The Kunming-Vientiane Railway: The Economic, Procurement, Labor, and Safeguards Dimensions of a Chinese Belt and Road Project

Scott Morris

Abstract

The Kunming-Vientiane (K-V) railway, part of the Kunming-Singapore multi-country rail network (or "Pan-Asia Railway"), is an anchor investment of the Chinese government's Belt and Road initiative (BRI). This case study will assess the rail project along four dimensions: economic implications; procurement arrangements; labor; and environmental and social safeguards. In each of these areas, evidence from the railway project suggests that Chinese policy and practice could be better aligned with the practices of other sources of multilateral and bilateral development finance. Where the project's standards are broadly aligned, at least in principle, there is nonetheless reason to believe that China's approach carries heightened risks given the overall scale of financing.

These risks hold for China's global program of official finance, which has made the country the largest source of official credit in the world. In this regard, BRI policymakers should consider a more rigorous set of "best practices" that align Chinese official finance with leading multilateral standards, even if these practices don't currently characterize many other bilateral lenders. Such an approach would be consistent with the multilateral vision for BRI espoused by Chinese officials and reflected in the framework of the annual Belt and Road Forum for International Cooperation. This study considers what a stronger set of standards would look like in the context of the four areas of focus.

Center for Global Development
2055 L Street NW
Fifth Floor
Washington DC 20036
202-416-4000
www.cgdev.org

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Introduction

The Kunming-Vientiane (K-V) railway, part of the Kunming-Singapore multi-country rail network (or "Pan-Asia Railway"), is an anchor investment of the Chinese government's Belt and Road initiative (BRI).[1] BRI has been cast in sweeping terms by Chinese officials and independent observers, often in ways that make it difficult to obtain precise definitions around geographic scope, or modes and scale of engagement. And with BRI now invoked in Sub-Saharan Africa and even Latin America, these attenuated contexts further obscure the initiative's salient features.[2]

From this standpoint, China's engagement with Lao PDR to construct a high-speed railway within Laos as part of a six-country rail network provides a clear basis for evaluating BRI. The K-V railway will directly link China's southern border with Laos, enabling further linkages with Singapore, Thailand, Malaysia, and Myanmar.

This case study will assess the rail project along four dimensions:

1. Economic implications—projected benefits as well as economic risks, particularly associated with debt burdens;
2. Procurement arrangements;
3. Labor;
4. Environmental and social safeguards.

In each of these areas, evidence from the railway project suggests that Chinese policy and practice could be better aligned with the practices of other sources of multilateral and bilateral development finance. Where the project's standards *are* broadly aligned, at least in principle, there is nonetheless reason to believe that China's approach carries heightened risks given the overall scale of financing.

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This study considers what a stronger set of standards would look like in the context of the four areas of focus.

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[1] http://english.cctv.com/2016/09/08/ARTIhSdgfLCm2pweCNjG7uCh160908.shtml

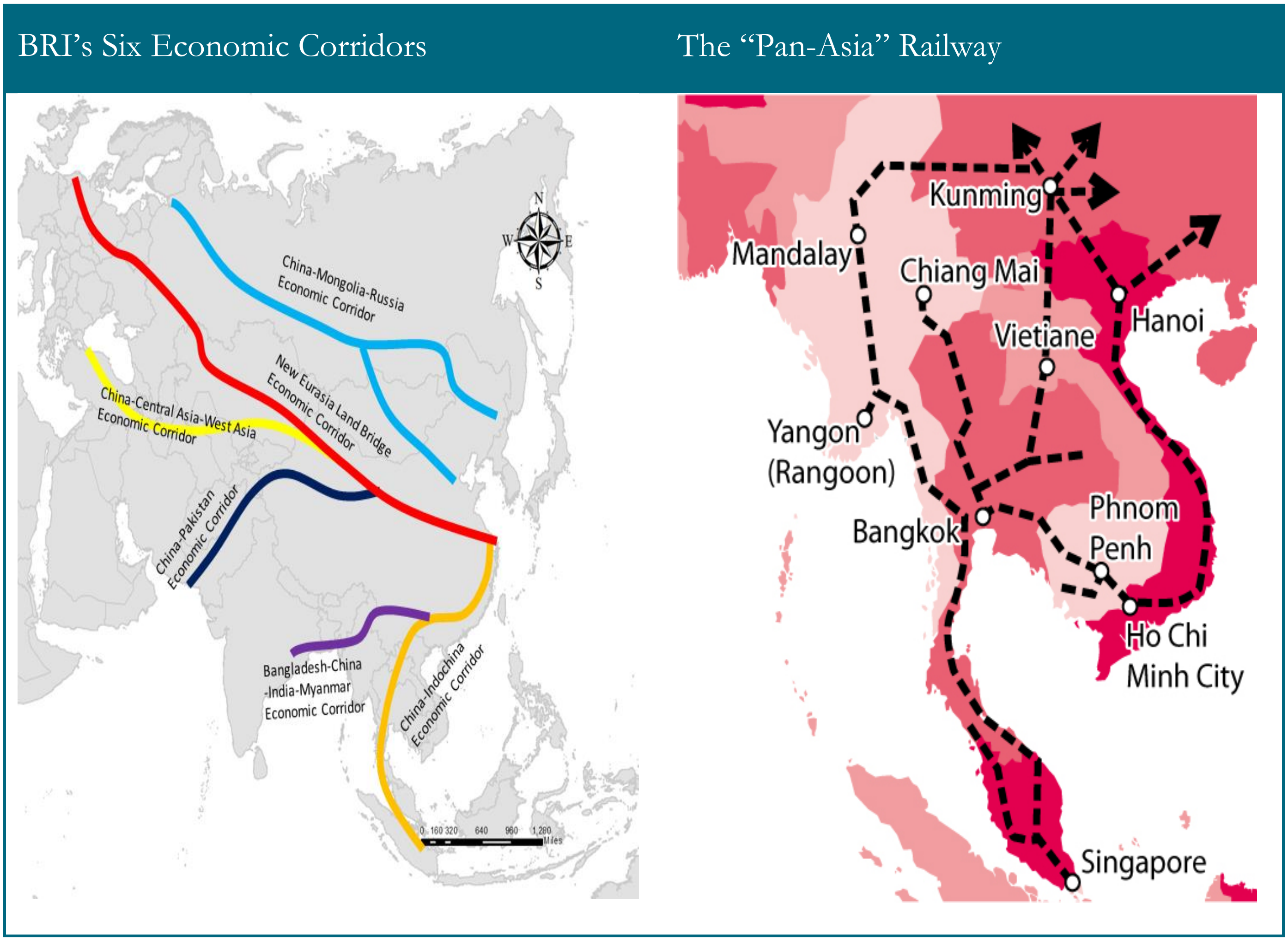
[2] "China's Belt and Road Lands in Latin America," *China Dialogue*, November 7, 2018.

[3] http://www.beltandroadforum.org/english/

Overview of K-V railway project

The K-V railway is part of the six-country Pan-Asia railway. The multi-country Kunming-Singapore rail link was first espoused at the 1995 ASEAN summit and was later adopted as a core investment of China's BRI.[4] The proposed rail network would provide the backbone for the China-Indochina Economic corridor, one of six defined economic arteries for BRI (Figure 1).[5] The K-V railway would form part of the central rail link in the six-country network, enabling a direct route from Kunming to Bangkok and Singapore via Vientiane.

Figure 1.



Source: Derudder et al., 2018.

Source: Asia Briefing, 2014.

[4] Shang-su Wu, "Singapore-Kunming Rail link: A Belt and Road Case Study," *The Diplomat*, June 7, 2016.

[5] Ben Derudder, Xingjian Liu, Charles Kunaka, "Connectivity along Overland Corridors of the Belt and Road Initiative," *MTI Global Practice Discussion Paper*, World Bank, October 2018.

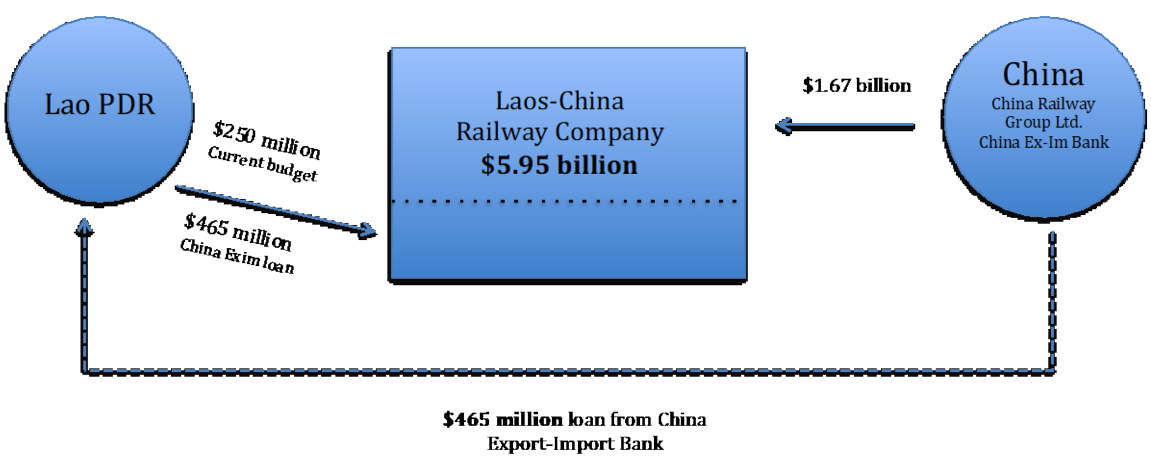
The K-V railway took shape when China's National Development and Reform Commission announced in 2015 that the governments of China and Lao PDR had signed an agreement to proceed with a joint venture to connect the Chinese rail system to a new railway in Lao PDR. The railway would use Chinese technical standards and equipment over a 260-mile route through Lao PDR.[6]

Figure 2 summarizes key elements of the financing arrangements for the railway project, which is incorporated as the Laos-China Railway Company, a joint venture with a 70-30% ownership split between China and Lao PDR. The China Railway Group, a Chinese state-owned enterprise (SOE), is the lead participant for China in the joint venture, with additional financing provided to support Lao PDR's equity stake through China Export-Import Bank.

Figure 2.

KUNMING-VIENTIANE RAILWAY
SUMMARY OF FINANCING

- **A $5.95 billion Joint Venture with 70% Chinese equity and 30% Lao PDR equity**
- **Current financing commitments of $1.67 billion (China) and $715 million (Lao PDR)**
- **Lao PDR current commitment includes $250 million from current budget and $465 million loan from China Export-Import Bank**
  - o **Concessional loan at 2.3%, 35-year maturity and 5-year grace period**
- **Joint Venture financing gap of $2.46 billion (China) and $1.1 billion (Lao PDR)**
  - o **$1.1 billion in borrowing represents an additional 6% of GDP in Lao PDR external debt**
- **Reported additional cost to Lao PDR for resettlement claims of $300 million**



[6] "The China-Laos railway project officially landed," National Development and Reform Commission press release (unofficial translation from website), November 13, 2015.

The Chinese SOE and its subsidiaries are responsible for construction of the railway.[7] The Chinese government's 2015 announcement indicated a completion date of 2020, though that date has subsequently been pushed back to the end of 2021.[8] As of mid-2018, it was reported to be one-third complete.[9]

The Laos economy and economic implications of the K-V railway

Lao PDR has seen sustained economic growth averaging 7.8% over the past decade.[10] This pace of growth has generated remarkable advancement in overall development. Per capita income has increased 300% since 2007, from $750 per capita, making it one of the poorest countries in the world at that time, to $2,270 per capita today, advancing the economy to lower-middle income status.

Laos's level of infrastructure development is consistent with a country at the lower-middle income level, with key areas of infrastructure above average. Among ASEAN countries, Lao PDR's road network is above average when it comes to geographic scope and quality, with much of it developed during this period of rapid growth.[11] Electrification is also above average within the region, reaching 90% of households by 2017. However, rail networks are virtually non-existent, and both the World Bank and Asian Development Bank identify substantial infrastructure gaps as key obstacles to further economic development.[12]

The pace of public investment in transport and energy infrastructure over the past decade has raised risks within the sector, as well as macroeconomic risks related to growing debt burdens. Sectoral risks primarily relate to sustainability issues. While the current road network earns high marks for quality, there are signs that sustainability may be weak. For example, the government's road maintenance fund could only meet 30% of needs as of 2017. To the degree the new railway is treated as public infrastructure within Laos, it appears vulnerable to future underinvestment when it comes to maintenance and upkeep.

At the macroeconomic level, the risk of public debt distress has increased rapidly as a result of public infrastructure spending, with the K-V railway project identified as a contributing factor driving a widening current account deficit.[13] Public debt stock has grown dramatically over the past decade, and along with it interest payments on public debt, driven mostly by borrowing from bilateral official creditors, i.e. other governments (Figures 3a&b). China's

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[7] *Reconnecting Asia* database, Center for Strategic and International Studies, 2018.

[8] Wu Chengliang, "China-Laos railway project set to be complete by late 2021," *China People's Daily*, November 15, 2017.

[9] "The Great Rail Dilemma of Laos," *Bangkok Post*, July 23, 2018.

[10] World Bank national accounts data, 2019.

[11] The World Bank Group, *Lao PDR Systematic Country Diagnostic*, March 9, 2017.

[12] Ibid., and Asian Development Bank, *Member Fact Sheet: Lao PDR*, 2018.

[13] IMF, *Lao PDR Staff Report for the 2017 Article IV Consultation,* February 2018.

share of the bilateral credits is not publicly reported, but the IMF indicates that Chinese financing is playing the leading role in overall debt growth.[14]

Figure 3a.

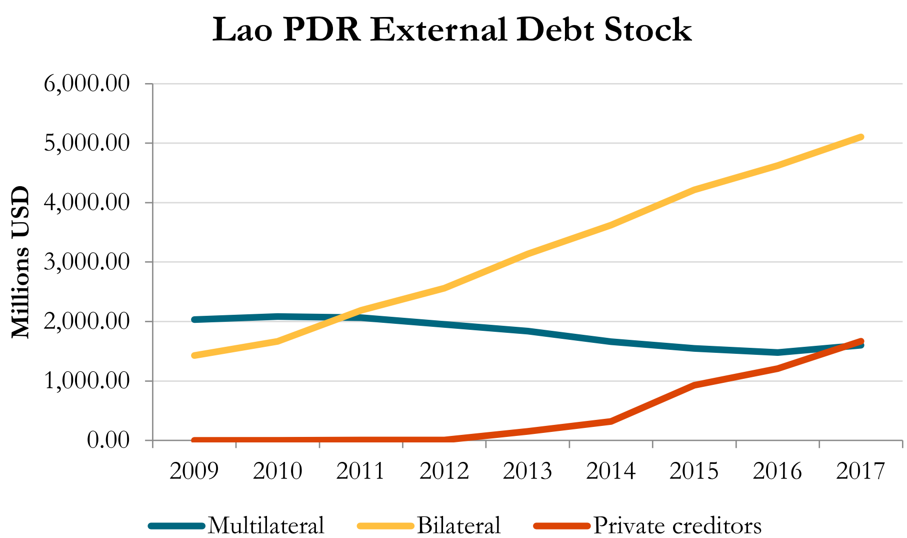
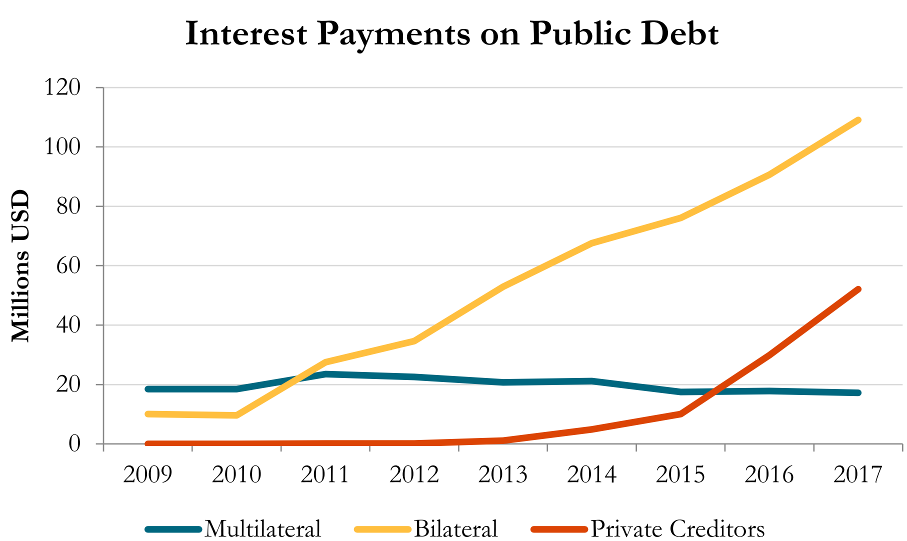


Figure 3b.



Source: International Debt Statistics, World Bank, 2019.

Given this trajectory, the IMF now classifies Lao PDR to be at high risk of debt distress, projecting public and publicly guaranteed debt (PPG) to rise from 65% to 70% of GDP by

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[14] IMF, *Lao PDR Staff Report for the 2017 Article IV Consultation—Debt Sustainability Analysis, January 2018.*

2022.[15] This exceeds the generally accepted sustainable threshold of 60% for developing economies.[16] Eighty percent of Lao PDR's PPG is denominated in foreign currency, and the railway project is expected to further worsen the current account deficit as the country expands its import of goods and services for the project.

Lao PDR's public borrowing has also become less concessional, reflecting the shift away from multilateral lenders in favor of bilateral creditors (Table 1).[17] For example, the World Bank's standard terms for low-income countries like Lao PDR are 38-year maturities with 6-year grace periods and 0.75% interest.[18] For countries at medium risk of debt distress, fifty percent of World Bank support is provided in grants; and for high-risk countries, the bank shifts exclusively to grants. These two features—a higher overall level of concessionality in financing terms, and mechanisms for adjusting concessionality according to debt risks facing the borrowing country—make the multilateral lender more attune to debt vulnerabilities compared to Chinese and other bilateral lenders.

Table 1. Average Borrowing Terms for Laos Government

Borrowing Terms Becoming Less Concessional			
	2009	2013	2017
Interest (%)	2	2.1	3.1
Maturity (years)	21.4	20.1	19.2
Grace period (years)	7.1	6.6	8
Grant element (%)	55.9	53.5	46.7

Source: International Debt Statistics, World Bank, 2019.

Potential costs associated with the K-V Railway

Under current financing arrangements for the railway joint venture, Lao PDR has committed $250 million from current budget expenditures, which amounts to 7% of annual expenditures (see Figure 2). The government has also committed to borrow an additional $465 million from China Export-Import Bank for the project. This loan is on concessional terms: 2.3% interest over 35 years, with a five-year grace period. As such, the fiscal effects of the loan will not be realized in the short term. Reported resettlement costs associated with

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[15] IMF, February 2018.

[16] John Hurley, Scott Morris, and Gailyn Portelance, *Examining the Debt Implications of the Belt and Road Initiative from a Policy Perspective*, Center for Global Development, March 2018.

[17] *Concessionality* is the degree to which there is a subsidy or grant element in a loan. Concessional financing is employed by most official lenders when financing projects in low-income countries, where fiscal constraints impede the ability to borrow on market terms. The multilateral development banks only provide concessional financing in these countries.

[18] http://ida.worldbank.org/financing/ida-lending-terms

land concessions for the project could be $300 million and will be borne by the Lao PDR government (see later section).[19]

All told, current financing obligations for the project by the Laos government appear to total just over $1 billion ($715 in equity plus $300 million in resettlement costs), or 6% of the country's GDP.

But longer-term commitments under the joint venture point to a financing gap of an *additional* $1 billion for Lao PDR. That is, with a total construction price tag of $5.95 billion, Laos's equity stake of 30% indicates total commitments of $1.78 billion, with just $715 million currently committed. Assuming this additional amount is also borrowed from official Chinese sources, in the absence of any other plausible sources of financing, this implies an additional 6% of GDP in external public debt, which does not appear sustainable given the overall growth in public debt and the decline in concessionality of the debt.

A press release from China's National Development and Reform Commission indicates that the Lao PDR government has also made tax concessions, in addition to the land concessions, in support of the project.[20] Tax concessions include waiving import duties on Chinese equipment associated with the project, with some indications that this duty-free equipment is also being diverted to other parts of the economy due to lax oversight, undercutting domestic enterprises outside of the railway project.[21] Such concessions, depending on their generosity, can significantly reduce the benefits accruing to the country, particularly given that the government has only a minority stake in the joint venture.

There are also unverified media reports that the government has pledged mining concessions as a guarantee on its participation in the joint venture.[22] If true, such concessions would lower the risk of the transaction for the Chinese government, while further reducing overall gains for the Lao economy. Uncertainty about each of these elements points to a general lack of transparency around the joint venture.

Potential benefits associated with the K-V Railway

It is also important to assess the economic gains associated with the K-V rail project. The World Bank has produced initial estimates of welfare gains (the net effect of positive growth effects and costs associated with the investments) resulting from the BRI's reduction in transport costs in East Asia and the Pacific.[23] This analysis estimates the reduction in transport times associated with better road, rail, and shipping linkages. The bank estimates

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[19] *Bangkok Post*, 2018.

[20] "The China-Laos railway project officially landed," National Development and Reform Commission press release (unofficial translation from website), November 13, 2015.

[21] Private correspondence with author.

[22] Peter Janssen, "China train project runs roughshod over Laos," *Asia Times,* August 18, 2018.

[23] François de Soyres, "The Growth and Welfare Effects of the Belt and Road Initiative on East Asia Pacific Countries," *MTI Practice Notes*, World Bank Group, October 2018.

that the East Asia Pacific countries see the highest gains, with a 2.31% average reduction in shipping times to other countries in the world.

These reductions translate into higher economic growth rates, captured on net by welfare estimates. Estimates range from 1.73% to 2.81% for the region, though the analysis varies across countries. In particular, the degree to which individual countries bear the burden of financing the infrastructure components significantly affects outcomes. The analysis highlights Mongolia as an example where the welfare effects of BRI would be negative if the country were to pay all its infrastructure costs. This analysis likely holds for Laos given that the two countries share a similar debt profile.[24]

Additional analysis indicates that Lao PDR will not be a major beneficiary of the six-country rail link, with other major cities along the corridor—Yangon, Hanoi, Kuala Lumpur, Bangkok, and Singapore—most likely to accrue the largest benefits.[25] This is not to say that Lao PDR does not stand to gain from the regional linkages, but rather that most of the overall value of the regional project will accrue outside the country. And similar to the case of Mongolia, Laos's direct financing obligations for the railway project, though just 30% of the project's overall cost, appears to call into question whether the country will see a net benefit from the project.

Short term economic gains associated with the project, such as local employment related to project construction, are limited by reliance on Chinese firms and workers (see Labor Issues).

In sum, early analysis indicates that the K-V railway will have positive regional economic effects, but will only have positive effects for Lao PDR if the financing burden is largely borne externally (i.e., by China).

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[24] Hurley et al., 2018.

[25] Derudder et al, 2018.

Implications for Chinese policymakers (economic)

To some degree, the structure of the K-V railway investment does reflect the debt vulnerabilities of Lao PDR. The project is structured as a joint venture, with China holding 70% of the equity and Lao PDR 30%. But even this arrangement requires levels of short- and medium-term financing from Lao PDR that raise debt concerns.

Implicit in the JV ownership structure is an understanding that the project will deliver more value for China than it will for Lao PDR. In fact, whether the project will deliver a positive economic benefit for Laos depends critically on the country's financing burden being kept to a minimum. This does not characterize the current financing arrangements, which strain the current fiscal capacity of government and obligate future spending to service Chinese loans.

Going forward, it will be important for Chinese policymakers to work with multilateral actors (IMF, WB, ADB) to assess project financing considering Lao PDR's debt risks. World Bank modeling of BRI projects should help to guide decision-making about financial burden.

Procurement arrangements

Effective public procurement practices are defined in terms of their ability to promote cost effectiveness and high quality through competitive bidding, and to guard against corruption through transparency and rules-based procedures. As a public works project within Lao PDR, the K-V railway is, in principle, primarily the responsibility of the national government when it comes to ensuring sound procurement. That said, when other governments or multilateral institutions provide financing for development projects, they often require baseline standards for procurement, particularly for large infrastructure projects. It is important, then, to focus on Lao PDR procurement standards and Chinese procurement standards, and how they interact in the railway project.

There are a number of multilateral disciplines, standards, or benchmarks focused on national-level public procurement. When it comes to cross-border financing, international competitive bidding (ICB) is widely viewed as best practice. ICB essentially characterizes the standards and practices of the multilateral development banks when they lend to national governments for public works projects. While ICB does allow for limited local content discrimination[26], it does not permit discrimination among foreign bidders and generally requires an open and transparent bidding process to ensure a level playing field among potential bidders. ICB is particularly relevant for large-scale infrastructure projects, where large foreign firms are often among the bidders and may in fact be the only bidders.

There are also trade disciplines with the same general orientation toward transparency and competition. The World Trade Organization's Agreement on Government Procurement (GPA) as well as provisions in bilateral and regional trade agreements seek to bind parties to public procurement disciplines, though this remains a highly contentious area of trade liberalization—just 19 of the WTO's 47 members are parties to the GPA, and neither China or Laos are currently parties to the agreement.

Before considering the degree to which the K-V railway project has proceeded according to sound procurement principles, it is important to recognize the key economic dimensions of the project, which are inextricably linked to the observed procurement outcomes. As a lower-income developing country with very limited access to private capital markets, Lao PDR is highly dependent on official creditors for capital investment. This includes bilateral creditors like the governments of China and Japan, as well as multilateral creditors like the World Bank and ADB.

Yet, as a small economy with limited fiscal and administrative capacity, the country's ability to plan and execute a large-scale infrastructure project like a national railway system is highly constrained. No multilateral lender, and almost no bilateral lenders, would be willing to finance a project on this scale.

[26] Favoring domestic firms and suppliers over foreign firms.

While the MDBs do provide support for rail development in many countries, Lao PDR presents a dilemma. The economic value of railway investment for the country depends fundamentally on cross-border linkages and broader regional integration, not on domestic ridership. Yet, financing on the scale needed to support the regional linkages, an estimated $5.95 billion in this case, is far beyond the scale of sustainable financing that the World Bank or ADB would consider for the country. But a piecemeal approach to rail development, which would stretch the investment program out over many years by financing smaller segments, would make these segments non-viable from an economic standpoint when evaluated as stand-alone projects by the MDBs. That is, this approach would fail to achieve the regional linkages that would drive economic benefits.

China's interest in the project is true to the economic spirit of BRI. As one piece of a larger rail network, the K-V railway represents higher potential value than what can be captured by Lao PDR within its own borders. This does not mean that China can lend freely to Lao PDR. But it does create an incentive to identify a financial structure that can be sustained over time and deliver the national railway project. Hence, we observe a joint venture, with a majority equity stake held by the Chinese government. Even at just 30 percent equity, Lao PDR's ability to finance its share of the project remains in doubt.

But for Chinese officials, this risk appears to be acceptable in relation to the potential rewards of greater regional railway connectivity. Chinese policymakers could be further motivated by a desire to employ domestic overcapacity, although this explanation does not appear to be a leading given the relative scale of the domestic problem.[27] Nonetheless, the motivation to employ domestic capacity directly informs the approach to procurement in BRI projects, creating the potential for significant distortions in consistently favoring Chinese firms.

With this context, it is implausible to expect a scenario where Lao PDR would launch an open tender for the railway project. With no ability to fund the project, the government would have had no bidders. But if we consider this to be a Chinese public investment that happens to be located within Lao PDR, we can better evaluate where the burden of sound procurement practices lays. That is, while Lao PDR's procurement rules have some relevance, it is ultimately China's approach to procurement that deserves scrutiny in the context of the K-V railway project.

As a joint venture between the two governments, we could expect the project to adhere to some blended standards of the two countries, so it is worth looking at both countries' practices.

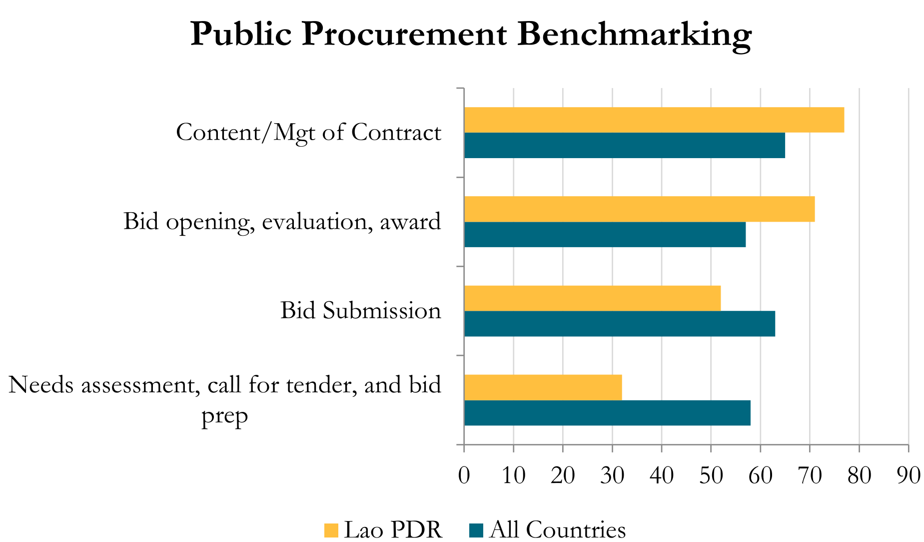
[27] David Dollar, "China's rise as a regional and global power: the AIIB and the 'one belt, one road'," Brookings Report, July 2015.

Lao PDR procurement rules

General measures of governance effectiveness, combined with specific measures of procurement standards, point to a generally weak environment within Lao PDR when it comes to public procurement. The World Bank and ADB identify the low quality of governance and public sector management as a key obstacle to economic development.[28] Lao PDR ranks 88 out of 144 countries on the World Economic Forum's transparency of government policymaking indicators, and 135 out of 180 countries on Transparency International's corruption perception index.[29]

Specific benchmarking of procurement standards shows a better picture, although there are key weaknesses that are relevant to the K-V railway project (Figure 4). Specifically, Lao PDR scores very low on the early stages of procurement up to and including bid submission, with an overall environment that makes it difficult for potential bidders to access information and prepare bids in a timely manner. Lao PDR is not a party to the World Trade Organization's Agreement on Government Procurement, and as a result, recourse for foreign bidders is weak.[30]

Figure 4.



Source: *World Bank Benchmarking Public Procurement 2017.*

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[28] *ADB Country Partnership Strategy: Lao People's Demcratic Republic, 2017-2020—More Inclusive and Sustainable Economic Growth*, Asian Development Bank, August 2017; *World Bank Group Country Partnership Framework for the Lao People's Democratic Republic, 2017-2021*, World Bank Group, April 2017.

[29] World Economic Forum *Global Competitiveness Index, 2017*; Transparency International *Corruption Perceptions Index, 2017*.

[30] Tania Ghossein, Bernard Hoekman, and Anirudh Shingal, "Public Procurement in the Belt and Road Initiative," *Discussion Paper MTI Global Practice*, World Bank Group, 2018.

China's procurement rules

Given the financing structure of the K-V railway project, China's procurement rules are more relevant. As the majority partner in the joint venture, Chinese procurement standards have more effect on procurement outcomes. Further, even if both governments rejected an open and competitive process, China could at least ensure a competitive bidding process for Chinese firms.

Most relevant for the K-V railway project is China's Bidding Law (BL), which governs procurement for large publicly-fund infrastructure, whether private or state-owned. Although the BL requires open bidding procedures for large projects (above approximately $300,000 in value), there is wide discretion for Chinese institutions to discriminate against potential foreign bidders through standard-setting, licensing requirements, and exclusion of consortia.[31]

The process is further biased in favor of Chinese firms when China Export-Import Bank is providing financing and the financing is concessional. Both factors mean the National Development and Reform Commission and the Ministry of Commerce have a mandate to engage in the procurement process in order to ensure the government's policy goals are met. To the degree this has meant "Buy Chinese," these institutional actors will ensure that procurement goes to Chinese firms. Of course, China Export-Import Bank's basic mandate is no different from any other export credit agency in this regard. But in the K-V railway project, the bank's financing plays a lesser role.

China is not yet a party to the WTO's Agreement on Government Procurement, in part because of the degree to which the policy banks and SOEs engage in discriminatory behavior. There are signs that Chinese negotiators are willing to bring more of these financing activities in line with the WTO disciplines.[32]

Even if non-Chinese firms are excluded, there is a question of the degree to which procurement was competitive for Chinese firms. Given the weak requirements for Chinese SOEs, including for cross-border projects, it is unlikely that the railway project was subject to a competitive bidding process.

[31] Ghossein et al., 2018.

[32] Ibid.

Implications for Chinese policymakers (procurement)

Procurement for the K-V railway project demonstrates the challenge of thinking of BRI as a truly multilateral initiative, led by China, versus a Chinese initiative with limited participation from other countries. With most financing for the railway project coming from the Chinese government, it is unrealistic to expect on open procurement process led by the Laos government. Yet, the closed nature of procurement for major BRI projects like this one reinforces skepticism among potential BRI partners. If other governments see no prospect for their firms to benefit commercially under BRI, then the initiative will likely fail to garner their support financially or diplomatically.

If Chinese policymakers aspire to a multilateral BRI, then they should adopt the multilateral institutions' ICB standard when it comes to BRI procurement. While this opens the door to Chinese financing going to non-Chinese firms, which could be politically unpalatable, it is important to recognize that Chinese infrastructure firms are already internationally competitive and would likely fair well under an open procurement model for BRI. For example, Chinese firms account for nearly 40% of global World Bank procurement, far more than any other country and far in excess of the amount of commercial activity accounted for by the bank's financing within China. This suggests that Chinese firms are among the most competitive globally under ICB standards.

Absent full adoption of ICB for BRI, Chinese policymakers should consider approaches that bring greater transparency and competition within China when it comes to public procurement. This requires greater progress on the broader procurement reform agenda within China, with a focus on the sources of official finance that support cross-border projects, starting with the policy banks.

Finally, BRI could provide the basis for improving procurement standards in borrowing countries. Procurement reform in lower income countries has been a long-standing agenda for the major multilateral institutions. China could provide stronger support for this agenda, including through financing for the MDBs' technical assistance efforts in these countries.

Labor Issues

Related to procurement practices in Chinese-financed projects is the question of project-related employment—specifically, the use of Chinese versus local labor, and the labor standards that apply to these projects.

A prominent survey of employment by Chinese firms in Africa suggests that the prevalence of Chinese workers may be exaggerated.[33] For state owned Chinese firms operating in Africa, local employees comprised 81% of their workforce, and within the construction sector (private and state-owned), local employees comprised 85% of the workforce. These figures likely vary by region, and we could expect that large-scale infrastructure projects conducted by Chinese state-owned firms could employ a significantly higher share of Chinese workers to the degree they are motivated by oversupply issues within China.

Nonetheless, the use of Chinese workers abroad has become politically controversial, and from an economic standpoint, limited use of local labor also limits a project's local benefits and should factor into government decision-making for publicly-financed projects like the K-V railway.

The question of labor standards has been equally controversial for Chinese financed projects. As with environmental and social safeguards (see next section), labor rules in areas like freedom of association, collective bargaining, forced labor, and child labor are a function of national law in the country hosting the project, as well as standards employed by Chinese firms operating abroad. In both cases, international guidelines reflected in the International Labor Organization's Fundamental Principles provide a basis for assessment.

Evidence suggests that labor practices for Chinese firms operating abroad are strongly shaped by the Chinese government when the firms are state-owned and particularly in the construction and mining sectors.[34] As with procurement issues, this suggests that Chinese standards will prevail over local standards in these cases. This has led to conflict and even violence in cases where Chinese policy and attitudes to labor rights has been at odds with local norms or policy.[35]

K-V tailway labor issues

Media reporting suggests that the use of Chinese labor has been prevalent in construction of the K-V railway. One report indicates that the estimated 30,000 workers on the project are "predominantly" Chinese.[36] At the same time, there are also indications that the joint

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[33] Kartik Jayaram, Omid Kassiri, and Irene Yuan Sun, "The closest look yet at Chinese economic engagement in Africa," McKinsey and Company report, June 2017.

[34] Mimi Zou, "Labour Standards Along 'One Belt, One Road'," in Lutz-Christian Wolff and Chao Xi (eds.), *Legal Dimensions of China's Belt and Road Initiative*, 2016.

[35] Ibid.

[36] Janssen, 2018.

venture has actively sought to hire local workers, as many as 7,112 according to Lao government's Ministry of Labour and Social Welfare.[37] This would represent just 24% of the total workforce for the project, well below the share identified in the survey of local hiring practices in Africa.

There are no indications that any commitments under the joint venture have sought to clarify the relative numbers of Chinese and local workers. Given the Chinese government's 70% ownership stake in the project, and the relatively small number of reported local workers, it seems clear that decisions about the use of local labor are made by the Chinese state owned firm and have favored Chinese workers over Lao workers.

Beyond anecdotal references to low wages for local workers in the media, there has been no identified reporting on labor conflicts or abuses. Nonetheless, labor standards in both China and Laos according to international principles is weak. And in at least one instance, the ILO convention on forced labor, Laos has adopted higher standards than China (see Table 2). In this area, it seems clear that whether China chooses to impose its domestic standards abroad, or simply accept local standards, labor protection outcomes will be weak relative to international standards.

Table 2. Ratification of ILO Fundamental Conventions

	China	Lao PDR
Forced Labor	✘	✓
Right to Organize/Collective Bargaining	✘	✘
Minimum Age	✓	✓
Freedom of Association	✘	✘

Source: Zou, 2016.

[37] "More than 7,000 Lao workers needed for Laos-China railway construction," Vientiane Times, July 25, 2017.

Implications for Chinese policymakers (labor)

Decisions about how much local labor to employ and the standards for protection of workers' rights appear to be strongly shaped by the Chinese government when it comes to SOEs operating abroad. In both areas, Chinese policymakers should consider clearer and stronger standards associated with BRI.

Targets for employment of local labor should form a core element of project commitments, and use of local labor should be identified as a development priority for BRI projects.

Labor protections will continue to be weak relative to international standards if the basis for these protections under BRI is some combination of Chinese domestic practices and practices in the country of operation. **At a minimum, Chinese policymakers should commit to follow the higher of the two standards where Chinese and local standards diverge for all BRI projects. And they should work toward a higher set of uniform standards relative to international best practice, even if those standards are higher than Chinese domestic practice.**

On-going deficiencies in this area will continue to detract from the ability of Chinese officials to "multilateralize" BRI, as key international partners remain wary of reputational risks associated with labor conflicts when there are low standards of protection.

Environmental and Social Safeguards

Environmental and social safeguards (ESS) encompass an array of standards and practices employed by international institutions engaged in cross-border official finance in developing countries. The risks that ESS seek to mitigate are generally viewed as most acute in the context of large-scale infrastructure projects.

Within the ESS risk rating system employed by the World Bank and other leading financing institutions, the K-V railway would most likely be rated a Category "A" project, deemed to be of highest risk when it comes to environmental and social concerns.[38] Large infrastructure projects are complex in terms of land use and can implicate a wide range of environmental (effects on natural habitats and agricultural areas) and social issues (village resettlement often chief among them).

Of course, mitigating the negative environmental and social impacts of public works projects is within the purview of national and sub-national regulations. But international ESS seek to ensure a baseline of project standards, particularly when local law and practice is determined to be weak.

The evolution of ESS in bilateral and multilateral institutions has revealed a tension between meeting ESS objectives and recognizing the sovereignty in countries of operation.[39] ESS critics have argued that the approach is overly indifferent to reasonable country standards and simply imposes cookie-cutter standards, which may be no better in practice. Advocates point to instances where ESS-related country standards and regulation remain weak and lead to bad outcomes in terms of environmental degradation or mistreatment of local populations.

China's approach in principle has been to rely on country standards, often espoused in the name of South-South cooperation and aligned with the arguments of ESS critics. Yet, in practice, the picture is more nuanced, with evidence that key institutions like China Export-Import Bank may be increasingly oriented toward employing ESS where local standards are weak. Chinese official finance has moved toward clearer and stronger environmental and social safeguard policies generally, but key financing institutions like China Export-Import Bank and China Development Bank still appear to rely largely on national laws in their countries of operation.

China Export-Import Bank appears to be at the forefront of Chinese official finance in adopting more stringent standards in its cross-border activities. For example, the bank

[38] According to World Bank ESS, Category A projects entail: significant adverse impacts that are sensitive, diverse, or unprecedented, or that affect an area broader than the sites or facilities subject to physical works; conversion/alteration of natural habitats; significant quantities of hazardous materials; or major resettlement.
[39] Chris Humphrey, *Time for a New Approach to Environmental and Social Protection at the Multilateral Development Banks*, ODI, 2016.

references World Bank ESS standards in its environmental policy.[40] And the recent green credit guidelines indicate that the bank will assess national standards and use Chinese standards if national standards are weaker, though the latter would still fall short of ESS best practices.[41] It is also difficult to assess the degree to which the bank is rigorously evaluating national laws and standards in practice.[42] In general, China Export-Import Bank guidelines adopt core principles aligned with international best practice, but operational policy is often vague, relying on "should" vs. "shall", and lacking concrete, time-bound commitments for actions.[43]

Table 3 summarizes key features of ESS employed by leading development finance institutions (World Bank, Agence France de Developpement, and Japan Bank for International Cooperation) in comparison to China's policy banks (China Export-Import Bank and China Development Bank). The AIIB is also included; though relatively small, it is a China-led multilateral institution that is highly aligned with World Bank standards. The elements highlighted in the table are particularly relevant to the K-V railway project.

The World Bank sets the highest standard for ESS. This starts with a rigorous approach to evaluating national laws for applicability and a commitment to working with national country partners to improve national standards and practice. This approach is also practiced by leading bilateral actors like the French development agency (AFD) and Japan's development bank (JBIC). These institutions have a bias toward higher ESS, which results in a willingness to impose project standards when national standards fall short. In contrast, China's policy banks start with a bias toward deferring to national law and little evidence that they depart from this approach in practice.

Most institutions, including China Export-Import Bank, commit to consultation with project stakeholders within the country, although rigor here may vary a great deal in practice. One measure of commitment in this area is the use of independent grievance mechanisms, which is standard in World Bank practice but has not been employed by the Chinese policy banks. The Chinese institutions have much narrower coverage in their ESS, compared to the more expansive and detailed list of topics covered by the other institutions. Key issues not listed by the Chinese institutions include: protection of indigenous populations, cultural heritage, worker rights, and human rights.

All institutions employ frameworks for differentiating projects according to levels of ESS risk. Major bilateral actors tend to align their risk categories with the World Bank framework, which helps to facilitate collaboration and co-financing, particularly on large infrastructure

[40] Paulina Garzon, *Handbook on Chinese E&S Guidelines for Foreign Loans and Investments*, China-Latin America Sustainable Investment Initiative, 2018.

[41] http://cms.eximbank.gov.cn/upload/accessory/20172/20172201624516937087.pdf

[42] Denise Leung, Yingzhen Zhao, Athena Ballesteros, and Tao Hu, *Environmental and Social Policies in Overseas Investments: Progress and Challenges for China*, World Resources Institute, 2013.

[43] https://www.followingthemoney.org/wp-content/uploads/2017/03/2007.08.28_China-Exim-Bank_Guidelines-for-Env-and-Soc-Impact-Assessments-2007_Exim_E.pdf

projects. The Chinese institutions do not explicitly employ the World Bank framework. As Chinese officials seek opportunities to "multilateralize" BRI, better alignment with the multilateral institutions in this area will be important.

Table 3. Comparison of Key Environmental and Social Safeguards

	World Bank	AIIB	AFD	JBIC	China Exim	CDB
Who sets the standards?	*World Bank + national laws, employing the more stringent of the two*	*AIIB + national laws, employing the more stringent of the two*	*AFD w/ reference to World Bank and other international standards*	*JBIC w/ reference to World Bank and other international standards*	*Mostly deference to national laws*	*Deference to national laws*
Is there an independent consultation/complaint mechanism?	✓	✓	✓	✗	✗	✗
Is there consultation with affected parties?	✓	✓	✓	✓	✓	✗
Safeguard Coverage	*Expansive*	*Expansive*	*Expansive*	*Expansive*	*Narrow*	*Narrow*
Are projects risk-rated?	✓	✓	✓	✓	✓	✓
Is relevant information published on the institution's website?	✓	✓	✓	✓	✗	✗
Efforts to avoid involuntary resettlement	✓	✓	✓	✓	✗	✗
Compensation standards for resettlement	✓	✓	✓	✓	✗	✗

Sources: Global Environmental Institute, *Comparing Financial Institutions' Environmental and Social Policies: Chinese and International Development Banks;* Fei Yuan and Kevin Gallagher, *Repositioning Chinese Development Finance in Latin America: Opportunities for Green Finance*, 2016; Clean Leap, The New Great Walls: A guide to China's overseas dam industry, 2012; Friends of the Earth, *Emerging Sustainability Frameworks: China Development Bank and China Export-Import Bank*, 2016; AFD, *Transforming Financial Systems for Climate Environmental and Social Framework,* 2018; World Bank *Environmental and Social Standards*, website; JBIC *Guidelines for Confirmation of Environmental and Social Considerations*, 2015; Export-Import Bank of China *Green Credit Guidance 2015*, and *Loan Project Environmental and Social Evaluation Guidance 2007*; AIIB Environmental and Social Framework, 2016.

Project transparency when it comes to ESS has become a core element for the World Bank and leading bilateral actors. Beyond requiring some degree of transparency of national partners, these institutions have committed to publishing relevant information on their websites. This commitment reflects the international nature of the financing activities and the need to be accountable to a broader group of stakeholders—first and foremost within the country of operation, but also to the broader array of shareholders of the multilateral institutions in the case of the World Bank, and to citizens and civil society in sponsor countries in the cases of AFD and JBIC. A lack of project transparency around ESS (and more generally) remains a key weakness for the Chinese policy banks.

Finally, the World Bank, AFD, and JBIC have clear policy statements related to resettlement issues, particularly pertaining to efforts to avoid resettlement in project design and the need to adequately compensate resettled populations. These issues are frequently among the most challenging in carrying out large-scale infrastructure projects, and institutions like the World Bank have learned through decades of experience to adopt clear and extensive procedures to handle these sensitive issues. The K-V railway project shows signs that such efforts by Lao PDR and the Chinese sponsors have fallen short to date.

K-V railway ESS issues

An environmental impact assessment (EIA) for the K-V railway project has been cited in media outlets as a reason for early delays in project implementation.[44] The EIA itself does not appear to be available in public outlets, reflecting a weakness of policies of China Export-Import Bank, which requires EIAs in projects that it funds but does not publish them.

Further, anecdotal evidence suggests that ESS-related project monitoring has been weak. One observer reports that "provincial officials seem to take a very hands-off approach to *everything* related to the railway as they view it as a Vientiane-Beijing agreement well above their pay grades, so I'd be very surprised if they are involved in monitoring day to day activities or environmental impacts."[45] This suggests that even if project standards on paper are reasonable, implementation could be compromised.

A 2017 World Bank road project in Lao PDR offers some assurances about national standards related to transport projects: the bank's safeguards data sheet for the transport project indicates that the Lao PDR Public Works and Transport Ministry has experience with World Bank ESS and that the ministry's environmental and social manual for the project was mostly in line with the bank's standards.[46] It highlights resettlement policies as a key area of deficiency in national standards, which we focus on in detail in the remainder of this section.

Multiple media reports identify Lao PDR government Decree on Compensation and Resettlement Management in Development Projects ("Decree 84") as the basis for addressing resettlement issues associated with the K-V railway project. Media reports cite

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[44] Simon Webb, "China, Laos say rail project to go ahead, pending environment study," *Reuters*, July 29, 2016.

[45] Private correspondence with author.

[46] World Bank, Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS), Report No: PIDISDSC21986, July 2017.

estimates from provincial task force committees in Lao PDR indicating that up to 4,411 families have been relocated along the 261-mile route.[47]

Reports indicate that total cost for relocations is estimated at nearly $300 million and will be borne by the Lao PDR government, not the joint venture.[48] Lao PDR's prime minister has also indicated that the country is borrowing $160 million from the Chinese government to support resettlement costs.[49] This additional borrowing, as well as the total resettlement cost, represents a considerable sum for the highly debt vulnerable government, in addition to the $250 million in current budget expenditures expected for the joint venture along with eventual service on the $465 million loan from China Export-Import Bank.

In various media outlets, Laotian citizens affected by the project express concerns about compensation, summarized here:

- Families had to give up land valued at $1,420 per hectare, and some have received just $595-$715 per hectare in compensation;[50]
- Complaints that compensation had been promised by a date certain and then withdrawn;[51]
- Complaints that evictions have proceeded before any compensation has been received;
- Complaints that the Lao PDR government has made vast land concessions to the venture, in excess of what is needed to construct the railway.[52]

Such complaints can reflect a failure of implementation of otherwise adequate regulations, or underlying weak regulations, both in level of standards and in provision for adequate enforcement mechanisms.

In the context of another project in Laos related to disaster risk management, the World Bank and the Lao PDR Ministry of Public Works prepared a gap analysis of Lao Decree 84 and World Bank ESS related to resettlement. The Appendix table presents an adapted version of that analysis in order to depict the overall quality of national regulations in the area of project resettlement.

Key deficiencies on resettlement relate broadly to standards for compensation. In part, the standards fall short of World Bank ESS by setting compensation rates too low. But they also

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[47] "High-speed Rail Project Will Force Thousands of Lao Families to Relocate," *Radio Free Asia*, November 22, 2017.

[48] "The Great Rail Dilemma of Laos," Bangkok Post, July 23, 2018.

[49] "Laos govt to pay compensation to families displaced by railway," *Vientiane Times*, November 25, 2018.

[50] "Families in Oudomxay Province First to Receive Compensation from Lao-China Railway," *Radio Free Asia,* May 14, 2018.

[51] "Thousands of families displaced by Laos-China railway, still awaiting compensation," *AsiaNews.it*, July 21, 2018.

[52] Peter Janssen, "Land-locked Laos on track for controversial China rail link," *Nikkei Asian Review*, June 24, 2017.

reflect a lack of independence in assessing compensation claims, which the bank seeks to remedy by mandating an independent mechanism.

Land concessions and associated resettlements in support of the railway project will have a long-term impact on livelihoods in the country's agricultural economy. This implies that compensation obligations under a more robust set of social safeguard standards would be significantly higher than current estimates. As indicated in the appendix, the World Bank has sought to bolster compensation claims associated with land us in Laos in the context of other projects, indicating that the government's standards have been too low, resulting in lower levels of compensation. That said, agriculture's share of the Laos economy has fallen by half over the past 15 years, accounting for 16% of the economy today.[53] This implies that whatever the railways local impacts, it may simply hasten national trends away from an agricultural economy.

In sum, ESS issues related to the K-V railway project reflect shared deficiencies between Lao PDR and China. Chinese policymakers should consider these areas of deficiency as the basis for more rigorous approaches to ESS across all channels of Chinese official finance, and certainly in the context of BRI. Specifically, the railway project appears to lack:

- Transparency on ESS issues. EIAs should be published in a timely manner on China Export-Import Bank's website.
- Independence in carrying out ESS, including independent environmental and social assessments (such as assessments of compensation claims);
- Robust consultation with affected populations and independent grievance mechanisms for these groups.

[53] World Bank National Accounts data, 2019.

Implications for Chinese policymakers (ESS)

Key deficiencies in the ESS framework for the K-V railway project, which relies largely or exclusively on Lao PDR regulation, points to the need for a standardized approach for Chinese cross-border financing akin to the World Bank framework. The scale of official Chinese financing globally makes it a special case among official lenders and much more like a multilateral lender than other, smaller bilateral actors. As such, **the Chinese government carries a special obligation to employ a consistent approach to ESS standards across countries of operation, one that does not vary dramatically depending on national standards.**

Lao PDR standards may be better than in some other developing countries but clearly are not on par with international best practices. As a highly visible anchor investment under BRI, the K-V railway project already shows signs of distress on ESS issues, particularly related to resettlement practices. And the lack of overall transparency on ESS raises risks that there may be more problems to come. **Best practice on ESS shows that rigorous ex ante efforts, transparency, independent mechanisms for monitoring and grievances all contribute to effective risk management.**

Further, the publicly-reported ESS costs borne by the Laos government suggest an imbalance when it comes to responsibilities under the joint venture. As discussed earlier, as a majority-owned Chinese government project, ESS responsibilities ought to be borne more directly by China. So, **while it is critical to establish high ESS standards for cross-border projects, it is also critical to ensure adequate resources to carry them out, particularly given the ownership arrangement.**

Conclusion

The K-V railway project is emblematic of BRI and its aims. It has well identified regional economic benefits, which include clear benefits for China. As such, it demonstrates the potential value of pursuing large-scale, cross-border public infrastructure projects.

At the same time, a close look at the project along key dimensions also reveals the risks associated with BRI, particularly for countries hosting these projects. The railway's benefits for Laos are uncertain, and this uncertainty is exacerbated by policy choices made by the Chinese government. This includes the financial structure, which strains Laos's debt capacity, the exclusive reliance on Chinese firms, the predominant reliance on Chinese workers, and deficiencies in the environmental and social safeguards associated with the project.

In each of these areas, some adjustments in Chinese policy could shift the overall costs and benefits for the host country in a favorable direction. In doing so, Chinese officials could also lower the overall risks associated with BRI, certainly reputational and political, but also the financing risks borne both by China and the other BRI countries.

Appendix. Comparison of World Bank and Lao PDR resettlement policies

Issue	World Bank Policy	Lao PDR Decree 84	Addressing Gaps in Lao Decree
Identified policy objectives	PAPs (Project Affected Persons) should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher Financial assistance to all project affected persons to achieve the policy objective (to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher) Compensation at full cost for all structures regardless of legal status of the PAP's land and structure.	PAP are compensated and assisted to improve or maintain their pre- project incomes and living standards, and are not made worse off than they would have been without the project.	World Bank requires explicit statement that cash compensation at replacement cost for land and structures will be paid without deduction for depreciation or salvageable materials. Also – income additional payments will be made to restore incomes, crops, trees as well as moving costs.
Support for affected households who have no recognizable legal right or claim to the land they are occupying	Financial assistance to all project affected persons to achieve the policy objective (to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher)	PAP who do not have legal land title, land use certificate or other acceptable documentation indicating their land use right, including customary and traditional land use right, only provides the right to claim compensation for their lost assets such as house/structures, trees and/or crops, and not land.	World Bank requires that PAPs who do not have legal title, land use certificates or other acceptable documentation indicating their land use right will still be entitled to Financial assistance to achieve the objective of the involuntary resettlement policy (to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre- displacement levels or to levels prevailing prior to the

			beginning of project implementation, whichever is higher) Vulnerable PAPs will receive special assistance.
Compensation for illegal structures	Compensation at full cost for all structures regardless of legal status of the PAP's land and structure.	PAP who do not have legal land title, land use certificate or other acceptable documentation indicating their land use right, including customary and traditional land use right, only provides the right to claim compensation for their lost assets such as house/structures, trees and/or crops, and not land.	World Bank requires compensation at full replacement cost, regardless of legal status of the land and structure.
Methods for determining compensation rates	Compensation for lost land and other assets should be paid at full replacement costs,	Identifies various types of compensation as appropriate; describes process for determining compensation, including consultation with affected parties; but ultimately leaves rate-setting to the government.	World Bank requires an independent appraiser to conduct a study of full replacement costs for all affected assets as the basis for compensation.
Compensation for loss of income sources or means of livelihood	Loss of income sources should be compensated (whether or not the affected persons must move to another location)	Provision of agriculture land in appropriate ways including the creation of new livelihood options and stable income generation activities and promotion of local crafts/industry in addition to agricultural production activities for the affected people.	World Bank requires that loss of income be restored to pre-displacement rates regardless of the legal status of the affected person

Source: *South East Asia Disaster Risk Management (SEA DRM) Project for Lao PDR: Resettlement Policy Framework*, Ministry of Public Works and Transport, Lao PDR, as published by the World Bank, April 2017