) characterises the interaction among major providers as oligopolistic competition, generating a sequence of moves and countermoves aimed at avoiding head-on rivalry. Jiang (2019) introduces the notion of "cooperative competition" to capture the coexistence of specialisation and convergence. Yet both concepts remain theoretically underdeveloped.

Furthermore, the literature has paid limited empirical attention to how convergence is shaped by policy learning. This article addresses these gaps by analysing the emergence and evolution of Chinese and Japanese infrastructure initiatives and projects. At the level of overarching initiatives, we develop a framework that treats competition and learning as intertwined processes that incrementally shape policy design. In the early phase, actors seek to differentiate themselves and occupy strategic niches. Over time,

they selectively absorb lessons from each other's successes and failures in particular domains. To explore how these two forces operate, we compare the design of the Chinese BRI and the Japanese PQI along three dimensions: (1) how each initiative is defined, (2) the nature of the state support instruments employed, and (3) the extent of their multilateralisation.

At the project level, we examine how China and Japan learn from experience through two Indonesian railway schemes: the Jakarta–Bandung high-speed rail (HSR) and the Jakarta mass rapid transit (MRT). Drawing on fieldwork and interviews in Japan and Indonesia, we show how China, as a late entrant into Indonesia's infrastructure sector, carved out a competitive niche that enabled it to outbid Japan, which had been active there for decades. Yet, despite being portrayed primarily as rivals, both countries engaged in policy learning following the HSR tender. China adjusted its practices during the implementation of the HSR project, while Japan incorporated lessons into the second phase of the MRT.

The remainder of the paper is organised as follows. Section 2 sets out our theoretical framework, integrating perspectives on competition and policy learning. Section 3 traces how these dynamics inform the step-by-step design of China's and Japan's infrastructure initiatives. Section 4 uses the Jakarta–Bandung HSR and Jakarta MRT projects to illustrate mutual competition and learning in practice. Section 5 concludes by discussing the theoretical contributions and practical implications of our findings.

2. Theoretical framework

To analyse how competition and learning among external actors shape infrastructure initiatives, this study adopts an inter-organisational approach (Biermann, 2011). This perspective starts from the premise that organisations do not operate as self-sufficient units, but are embedded in wider environments in which they exchange resources, build networks, and undergo processes of institutional socialisation (Franke, 2017). Through these interactions, organisations are mutually constituted over time (Brosig, 2011). Although our empirical focus is on states, we assume that the core expectations of inter-organisational theory apply: like organisations, states compete, specialise, and learn from one another under conditions of interdependence.

In Asia's sub-regions, external powers compete to shape connectivity and to promote their exports and domestic industries. China and Japan both seek to support regional infrastructure because such projects can deliver geopolitical leverage and generate business for firms at home. Resource dependence theory suggests that actors who control critical resources can exploit power asymmetries to advance their preferences (Pfeffer & Salancik, 1978). By linking financial, technical, or political support to specific policy proposals, providers can inject conditions into recipient states' decision-making. This creates strong incentives for actors to position themselves as key providers of infrastructure finance and expertise.

Research on organisational competition indicates that in crowded environments, actors tend to specialise and occupy niches that build on pre-existing strengths or competitive advantages (Brosig, 2011). In our framework, competition is therefore treated as a first driver in the emergence and design of connectivity initiatives: it encourages China and Japan to differentiate their offers and to claim specific niches in terms of how they support infrastructure. Interplay and specialisation are often conceptualised as indirect, with organisations adjusting to each other because they share a field or operate within the same structural context. Specialisation, in this sense, refers to the occupation of a distinct niche defined by actors' inherent characteristics and by the type of resources they can credibly supply.

The second component of our framework is policy learning. Under various labels policy-oriented learning (Sabatier, 1988), lesson-drawing (Rose, 1991), government learning (Etheredge & Short, 1983) the concept refers to the transfer of knowledge from one policy process to another (Bennett & Howlett, 1992).

Hall (1988) defines policy learning as a deliberate attempt to revise policy goals or instruments in light of the observed consequences of previous policies and newly available information, with the aim of better achieving overarching governance objectives. Our interest lies specifically in learning that occurs between entities rather than within a single actor. Both successful and failed policies can become reference points for future adjustment (May, 1992). Learning operates within the boundaries of the policy area concerned and shapes specific features of strategy design.

In contrast to the largely indirect logic of competition, learning presupposes more direct exchanges of information and experience. It does not necessarily reinforce specialisation: actors may also emulate successful practices by copying objectives, instruments, or implementation arrangements. In our case, this mechanism helps explain the convergence observed between the two connectivity initiatives. Table 1 summarises the main differences between the competition and learning logics. Within our framework, learning is the principal mechanism that generates convergence in policy design in the field of infrastructure support, operating alongside and sometimes following earlier rounds of specialisation.

Table 1. Competition and Learning Logic

	Cause for policy emergence and design	**Type of interaction with other actors**	**Outcome**
Logic of competition	Need to manage resource exchanges; intrinsic capabilities and comparative advantages	Indirect	Specialising and occupying a niche
Logic of learning	Successes and failures of previous policy choices	Indirect (observation) and direct (interaction)	Selective lesson-drawing and convergence

Source: Mao et al., 2025

At the same time, learning can also contribute to further specialisation, especially when actors draw lessons from failed policy implementation or flawed design and adjust in ways that accentuate their distinctiveness. In practice, competition and learning unfold simultaneously over the course of policy emergence and design, as illustrated in Figure 1. Political entities seeking to occupy a niche must monitor rivals, and processes of policy learning can thus occur in parallel with competitive positioning. Competition provides the initial impetus to design infrastructure initiatives aimed at securing a niche, producing specialisation under competitive pressure. At the same time, strategies gradually converge as actors learn from others' experiences. This iterative cycle continues as entities both compete and learn.

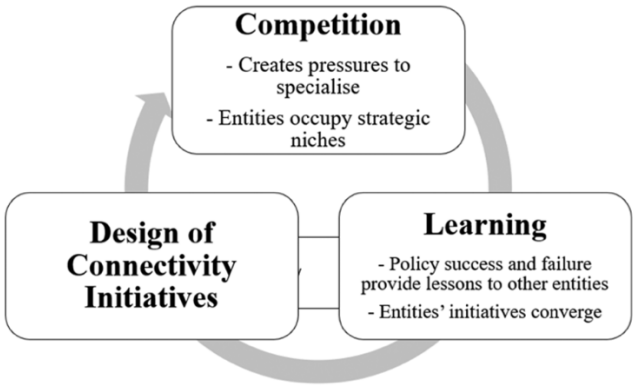

Figure 1. Theoritical Framework

To operationalise this framework, we analyse the incremental design of infrastructure initiatives by systematically reviewing policy documents and conducting expert interviews in Tokyo (Japan) and in Jakarta, Bandung, and Yogyakarta (Indonesia). We focus on three policy dimensions that are prominent in the Chinese and Japanese cases: (1) definition, (2) character of support, and (3) degree of multilateralisation. The first dimension concerns how infrastructure initiatives are conceptually framed what they are understood to encompass and what principles they emphasise. China highlights mutual learning, respect for sovereignty, and diversity of development paths, whereas Japan emphasises "quality" infrastructure and standard-setting. We examine how broad each actor's definition of infrastructure support is in practice.

The second dimension concerns the character of the resources provided. China is associated with rapid, large-scale infrastructure construction delivered by state-owned enterprises and backed by state-led financial institutions. Japan, in contrast, channels official development assistance and foreign direct investment into infrastructure through public–private partnerships, with a strong focus on risk management and investment returns. We compare commonalities and differences in these support patterns.

The third dimension, the degree of multilateralisation, is arguably the most dynamic. Initially, China's BRI centred on bilateral negotiations, but the creation of alternative financial institutions such as the Asian Infrastructure Investment Bank (AIIB) signals a stronger multilateral orientation. Japan, for its part, initially framed its multilateral infrastructure initiatives in contrast to bilateral models, yet China has increasingly embraced multilateralism as well. We therefore investigate how far each country's infrastructure support has been multilateralised. By examining these three dimensions, we show how China and Japan specialise to occupy different niches and selectively learn from each other, producing both differentiation and convergence between their infrastructure initiatives.

2.1 Infrastructure connectivity strategies

2.1.1 China's Belt and Road Initiative

The Belt and Road Initiative (BRI) preceded by the ideas of the Silk Road Economic Belt and the Twenty-First Century Maritime Silk Road was first announced during Chinese leadership visits to Kazakhstan and Indonesia in 2013. By 2024, a total of 153 countries and 32 international organisations had signed memoranda of understanding for cooperation under the BRI framework, and the overall initiative has been estimated to involve up to US$8 trillion in investment (Apostolopoulou, 2021; Chinese Government, 2023). Despite this enormous scale, there is still no universally agreed definition or set of criteria for what constitutes a BRI project (Hale, Liu, & Urpelainen, 2020). One key policy document, *Vision and Actions on Jointly Building Silk Road Economic Belt and Twenty-First Century Maritime Silk Road*, calls on "countries along the Belt and Road" to align infrastructure plans and technical standards, jointly develop major transport corridors, and gradually build an infrastructure network that links Asian sub-regions and connects Asia with Europe and Africa (NDRC, Ministry of Foreign Affairs, & Ministry of Commerce, 2015).

As the most visible new actor in Asia's infrastructure push, China's approach has attracted strong criticism from policymakers and scholars. Critics argue that the speed and magnitude of Chinese projects serve Beijing's geopolitical ambitions and risk pushing host states into "debt traps" (Akimoto, 2018; Rüland, 2020; Umbach, 2019). Yet such accusations also reflect China's position as an emerging donor in international development. Similar concerns were previously raised about Western institutions such as the International Monetary Fund and the World Bank (Escobar, 1995; Stiglitz, 1998), and about Japan during its surge in infrastructure exports in the 1980s. This pattern suggests that early movers in a policy domain,

or proponents of a new model of support, may initially encounter failures that later become raw material for policy learning both for themselves and for other actors.

From this perspective, the BRI can be interpreted as China's attempt to claim a specific niche that matches its comparative advantages as a rising power offering a distinctly pragmatic style of development assistance (Brosig, 2011). In the wake of the global financial crisis, the appeal of the neoliberal model weakened, yet no widely accepted alternative for international development had emerged. Chinese infrastructure initiatives therefore represent a process of experimentation in how to provide connectivity support (Rüland, 2020). The distinctiveness of China's approach can be read as a deliberate move to distance itself from Western practices and from the established architecture of international financial institutions and multilateral development banks. At the same time, this is not merely an oppositional stance. It reflects China's own learning trajectory and its "cognitive priors" (Acharya, 2010): dissatisfaction with what it perceived as restrictive rules, governance requirements, and veto positions held by advanced Western economies led Beijing to craft alternative financing rules for infrastructure. From China's point of view, this constitutes a pragmatic response to what it sees as Western rhetoric unaccompanied by concrete action, offering instead visible connectivity projects on the ground (Personal communication, Indonesian ministry official, Jakarta, July 2023; Indonesian minister via Chinese SOE executive, July 2024).

Specialisation to occupy a niche

Definition - As a newcomer to large-scale development cooperation, China has kept the definition of the BRI deliberately broad and somewhat ambiguous, reflecting both the magnitude of the initiative and the diversity of actors involved (Hale et al., 2020). This ambiguity can also be interpreted as a gesture toward respecting varied development paths and promoting "mutual learning and mutual benefit" (NDRC, Ministry of Foreign Affairs, & Ministry of Commerce, 2015), in conscious contrast to what Beijing criticises as the one-size-fits-all neoliberal "Washington Consensus" promoted by Western donors (Brautigam, 2009). In practice, many components of Chinese connectivity efforts remain less visible because the sheer size of high-profile physical projects, combined with limited transparency, overshadows other activities. Infrastructure under the BRI covers port and airport facilities, road corridors, and high-speed rail, among others. The official *Vision and Actions* document also presents China's approach as pragmatic and formally "apolitical," emphasising mutual respect for sovereignty and non-interference in domestic affairs (NDRC, Ministry of Foreign Affairs, & Ministry of Commerce, 2015). As a latecomer, China has shown a willingness to accept higher political and economic risks by working in host countries that often struggle to obtain financing from existing multilateral development banks.

Character of support - China's comparative strength lies in its own development experience, frequently described as having "developmental state" characteristics (Jiang, 2019; Rüland, 2020): rapid project planning and implementation, heavily drawing on Chinese capital, technology, and labour. Several domestic factors underpin this outward push: persistent overcapacity in steel, aluminium, cement, and related industries (Sevilla, 2017; Zhao, 2018); the need for structural transformation that encourages provinces and local governments to pursue export-oriented growth strategies (Yoshikawa, 2016); the objective of accelerating development in China's less developed western and southern regions (Zhao, 2018); and efforts to diversify away from large holdings of US dollar reserves and other foreign securities (Karim, 2015). As a result, BRI support is dominated by state-led foreign direct investment targeted at large-scale "hard" infrastructure high-speed rail, highways and feeder roads, ports and airports, energy facilities, and industrial or special economic zones.

Observers often characterise Chinese connectivity finance as notably pragmatic and fast in terms of loan decision-making, differentiating it from procedures used by multilateral development banks and traditional donors from the Global North (Personal communication, staff of Japanese development agency, Jakarta, July 2023 and June 2024). While Western institutions increasingly insist that good political governance is a precondition for market operations (Ake, 1993), China typically refrains from attaching stringent governance conditionality, thereby lowering barriers that recipient governments may otherwise struggle to meet (Personal communication, development consultancy expert, Jakarta, July 2023). Although this "apolitical" approach has been criticised in Western debates (Rüland, 2020), there are also positive reasons why China's model has traction. Many governments view the Chinese developmental state as attractive precisely because it appears to deliver visible outcomes quickly (Personal communication, Indonesian ministry official, Jakarta, July 2023). Moreover, the withdrawal or downscaling of Western actors from large-scale infrastructure during the 1990s and 2000s (Jiang, 2019) created space that China was well positioned to fill.

Multilateralisation - Despite official documents that advocate multilateral cooperation, Chinese infrastructure finance has in practice been dominated by bilateral deals under a well-publicised "win–win" narrative closely aligned with the political objectives of host leaders (Rogelja, 2020). Several cases illustrate this pattern. In Indonesia, China framed the Jakarta–Bandung high-speed rail project as supporting President Joko Widodo's Global Maritime Fulcrum vision and promised project operation in 2019, the year of his re-election campaign. In Malaysia, as Prime Minister Najib Razak faced electoral pressure and the mounting 1MDB scandal, China proposed rapid investments in infrastructure projects designated under the Economic Transformation Programme (ETP) to shore up elite support (Weiss, 2020). Beijing also purchased Malaysian government bonds and 1MDB-owned power assets burdened by debt (Venkat & Carew, 2015), and injected cash into 1MDB by acquiring a 60 per cent stake in Bandar Malaysia (Liao & Katada, 2021). Across such cases, China's ability to commit funds quickly and proceed without imposing demanding governance conditions has been welcomed by many partners (Personal communication, Indonesian ministry official, Jakarta, July 2023).

Learning and convergence

Over time, the BRI has been adjusted in response to mounting criticism about project quality and environmental impacts. The 2021 *Measures for the Administration of Foreign Aid* issued by the China International Development Cooperation Agency explicitly adds the promotion of "sustainable development" and "high-quality Belt and Road cooperation" as objectives and calls for a more systematic framework for project monitoring and evaluation (China International Development Cooperation Agency, 2021). The most recent BRI Action Plan (2018–2030) further underlines the need for standardisation in project implementation an emphasis long associated with Japan's approach. At the second Belt and Road Forum, the Standardisation Administration of China launched a national standards information platform for use with BRI partners, pledged to train 1,500 environmental officials from participating states within three years, and announced the creation of a BRI Environmental Big Data Platform (The Second Belt & Road Forum for International Cooperation, 2018). Recent data also indicate that the first half of 2023 constituted the "greenest" six-month period for BRI energy-related investments since 2013 (Green Finance & Development Centre, 2023). Together, these initiatives show that Beijing has taken on board external concerns and incorporated elements that bring the BRI closer to other actors' priorities, such as Japan's focus on standards. Xi Jinping's address at the Second Belt and Road Forum in 2019, with its explicit

language on transparency, environmental sustainability, and sustainable development, likewise signals convergence with the connectivity agendas advanced by Japan and the European Union.

Chinese support instruments themselves draw heavily on the export-promotion model Japan used up to the 1980s, centred on economic infrastructure, tied aid, and non-concessional financing prior to Japan's fuller integration into the OECD Development Assistance Committee framework (Jiang, 2019). In developing Asian countries, China Eximbank's infrastructure lending largely takes the form of government concessional loans denominated in RMB and preferential buyers' credits in USD, both typically carrying interest rates of around 2–3% and being linked to Chinese contractors (Kitano & Miyabayashi, 2019). Experience in Indonesia's Jakarta–Bandung high-speed rail (HSR) project has also prompted adjustment. Although China "won" the tender against Japan with a business-to-business proposal that did not require an Indonesian sovereign guarantee, the project subsequently encountered cost overruns due to underestimated land-acquisition challenges and the absence of serious early attention to operating deficits in the initial years (Personal communication, Indonesian SOE executive, Jakarta, June 2024; Indonesian transport expert, Bandung, June 2024). As a result, Beijing has placed growing emphasis on the financial viability of BRI projects (Mao, 2023). Its goals have gradually shifted from simply securing contracts to negotiating deals that are more sustainable over the long term, a change reinforced by heightened global concern over debt vulnerabilities in borrower states, especially in the wake of COVID-19 (Yue & Wang, 2020). Reflecting this shift, Xi Jinping stressed responsible and sustainable lending at the second BRI Summit, and in 2019 the Ministry of Finance released a BRI Debt Sustainability Framework modelled on the IMF/World Bank framework for low-income countries (Ministry of Finance of China, 2019). China also endorsed the G20 Principles for Quality Infrastructure Investment promoted by Japan, signalling responsiveness to criticism of rapidly expanding infrastructure lending and to calls from the international community for higher standards.

Evaluations that portray China as unwilling to engage with multilateral norms may therefore overlook important changes. Some institutions associated with the BRI most prominently the Asian Infrastructure Investment Bank have been repositioned closer to mainstream multilateral development practices (Wilson, 2019). Beyond institutional reform, reliance on top-level bilateral bargaining has exposed China to commercial and political risks when host governments seek to extract better terms by playing multiple financiers off against one another (Personal communication, Indonesian ministry official, Jakarta, July 2023) or when leadership changes, as in Malaysia (Jiang, 2019; Liao & Katada, 2021). Limited consultation with local communities and weak assessment of social and environmental impacts have also contributed to a perception among host-country actors and publics that Chinese projects are of lower quality than Japanese ones (Personal communication, Indonesian policy expert, Jakarta, July 2023).

In response, Beijing has increasingly signalled an interest in working through multilateral channels. At the Second Belt and Road Forum it announced cooperation with UN bodies on the Belt and Road Green Lighting Initiative and Belt and Road Green Cooling Initiative, and it created the Multilateral Cooperation Centre for Development Finance with major existing financial institutions, including the ADB, EBRD, European Investment Bank, Inter-American Development Bank, and the World Bank. Practical experiences in Indonesia have also encouraged more collaborative thinking. Faced with implementation difficulties in the Jakarta–Bandung HSR, President Joko Widodo proposed extending the line to Surabaya and inviting Japan to re-enter the project consortium alongside China (Jakarta Post, 2020). Chinese actors reportedly showed more openness to such trilateral cooperation than their Japanese counterparts (Personal communication, Japanese development agency expert, Jakarta, June 2024). This flexibility and willingness to work even with competitors and established multilaterals reflects an important learning outcome. Xi

Jinping's 2019 speech at the Second Belt and Road Forum, which highlighted the principles of "extensive consultation and joint contribution" (Xi, 2019), further underlines that lessons have been drawn from the perceived advantages of Japan's practice of operating through the ADB and aligning with partner countries' development plans (see also Table 2).

Table 2. china's approach to infrastructure connectivity

	Specialisation to occupy a niche	**Learning and convergence**
Definition	Vague and lacking clarity; stresses mutual learning and mutual benefit; tolerant of diverse development paths; presents itself as apolitical and respectful of sovereignty.	Flexible enough to allow adjustments over time; growing emphasis on standardisation and environmental concerns.
Character of support	Draws on China's own development experience; rapid construction of physical links; use of state-affiliated institutions; flexibility and pragmatism; rich in financial, material, and labour resources.	Influenced by Japanese experience; introduction of debt-sustainability frameworks; stronger transparency and monitoring.
Multilateralisation	Bilateral, top-level state-to-state negotiations aimed at the ruling government's political interests.	Multilateral cooperation to lower political and implementation risks; willingness to cooperate with competitors.

Source: Mao et al., 2025

2.1.2 Japan's Partnership for Quality Infrastructure

Japan's involvement in Asian infrastructure dates back to the 1950s, when it provided projects as part of war reparations to rebuild facilities destroyed during its occupation in the Second World War (Arase, 1995). Framed as *keizai kyōryoku* (economic cooperation), these schemes ensured that Japanese firms supplied goods and services for reconstruction and quickly evolved into a state-led instrument to support the overseas expansion of Japanese business (Zhao, 2018). Over time, Japanese assistance continued to prioritise hard infrastructure aimed at promoting industrialisation and reinforcing production and supply-chain links for Japanese manufacturers across the region. Yet despite its longstanding dominance as an infrastructure provider, Japan only created the Partnership for Quality Infrastructure (PQI) in 2015 after China had launched the BRI as an umbrella policy to consolidate its various infrastructure initiatives in Asia and beyond (Thankachan, 2017). The discursive framing of PQI is widely interpreted as a response to the BRI (Jiang, 2019; Li & Taube, 2019).

Against China's model of mainly bilateral, state-led, and fast-moving infrastructure expansion, Japan advanced a strategy that in part mirrors, but also seeks to differentiate itself from, Beijing's approach. PQI highlights "quality" infrastructure, continued reliance on multilateral development institutions, and a strong role for private capital through public–private partnerships. At the same time, important similarities remain. Like China, Japan offers financial backing for physical infrastructure rather than focusing primarily on regulatory reforms in Asian economies. In its earlier phase, Japanese infrastructure support was also relatively relaxed about governance and transparency checks, with projects designed largely to benefit Japanese corporations, until external criticism and domestic debate following its accession to the OECD Development Assistance Committee pushed Tokyo to reform ODA practices (Arase, 1995). However, intensifying competition from China has encouraged Japan to partially revive its earlier mercantilist use of infrastructure for commercial gain (Jiang, 2019), thereby contributing to a broader return of developmental-state style strategies rooted in its own post-war growth experience (Rüland, 2020). That this shift was

catalysed by China's rise suggests that Japanese policymakers have learned from Chinese tactics even after decades of alignment with the DAC orthodoxy.

Specialisation to occupy a niche

After Japan articulated its Free and Open Indo-Pacific (FOIP) vision in 2017, the Partnership for Quality Infrastructure (PQI) was elevated as one of FOIP's core policy pillars, framed as a contribution to regional public goods and peaceful cooperation in the Indo-Pacific. In contrast to China's bid to reassert a dominant position in East Asia (Akimoto, 2018), Tokyo stresses "openness" and "inclusivity", implicitly countering the BRI's early imagery of fixed routes and pre-selected "participating countries". Its parallel insistence on the rule of law responds to the BRI's emphasis on national sovereignty and host-country policy autonomy.

PQI's distinctive feature, however, is its branding around "quality" infrastructure, designed to differentiate Japanese projects from Chinese schemes often portrayed as fast but poorly controlled. As Abe argued, Japan should reject "cheap but shoddy" solutions and instead "choose the long-lasting, high-quality item even if the price is a bit higher" (Abe, 2016). Given Japan's limited fiscal space, this high-price/high-quality positioning becomes a strategic necessity (Pascha, 2020). Officially, quality infrastructure is defined in terms of low life-cycle costs, safety, resilience to natural disasters, attention to environmental and social impacts, and contributions to local society and the economy (Ministry of Foreign Affairs of Japan, 2015). In a broader political–economic sense, "quality" also encompasses good governance, transparency, economic viability and robust risk assessment (Pascha, 2020). As a long-standing leader in the field, Japan promotes standardisation of quality infrastructure through cooperation with multilateral institutions such as the World Bank and the Asian Development Bank (Ministry of Foreign Affairs, 2015). Yet Japanese practitioners acknowledge that such qualitative claims remain difficult to verify empirically (Personal communication, Japanese railway company staff, Jakarta, July 2023).

Historically, Japanese infrastructure assistance has been heavily finance-centred, relying on tied aid and non-concessional lending. In the 1950s and 1960s, war-reparation–type "economic cooperation" arrangements were governed by six conditions: reparations should not disrupt normal trade; procurement contracts would link Japanese firms with recipient governments; only goods and services would be transferred; at least one party in each agreement had to be Japanese; transactions were denominated in yen; and standard commercial procedures applied (Arase, 1995).

From the 1970s, as Japan's economy surged and it joined the OECD Development Assistance Committee in 1964, humanitarian considerations were gradually incorporated into ODA, reinforcing Japan's image as a non-military economic power (Rix, 1980). In the 1980s, the government launched a "go-global" campaign built on a trade–investment–ODA trinity to support firms that were losing competitive advantage as loans became untied. During the 1990s, despite the bursting of the domestic bubble, Tokyo continued regional cooperation to help address the Asian financial crisis, but subsequently reduced overall ODA levels. In the 2010s, under Abenomics, Japan re-entered infrastructure expansion, reviving a mercantilist use of infrastructure exports to counter domestic stagnation.

Japan also operates a request-based system that enables Japanese firms to identify, propose and co-develop projects with partner governments from an early preparatory stage. As a DAC member, both the Japan International Cooperation Agency (JICA) and the Japan Bank for International Cooperation (JBIC) apply social and environmental safeguards comparable to those of the World Bank and ADB (Mao, 2023). During implementation, JICA and JBIC impose strict governance conditions, including anti-corruption requirements for borrowing governments (Personal communication, Indonesian infrastructure finance expert, Jakarta, June 2024).

Membership in the OECD-DAC also led Japan to internalise a wide range of Western development norms (Söderberg & Berg, 1996). Even as Tokyo has shifted back towards a more idiosyncratic, interest-driven stance, a key PQI objective remains the promotion of infrastructure standards through multilateral development banks. Japan not only relies on multilateral benchmarks in its own practice, it also seeks to shape them. PQI is anchored in the G7 Ise-Shima Principles for Promoting Quality Infrastructure Investment, endorsed in 2016, and Japan subsequently championed the G20 Principles for Quality Infrastructure Investment, which set out six core principles. Tokyo has further worked with Australia, India and the United States to launch the "Blue Dot Network" at the 2019 Indo-Pacific Business Forum, a mini-lateral initiative widely seen as a response by states that felt sidelined by the initial BRI corridors.

Through these platforms, Japan positions itself as a normative entrepreneur, using multilateral and mini-lateral forums to diffuse standards aligned with its notion of "quality" infrastructure. This emphasis on rules and standards is presented as a key comparative advantage vis-à-vis China.

Learning and convergence

Despite its long record in infrastructure provision, Japan traditionally maintained a low profile, cultivating the image of a peaceful, non-military economic power and often following the lead of US foreign policy rather than asserting its own geopolitical leadership (Personal communication, Chinese government official, Jakarta, June 2024). FOIP itself was initially articulated by the United States rather than Japan (Personal communication, Chinese government official, Jakarta, June 2024). Against this background, the decision to launch a high-visibility initiative such as PQI, framed around "quality" infrastructure, already reflects learning from China's bold BRI branding. PQI also adopts a prosperity-sharing narrative that closely resembles BRI discourse, and it operates implicitly through economic corridors similar to China's corridor strategy.

Indeed, the corridor idea predates the BRI and can be traced back to Japan's own planning. The 2010 Comprehensive Asia Development Plan prepared by the Economic Research Institute for ASEAN and East Asia (ERIA) identified three major initiatives: the East–West Economic Corridor from Viet Nam to Myanmar; the Mekong–India Economic Corridor linking ports across mainland Southeast Asia; and the Maritime ASEAN Economic Corridor focusing on port infrastructure in maritime Southeast Asia. These plans demonstrate that corridor-based infrastructure development is not uniquely Chinese but has roots in Japan's pre-BRI strategy.

Since the Abe administration, ODA and infrastructure policy have also been increasingly aligned with Japan's National Security Strategy, incorporating themes such as peacebuilding, governance, human rights and humanitarian assistance. These principles were written into the revised ODA Charters of 2015 and 2023, signalling an ambition to act not only as an economic actor but as a broader normative and security stakeholder. In this sense, Japan has learned to present itself as a global leader rather than merely a "civilian" or "economic" power.

Although Japan was the earlier leader in infrastructure finance, it has clearly absorbed lessons from China regarding the signalling effect of headline figures. The initial PQI pledge of US$110 billion closely echoed China's US$100 billion capitalisation of the AIIB. The later expansion of PQI's envelope to US$200 billion underlines that Japan also uses large numerical commitments as a selling point, thereby converging to some extent with Chinese practice. To compensate for its more limited fiscal capacity and compete with China's state-backed SOEs, Tokyo has sought to mobilise private capital through PPP schemes.

Japan has also studied China's rapid implementation style and responded by centralising coordination. Under Abe, the Cabinet Office (Kantei) strengthened its role through the Economic Cooperation

Infrastructure Meeting, which convenes relevant ministries to prepare an annual Infrastructure Overseas Expansion Strategy. Kantei also manages the Economic Cooperation Infrastructure Portal, which lists contact points across ministries for different thematic areas of overseas infrastructure expansion.

To make Japanese finance more competitive and better match China's "soft budget constraint" advantages, JBIC has expanded long-term lending to local financial institutions and stepped up support for relatively high-risk projects. Nippon Export and Investment Insurance (NEXI) has extended its investment insurance horizon from 15 to 30 years, now covering the risk of government contract breaches even beyond project completion, and has raised maximum country-risk coverage to 100% for overseas investment and export credit insurance.

Japan's defeat in the Jakarta–Bandung HSR tender has also prompted adaptation in its diplomatic style. Tokyo has increasingly resorted to bilateral top-leadership agreements in major railway deals. In India, for example, Abe and Modi agreed in 2016 to adopt the Japanese Shinkansen system without holding an open competition, mirroring the high-level political bargaining between Xi Jinping and President Joko Widodo over the Jakarta–Bandung HSR. Japan aligned its offer with Modi's "Make in India" and "Skill India" agendas through commitments to technology transfer and human resource development (Jain, 2019).

At the same time, depictions of an intense strategic clash between Japan and China over infrastructure may be exaggerated. There is growing evidence of willingness to cooperate. In the multilateral realm, ADB President Takehiko Nakao noted in 2017 that, given the vast financing needs, "We don't need to regard the AIIB as a kind of rival, because there is a very large need to finance, so we can cooperate" (Pollmann, 2017). The Japanese government has publicly indicated openness to collaboration with the BRI (Sano, 2018) and even considered joining the AIIB in 2018. Membership did not materialise, apparently due to US pressure on allies not to participate (The Economist, 2015), but Japan and China nonetheless agreed to cooperate on 52 infrastructure projects. During Abe's 2018 visit to China, the two leaders pledged to deepen cooperation, including in infrastructure support. Subsequent escalation of US–China trade tensions, however, pushed Japan closer to the US position and disrupted these nascent cooperative efforts (Personal communication, Chinese SOE executive, Jakarta, July 2024). Table 3 summarises Japan's approach to infrastructure connectivity in terms of niche specialisation and learning-induced convergence.

Table 3. Japan's approach to infrastructure connectivity.

	Specialisation to occupy a niche	**Learning and convergence**
Definition	International public good; focus on quality; rule of law; and standard setting.	Infrastructure support consolidated under one policy umbrella.
Character of support	Financial support; engagement with the private sector through public–private partnerships; emphasis on risk management.	Increased funding volume; faster coordination; willingness to exempt state guarantees and assume greater risks.
Materialisation	Use of multilateral institutions and platforms, particularly the ADB; promotion and endorsement of connectivity standards via multilateral forums.	State–state bilateral negotiations; targeting the ruling government's political interests; cooperation with competitors.

Source: Mao et al., 2025

3. Empirical case study: railway projects in Indonesia

Japan's relationship with Indonesia deepened from 1951, when Tokyo began paying war reparations for infrastructure destroyed during its wartime occupation. Indonesia received 288 billion JPY in reparations and a further 144 billion JPY in economic cooperation funds (Nishihara, 1976). From 1968, this cooperation evolved into ODA, and Japan gradually became Indonesia's principal partner in investment, trade and aid, while Indonesia served as a key supplier of natural resources for Japan's industrialisation. Anti-Japanese protests in Southeast Asia during the 1970s, including Indonesia, prompted the 1977 Fukuda Doctrine, which pledged that Japan would not become a military power even as its regional presence grew, allowing economic ties to continue to deepen. By 2016, cumulative Japanese assistance to Indonesia had reached US$49 billion, making Japan Indonesia's largest bilateral donor and Indonesia Japan's largest ODA recipient (JICA, 2018). Japan also dispatched thousands of experts and survey teams and trained over 44,000 Indonesian participants (JICA, 2018). From the 1980s onward it played a central role in transport planning for Greater Jakarta and in railway modernisation, including the Jakarta MRT, supported by Japanese finance and technology since 2006.

China's ties with Indonesia followed a different trajectory. Beijing's participation in the 1955 Bandung Conference forged anti-imperialist and anti-colonial solidarity with Jakarta (Amin, 2014), and Indonesia was the first Southeast Asian state to establish diplomatic relations with the PRC under Sukarno. These links collapsed under Suharto amid anti-communist purges and accusations that China had backed the failed 1965 coup; relations were not restored until 1992. From 1999, China's "going out" policy encouraged firms to invest abroad, and between 2000 and 2017 Indonesia received US$4.42 billion in Chinese development finance, the largest volume in Southeast Asia (Malik et al., 2021). During Xi Jinping's 2013 state visit to Indonesia, he announced the Twenty-First Century Maritime Silk Road in the Indonesian parliament, and subsequent Chinese finance was closely aligned with President Joko Widodo's goals of upgrading mineral-based industrial capacity and expanding infrastructure.

Japan's longstanding presence gave it substantial influence over Indonesia's transport policy. JICA experts were seconded to key ministries, and extensive training programmes socialised Indonesian officials into Japanese planning approaches. This dominance underpinned the "All-Japan" concept for Jakarta MRT Phase 1, which envisaged exclusive use of Japanese technology. By contrast, Indonesia's aspiration for a high-speed rail line between Jakarta and Surabaya dates back to the 1980s. Japan proposed Shinkansen technology in 2007, and a JICA feasibility study in 2013 recommended a first stage between Jakarta and Bandung, where passenger demand would be highest. When Jokowi took office in 2014, he voiced concern about committing state budget resources to an expensive HSR project, creating an opening for China.

As a newcomer to Indonesian infrastructure and to overseas HSR, China sought to occupy a niche by moving quickly at the top political level. During Jokowi's visit to China in March 2015, Xi linked the BRI's Maritime Silk Road to Jokowi's "Global Maritime Fulcrum", and the two leaders agreed to deepen infrastructure cooperation. An MoU on the Jakarta–Bandung HSR was signed between China's NDRC and Indonesia's Ministry of State-Owned Enterprises. Domestically, Jokowi faced criticism from politicians who preferred spending scarce public funds on more basic infrastructure in remote regions. In the ensuing bidding contest, Japan offered to reduce the sovereign guarantee from 100% to 50% and to increase local procurement (Sankei Shimbun, 2015). China, however, proposed a business-to-business SOE consortium model that did not require Indonesian budget financing, which allowed Jokowi to deflect domestic

opposition and award the project to China. Beijing also promised that the line would begin operations in 2019 coinciding with Jokowi's re-election campaign whereas the Japanese proposal envisaged completion in 2021.

Japan's loss triggered visible policy learning and partial convergence with Chinese practices. Japanese officials acknowledged that China's advantage lay in swift decision-making and flexibility, in contrast to Japan's cumbersome loan approval procedures (Personal communication, staff at Japanese development agency, Jakarta, June 2023; Indonesian transport expert, Bandung, June 2024). Tokyo subsequently shortened approval times to around 1.5 years for priority projects and two years for others, introduced currency-conversion options for ODA loans to upper-middle-income countries, and allowed certain sub-sovereign borrowers to obtain yen loans without central government guarantees if specific conditions on commitment and macroeconomic stability were met.

Japan also began rethinking its insistence on exclusive control in flagship projects. Jokowi publicly floated the idea of Chinese–Japanese cooperation on extending the HSR to Surabaya, but Japanese firms rejected participation unless only Japanese technology was used. In retrospect, Japanese development-agency staff conceded that joint participation in the Jakarta–Bandung HSR might have been preferable to losing the project entirely (Personal communication, Jakarta, June 2024). This reassessment is reflected in Jakarta MRT Phase 2, where Japan is exploring cooperation with France and has shifted from an "All-Japan" to a "Core-Japan" approach in which Japanese technology forms the backbone but not necessarily the entirety of the system (Personal communication, staff at Japanese development agency, Jakarta, June 2024).

China, despite winning the HSR contract, also engaged in substantial learning from Japan's longer experience in Indonesia. Chinese actors underestimated the complexity and cost of land acquisition, assuming a similar top-down process to that in China (Personal communication, Indonesian infrastructure expert, Yogyakarta, July 2024). They also failed to fully account for early-stage operating losses in the absence of a state guarantee, leaving Indonesian and Chinese SOEs to absorb deficits during initial operations (Personal communication, Indonesian infrastructure expert, Bandung, June 2024). On the sociopolitical side, Chinese SOEs initially sought highly visible branding, including Chinese-language banners at publicity events, but quickly encountered public sensitivities about perceived Chinese influence. Drawing on Japan's earlier experience with anti-Japanese protests in the 1970s, Chinese actors learned to adopt a lower profile and to better manage local sentiments (Personal communication, Chinese SOE executive, Jakarta, July 2024).

Finally, China has begun emulating Japan's longstanding strength in soft power. Beyond finance and technology, Beijing increasingly recognises the importance of "people-to-people" ties and has expanded cultural and exchange activities aimed at improving its image in Indonesia an area where Japan has long enjoyed an advantage through cultural exports (Personal communication, multilateral development institution expert, Jakarta, July 2023).

4. Discussion

This study set out to explain how competition and policy learning jointly shape the design of Chinese and Japanese infrastructure export strategies. Building on an inter-organisational perspective, we argued that competition is the initial driver behind the emergence of connectivity initiatives: states leverage their comparative advantages to specialise and occupy strategic niches. Learning, in turn, explains why these differentiated strategies gradually converge as actors selectively adopt elements of each other's practice.

Our empirical analysis examined three dimensions of policy design (1) definition, (2) character of support, and (3) degree of multilateralisation for both the BRI and PQI. On the Chinese side, the BRI enabled China to occupy the niche of a rising power willing to provide large-scale, politically pragmatic infrastructure finance and to assume higher political and economic risk than traditional OECD-DAC donors. State-backed SOEs and policy banks allow for a fast and flexible decision-making process with relatively light governance conditionality compared to many donors from the Global North. Initially, China relied primarily on top-level bilateral negotiations, rather than on North-dominated multilateral institutions, to select and structure projects.

At the same time, China has engaged in substantial learning. Criticism of "debt traps" and environmental harm has prompted Beijing to stress "high-quality" BRI cooperation, invest in standard-setting and training on environmental issues, and adopt rhetoric that foregrounds transparency, environmental sustainability and sustainable development. China has also become more cautious about financial risk, shifting from a strategy of "winning bids" towards negotiating more financially viable projects and participating in global discussions on quality standards, for example at the G20 Summit. In multilateral terms, it has moved closer to the institutional mainstream through bodies such as the AIIB and has shown a greater willingness to cooperate with putative competitors, including Japan.

Japan, by contrast, initially occupied a niche as the historical leader in Asian infrastructure, framing PQI around "openness", "inclusivity" and "quality" as a contrast to what was perceived as the BRI's predetermined routes and variable standards. Drawing on the reputation of Japanese engineering, PQI emphasises quality and standardisation, and Japan uses multilateral platforms such as the G7, G20, World Bank and ADB to promote rules and safeguards. After joining the OECD-DAC, Japanese ODA projects became closely aligned with multilateral social and environmental safeguards, and strict governance requirements became a central feature of loan conditionality.

Yet Japan has also learned through competition with China. The very creation of PQI as a high-profile initiative signals a move away from Japan's earlier low-key economic diplomacy and reflects learning from the BRI's agenda-setting power. Since the Abe administration, infrastructure export has been linked more explicitly to national security concerns, shifting Japan's self-image from a purely economic power to a broader strategic actor (Personal communication, Japanese infrastructure expert, Tokyo, June 2024). Budget announcements for PQI have mirrored Chinese headline figures, while PPP schemes mobilise private capital to match China's state-backed financial scale. Centralisation of coordination in the Cabinet Office, together with expanded risk-taking by policy banks and export-credit agencies, also points to convergence with aspects of China's state–SOE model. Moreover, despite widespread narratives of rivalry, Japan has signalled openness to cooperation with China in multilateral arenas such as the ADB and, at times, through bilateral understandings although these efforts have been constrained by deteriorating US–China relations.

The Indonesian railway cases provide a concrete illustration of how these dynamics play out at project level. Japan's long-standing dominance in post-war infrastructure and close embeddedness in Indonesian policymaking meant that it initially set the agenda for Jakarta MRT and for early HSR planning. China, entering later, occupied a niche in the Jakarta–Bandung HSR by leveraging SOEs to propose a business-to-business model without Indonesian sovereign guarantees and by promising rapid completion timed to Jokowi's re-election campaign. These features spoke directly to domestic fiscal and political constraints and allowed China to win the bid.

Subsequent adjustments on both sides demonstrate mutual learning. Japan simplified loan procedures, shortened approval times, offered more flexible currency and guarantee options, and shifted from an "All-

Japan" to a more open "Core-Japan" approach in Jakarta MRT Phase 2, including potential cooperation with non-Japanese partners. China, meanwhile, confronted unanticipated challenges in land acquisition and early-stage operating losses in the absence of sovereign guarantees, leading to financial strain on SOEs. Chinese actors also learned to manage sensitivities about public visibility and anti-Chinese sentiment, adopting a lower profile and investing more in "people-to-people" and cultural diplomacy areas where Japan has long excelled.

Taken together, these findings support our theoretical claim that specialisation and convergence are sequential but often overlapping processes. Competition pushes actors to exploit comparative advantages and differentiate their offers, while policy learning both from rivals and from local implementation drives partial convergence in design and practice. Our evidence also aligns with notions such as "co-evolutionary pragmatism" (Tang, 2021), in which learning by doing at the project level filters back into initiative-level adjustments, and with work showing that China's learning from Japan has involved significant adaptation rather than simple copying (Leutert, 2022; Liao & Katada, 2021).

At the same time, we recognise that barriers to diffusion and learning remain significant. Domestic politics, institutional path dependencies and great-power tensions all mediate how far policy banks or implementing agencies will internalise lessons, for instance regarding socio-environmental safeguards (Solingen, 2012). It is therefore uncertain whether Chinese policy banks will formally adopt standards comparable to JICA or JBIC, even if individual projects already show greater awareness of these risks.

5. Conclusion

This article has examined how China and Japan design and adjust their overseas infrastructure strategies under conditions of competition and policy learning. At the policy-initiative level, we showed that the BRI and PQI initially reflected distinct specialisations: China positioned itself as a risk-tolerant, pragmatic provider of rapid, large-scale physical connectivity through SOEs and policy banks, while Japan leaned on its reputation for quality, rule-based cooperation and multilateral standard-setting. Over time, however, both initiatives have undergone incremental convergence. China has moved closer to global debates on quality, sustainability and risk management, while Japan has adopted more assertive branding, increased financial scale and streamlined coordination mechanisms that echo aspects of China's approach.

The Indonesian cases of the Jakarta–Bandung HSR and Jakarta MRT demonstrate how these macro-level trends are grounded in project-level interactions. Competition allowed China to exploit a niche in HSR finance and timing that Japan could not match under its existing rules. The subsequent redesign of Japanese loan procedures and greater openness to collaboration, together with Chinese adjustments in risk assessment, land acquisition strategy and soft-power outreach, indicate that both sides learn from each other and from the local context. Convergence here is not a matter of simple imitation, but of context-specific adaptation a finding consistent with studies that emphasise localisation in China's learning from Japan (Leutert, 2022; Liao & Katada, 2021).

Our analysis also raises several avenues for future research. First, while we distinguished analytically between initiative-level and project-level learning, we observed two-way interactions between them: discursive and institutional changes around the BRI and PQI filter into specific projects, while learning by doing at project level can, in principle, inform subsequent policy revisions. The strength of this feedback loop depends on evaluation systems, organisational incentives and political constraints. Comparative work across sectors and host countries would help clarify when and how project experience effectively feeds back into initiative design.

Second, it remains important to investigate the limits of convergence. Following the Jakarta–Bandung HSR, Chinese actors have become more attentive to socio-environmental risks and local sensitivities, but it is uncertain whether this awareness will lead to formal adoption of safeguards akin to those of JICA or JBIC (Solingen, 2012). Longitudinal research tracking concrete projects and portfolio changes in Chinese and Japanese financing would allow scholars to assess whether observed learning is sustained, partial, or symbolic.

Finally, our findings have implications for the future landscape of global infrastructure competition. New initiatives such as the Partnership for Global Infrastructure and Investment (PGII) put forward by the G7, alongside emerging providers including Turkey, Saudi Arabia and India, suggest that a wider group of states is now entering the field. As more actors compete to offer infrastructure finance and expertise, we can expect similar patterns of mutual observation, selective copying and adaptation. The experience of the Jakarta–Bandung HSR and Jakarta MRT projects thus offers an early window into how norms, standards and practices in global infrastructure development may be shaped by the interplay of competition, convergence and cooperation among an expanding set of providers.

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