



THE CHINA-PAKISTAN ECONOMIC CORRIDOR

BARRIERS AND IMPACT

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UNITED STATES
INSTITUTE OF PEACE



ABOUT THE REPORT

This report clarifies what the China-Pakistan Economic Corridor actually is, identifies potential barriers to its implementation, and assesses its likely economic, socio-political, and strategic implications. Based on interviews with federal and provincial government officials in Pakistan, subject-matter experts, a diverse spectrum of civil society activists, politicians, and business community leaders, the report is supported by the Asia Center at the United States Institute of Peace (USIP).

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Cover and table of contents image: A portion of the map of the China-Pakistan Economic Corridor Highways Network. Map redrawn by Robert Cronan/Lucidity Information Design, LLC.

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| | |
|-------------------------|-----------|
| Introduction ... | 5 |
| From Gwadar to CPEC ... | 6 |
| What is CPEC? ... | 7 |
| Potential Impact ... | 22 |
| Political Barriers ... | 31 |
| Economic Barriers ... | 42 |
| Recommendations ... | 50 |
| Appendix ... | 55 |

[The ultimate benchmarks for the success of the China-Pakistan Economic Corridor will be whether it boosts industrial productivity, exports, and job creation in Pakistan, putting the country on a path toward sustained, high levels of equitable economic growth.]

Summary

- Support for the China-Pakistan Economic Corridor (CPEC) and Chinese investment in the country is almost unanimous in Pakistan. The country's political parties and regions, however, have been deeply divided on the subject of equitable distribution of and control over CPEC projects.
- CPEC is a fifteen-year program scheduled for completion in 2030 that will begin to address Pakistan's energy and infrastructure needs in the near term.
- CPEC could prove an opportunity to decisively overcome the Balochistan insurgency in Pakistan. Doing so, however, means protecting the political rights of the locals and granting economic privileges over migrant labor.
- A broader CPEC authority is necessary to ensure that the project moves forward on a consensus basis. Neither the Pakistani military nor the civilian bureaucracy have the economic and political aptitude to steward the project to success. Such a task is the reserve of the political leadership in Islamabad.
- Policymaking communities in New Delhi and Washington exaggerate the strategic component of CPEC. This may, however, end up being a self-fulfilling prophecy. Pakistan's primary goal should be to put itself on a trajectory of rapid, equitable, and sustained macroeconomic growth.
- The ultimate benchmarks for the success of CPEC will be whether it boosts industrial productivity, exports, and job creation in Pakistan, putting the country on a path toward sustained, high levels of equitable economic growth.

Introduction

The China-Pakistan Economic Corridor (CPEC) is a series of energy and infrastructure projects, some of which connect China's western Uighur Autonomous Region of Xinjiang to the Arabian Sea coast of Pakistan's Balochistan province. Initiated in mid-2013 and formally launched in April 2015, CPEC is generally described as a \$46 billion package of Chinese aid to and investments in Pakistan, though Pakistani officials claim the total had reached \$62 billion by April 2017.¹

CPEC is the first large-scale attempt to bolster economic ties between Beijing and Islamabad after decades of robust diplomatic and military relations. During the 1950s, relations between the two countries were frosty, given Pakistan's alignment with the West during the Cold War and China's embrace of India.² Also during this period, however, Pakistan became the first Muslim country to recognize the Peoples Republic of China.

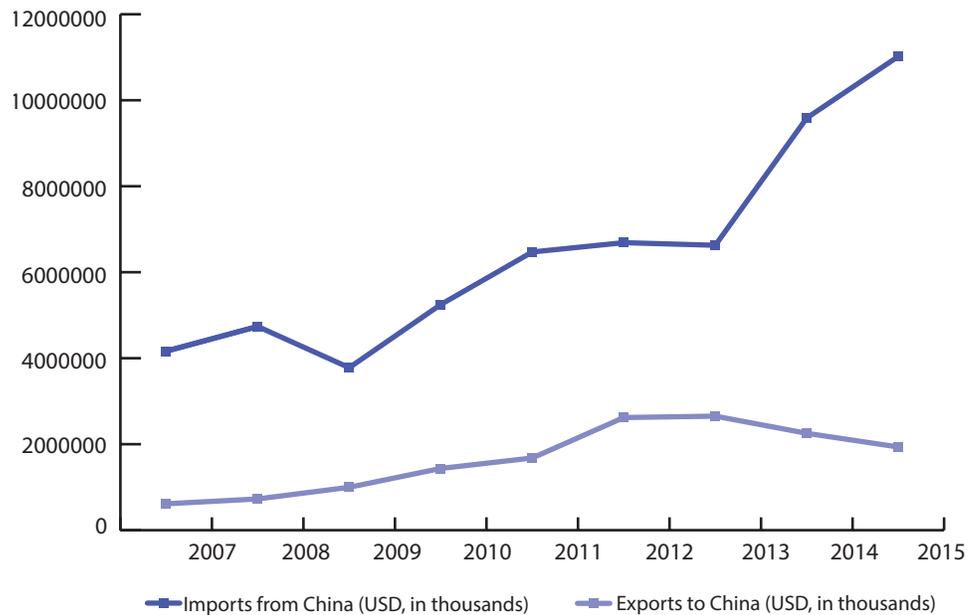
Two conflicts—the 1962 war between China and India and the 1965 war between India and Pakistan—set the seeds for what is now, fifty-five years later, a firm strategic partnership.³ A shared rivalry with India combined with Pakistan's belief in the unreliability of the United States as an ally pushed Beijing and Islamabad closer together. In the 1970s, Pakistan facilitated secret talks between US Secretary of State Henry Kissinger and Chinese Premier Zhou Enlai, paving the way for US recognition of the Peoples Republic of China. Work on the Karakoram Highway, connecting Gilgit-Baltistan in Pakistan with China's Xinjiang region, began and was completed by the end of the decade. Beijing was also instrumental in the Pakistani nuclear program and is now a major supplier of military hardware to Islamabad. The two countries jointly produce the JF-17 aircraft.

Economic ties have been their weakest link. The free trade agreement (FTA) signed in 2006 has increased the volume of bilateral trade, but China has been the primary beneficiary (see figure 1). Pakistan, like many countries, has a massive trade deficit with China. Further, the land route between the two countries has seen little traffic in bilateral trade. The territories on either side of the border are low in both population and industrial activity (China's industrial and population centers are concentrated along its eastern coast, Pakistan's mainly in its central-southern region). Although the distance by sea is considerable, sea freight is far cheaper than truck freight. CPEC comes into force as the one-way trade gap widens and cross-border trade by land is minimal.

This said, CPEC has been a morale booster for Pakistan, whose economy has lagged behind other South Asian states, Afghanistan excepted. Yet the announcement of the first batch of CPEC projects immediately triggered an acrimonious internal political debate, the country's smaller provinces alleging that the focus of the corridor has been diverted to Punjab, the largest and most prosperous province, at the expense of the rest of the country. India also was quick to express its forthright opposition to CPEC, condemning projects in the Gilgit-Baltistan region that borders China to the north—which both it and Pakistan claim as legal territory—and expressing concern over the potential of the corridor to facilitate a more robust Chinese military presence in the Indian Ocean region. Some Indian officials have also suggested that an economically empowered Pakistan less reliant on Western aid and trade and more integrated into a Sino-centric geoeconomic space could become emboldened in its strategic decision making or less vulnerable to nonmilitary coercive action.

Inside and outside Pakistan, debate has been vigorous over more fundamental questions of the cost and security of CPEC and Pakistan's capacity to implement projects.

Figure 1. Pakistan’s Trade with China



Source: World Bank World Integrated Trade Solution.

This report addresses these concerns and confusions and proposes mechanisms for Pakistan to best leverage what many describe as an historic opportunity to put Pakistan on a path toward sustained, high levels of equitable growth, ameliorating conflict and poverty within the country and improving its ties with neighboring states.

From Gwadar to CPEC

For much of the past decade, the Gwadar port—a critical node in the CPEC—has been depicted as part of a Chinese master plan to gain a foothold in the Indian Ocean region. According to a senior retired Pakistani diplomat, Beijing constructed Gwadar essentially as a favor to Islamabad, which had for decades been looking for a sovereign partner to finance, construct, and operate the port after purchasing it from Oman for \$8.4 million in 1958. During the Cold War, well before China’s reemergence as a global power, Pakistan reached out to both the Soviet Union and the United States to develop a naval base at Gwadar.

It was not until the fall of the Soviet Union that Gwadar’s commercial promise came to prominence. It is ultimately under the tenure of military ruler General Pervez Musharraf that Gwadar emerged as a modern, deep-sea port. Musharraf, according to a former senior Pakistani diplomat, asked his Chinese counterparts for assistance and the Chinese agreed to finance and build the port “as a favor” to Pakistan—not out of recognition of the port’s commercial or strategic value. But Pakistani officials continued to position the port as a gateway to Central Asia as much, if not more, than its connectivity to China. In late January 2007, the operations of the port were handed over to the Port of Singapore Authority, followed by a formal inauguration on March 23, 2007.

It was not until the fall of the Soviet Union that Gwadar’s commercial promise came to prominence.

The Pakistani experience in Gwadar's first phase offers two important takeaways. One, Pakistan was not putting all its eggs in the China basket. Two, China was not opposed to the participation of other sovereign entities in Gwadar-related projects. There may in fact have been some US interest in supporting the development of Gwadar, linking it to regional economic integration and eventually ill-fated Reconstruction Opportunity Zones envisioned for Pakistan's border regions with Afghanistan and earthquake-hit areas of Kashmir.

Beginning in 2007, as the Gwadar port came into operation, Pakistan was hit by a perfect storm of political instability, terrorism, a global economic crisis, climate change-induced natural disasters, and the effects of poor policymaking, resulting in steep declines in economic growth and foreign direct investment. As Pakistan's economic fortunes declined, the Port of Singapore Authority failed to meet its pledge of investing approximately \$550 million in the Gwadar port.⁴ The Gwadar dream was held in abeyance. None of the key elements of the Gwadar master plan—the refineries, power plants, and industrial estates—had materialized.

On February 18, 2013, the leasing rights for the Gwadar port were formally transferred to the China Overseas Port Holding Company, registered in Hong Kong.⁵

By mid-2013, Pakistan was in a state of relative political stability. After general elections in May, the country saw its first transition of power from one democratically elected government to another. At the same time, China began to fuse its regional connectivity programs into a comprehensive initiative. Shortly after the elections in May, but before the new government took power, Chinese Premier Li Keqiang visited Pakistan and agreed to develop an “economic corridor.” Li arrived in Islamabad after a trip to New Delhi, where he had discussed the Silk Road Economic Belt and the 21st-Century Maritime Silk Road, also known as the Belt and Road Initiative (BRI). Officials in Beijing regard CPEC as the flagship project of BRI.⁶

In July 2013, newly elected Prime Minister Nawaz Sharif visited Beijing, where he signed an agreement pledging to “develop the long-term plan for [the] China-Pakistan Economic Corridor.”⁷ The next month, China and Pakistan held their first high-level coordinating meeting on CPEC. Over the next year, the CPEC Joint Cooperation Committee (JCC)—chaired by Pakistan's planning minister and the vice chairman of China's National Development and Reform Commission—would convene two more times, and senior Chinese and Pakistani officials held additional working group meetings on energy and transportation. President Xi Jinping was to visit Pakistan in the fall of 2014 to formally launch CPEC, but his visit was postponed in response to protests by the opposition Pakistan Tehreek-e Insaf party.

In April 2015, President Xi visited Islamabad, where both he and Sharif formally launched CPEC. By year's end, critical renovations and upgrades on the Karakoram Highway were completed. When President Xi arrived in Islamabad, many wheels in Pakistan were already in motion. Important changes were taking place in the region and globally. The US surge in Afghanistan had come to an end. China's economic growth began to lag. Given a reduced US footprint in the region, China began to explore ways to pivot through Eurasia.

What Is CPEC?

The aim of CPEC, Chinese and Pakistani officials say, is both to strengthen trade between the western Chinese city of Kashgar and Pakistan's Arabian Sea port of Gwadar and to boost economic growth within Pakistan and China's landlocked Xinjiang region. CPEC provides western China with blue water access, linking Xinjiang with Pakistan's province of Balochistan. Each country, of course, has its own objectives (see table 1).

Table 1. Chinese and Pakistani Objectives from CPEC

| Chinese | Pakistani |
|--|---|
| Stabilize strategic ally Pakistan. | Attract aid and foreign direct investment to boost economic growth, create jobs, enhance productivity, and increase exports. |
| Reduce the risk of violence in the bordering Xinjiang region from Pakistan-based drivers of instability. | Obtain financing for electricity generation and transmission projects to eliminate shortfall, meet future residential and industrial demand, and achieve a more affordable and diverse energy fuel mix. |
| Offset slowing domestic economic growth by exporting excess capacity and supply. | Upgrade road and rail infrastructure to enhance regional connectivity and ground logistics efficiency. |
| Redirect forex reserves from US Treasury bills toward projects abroad with higher rates of return. | Reduce dependence on the Karachi port and Port Qasim, lowering port congestion and making a potential full Indian naval blockade less likely. |
| Bolster troubled state-owned enterprises by exporting overcapacity and oversupply. | Leverage Chinese investment and expertise in industrial zones to bolster and diversify manufacturing sector through industrial zones producing higher value-added goods. |
| Demonstrate a new, China-led, win-win model of international development. | Modernize and diversify agricultural industry through Chinese investment and transfer of technology. |
| Secure refueling, replenishing, and ship repair facilities in the Indian Ocean region. | Expand the Sino-Pak relationship beyond a strategic and military alliance into an economic partnership as well. |
| Break out of US containment efforts. | Use CPEC as a demonstration effect, indicating to other investors that Pakistan is a safe and attractive destination for foreign direct investment. |
| Integrate deeper into Eurasia and Indian Ocean region and foster economic growth in western regions of China through a shorter, direct link with Arabian Sea and Indian Ocean region at Gwadar and Karachi and creation of complementary supply chains with regional states. | Establish Pakistani ports as transshipment hubs for Central and South Asia and western China. |
| Reduce dependence on Straits of Malacca as transit route for energy and trade, as well as raw materials extracted from East Africa. | Develop the economically backward region of Balochistan. |
| Enhance food security by investing in and sourcing agricultural and livestock products from Pakistan. | |

The term economic corridor is to some extent misleading and has resulted in misconceptions of what the project entails, some observers believing that an entirely new, direct route between Kashgar and Gwadar was being established.⁸ Greater clarity emerged in April 2015, when China and Pakistan signed a series of memorandums of understanding worth \$46 billion for energy and infrastructure projects under the CPEC framework. The projects included a part of CPEC range in maturation: some at the feasibility stage, some basic framework agreements, and many actual commercial contracts. Several had been initiated under the previous coalition government led by the Pakistan Peoples Party (PPP).

The Planning Commission of Pakistan—the chief coordinating body on CPEC in Pakistan—has divided CPEC into four phases: early harvest projects, to be completed by 2018 (when the next general elections are expected); short-term projects, to be completed by 2020; medium-term projects, to be completed by 2025; and long-term projects, to be completed by 2030. The Planning Commission has yet to formally categorize individual projects by phase. Among energy projects, it distinguishes between priority and actively promoted projects without providing definitions for the terms. Priority projects, with the exception of two hydroelectric projects, are scheduled for completion by 2020. Actively promoted projects are scheduled for completion after 2020 or are on the backburner. Beijing has been more opaque in its publicly available documentation on CPEC. Whether it subscribes to Pakistan's typology is unclear.

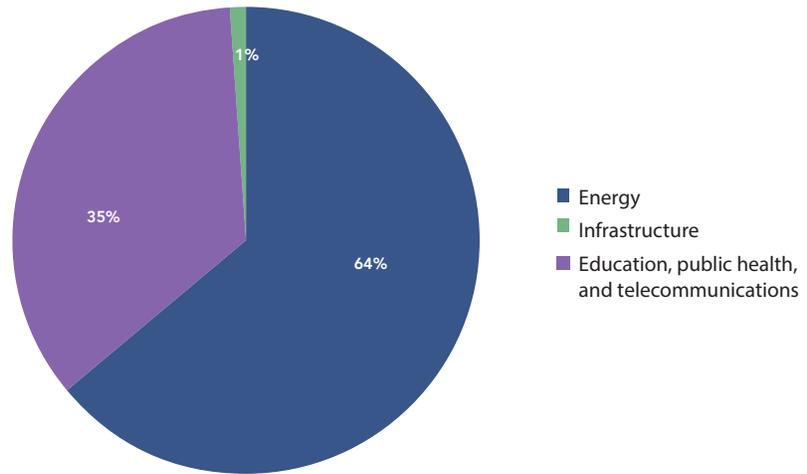
The three five-year phases of CPEC should be seen as more notional than fixed, distinct periods. The first phase is essentially an economic stimulus, aimed at helping eliminate Pakistan's industry-crippling electricity shortages and address its infrastructure inefficiencies while promoting intra-Pakistan and regional connectivity. CPEC, like all Belt and Road Initiative projects, is also a way for China to weather the storm of its current economic transition, to prop up its state-owned enterprises as they deal with overcapacity and oversupply issues. The second phase aims to leverage the enhanced productive capacity in Pakistan by boosting industries, particularly export-oriented ones, through special economic zones backed with Chinese investments. A draft of the long-term plan leaked to the Pakistani media in May 2017 also suggests that agriculture will play a critical role. The third phase is the most ambitious and least clear; speculation is that it might involve the construction of rail and energy pipelines between Kashgar and northeastern Pakistan, and upgrades to the Karakoram Highway linking the two countries, making it an all-year road network. The border crossing is presently closed during the winter.

Most CPEC projects (roughly 64 percent of all expenditures proposed as of May 2017) are commercial contracts for generating and transmitting electric power (see figure 2). Infrastructure projects are largely funded by government-to-government concessional loans, interest rates averaging about 2 percent (see figure 3). Several projects in Gwadar—including the planned \$230 million international airport—are funded by grants. The \$46 billion figure often cited by Pakistani officials is neither a fixed number nor a lump sum payment to Islamabad, and should be seen as a demonstration of Chinese seriousness about investing in Pakistan and the extent of its willingness to finance projects there. Chinese officials have said that they are willing to finance billions of dollars of additional projects under the CPEC framework; as indicated, that lump sum value of projects included in the CPEC portfolio has risen. As of September 2016, between \$14 and \$18 billion has been spent.⁹

For the first phase of CPEC, projects are generally slated for completion by 2020, but some hydroelectric projects, which are time intensive, will be as late as 2023.

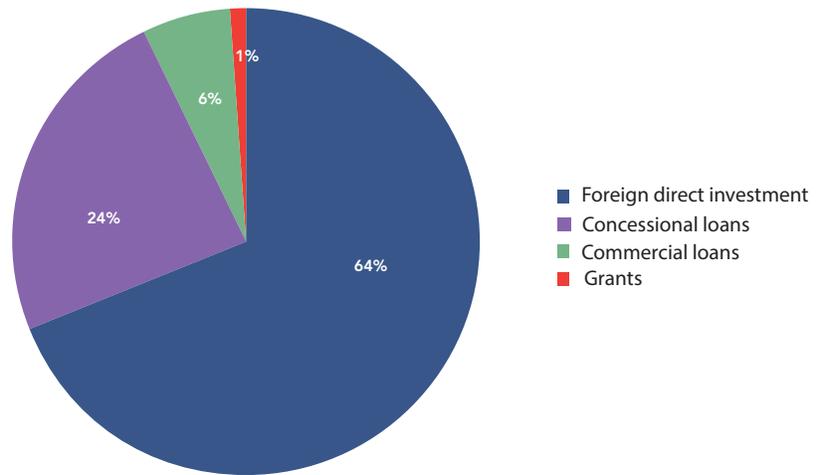
The three five-year phases of CPEC should be seen as more notional than fixed, distinct periods.

Figure 2. CPEC Project Types



Source: Author's compilation based on Planning Commission of Pakistan data.

Figure 3. CPEC Project Financing Type



Source: Author's compilation based on International Monetary Fund data.

Phase I (2015–2020)

Early harvest and short-term projects fall into two major categories: electric power generation and infrastructure.

Most of the proposed spending, roughly 64 percent, according to the Planning Commission of Pakistan's figures, is dedicated to generating and distributing electric power. Of the generation projects, around 67 percent (in terms of installed capacity) involve coal power. The rest are hydroelectric, solar, and wind power as well as two critical transmission line initiatives—Pakistan's first private investment in the electricity transmission sector.

Most remaining allocations are related to infrastructure. Approximately \$686 million focuses on the expansion of the Gwadar port and associated developments, including the construction of a six-lane motorway from the port to the highway, a free trade zone, and a modern international airport. Outside Gwadar, major upgrades are planned for the Karakoram Highway and for rail and road connectivity between Pakistan's two largest cities, Karachi on the Arabian Sea and Lahore to the east. Intracity and intercity rail transportation projects are also planned for each province.

Outside these two major categories is a \$44 million fiber optic cable project connecting Rawalpindi (adjacent to Islamabad) to the Transit Europe-Asia Terrestrial Cable Network, which will enable 3G/4G internet access in Gilgit-Baltistan and a series of goodwill projects, to include a hospital and a vocational institute, both in Gwadar.

Ground Connectivity

The CPEC enhances road and rail connectivity between Kashgar and Gwadar (see map 1). Within Pakistan, no single Chinese-built road runs from the border with China to the Arabian Sea and Gwadar. The intra-Pakistan CPEC road network has evolved into three routes—the western, central, and eastern—none of which are entirely new. Upgrades along these routes are being financed not just by Beijing, but also by other multilateral lenders and domestic borrowing. The government of Pakistan is also using its own funds for some projects. CPEC largely expands or improves existing road networks in Pakistan, builds off recently completed infrastructure projects, and leverages ongoing projects funded by the government of Pakistan or other international lenders, such as the Asian Development Bank (ADB) and the US Agency for International Development (USAID).

The largest road expenditure in the CPEC portfolio is a single section along the Karachi-Lahore Motorway, and will primarily benefit the Karachi port and exporters in the industrial hubs of Punjab.

The Northern Passage

The Karakoram Highway is the main artery connecting Islamabad and Rawalpindi with Kashgar. Completed in 1979 and prone to landslides, it has fallen into disrepair. Within Pakistan, major bottlenecks interrupt the portion between Islamabad and the city of Gilgit. Along this stretch, large portions are not controlled-access highway but instead resemble a high-speed boulevard.

Before CPEC was launched, Beijing and Islamabad initiated an upgrade of the highway from the Khunjerab border with China to Raikot in the Gilgit-Baltistan region. A series of tunnels along this 208-mile route also allow for the flow of ground traffic through areas submerged by water as a result of landslides that occurred in 2010. The road upgrade and tunnels were completed in late 2015. Until then, vehicles and freight had to be transported by raft over the Attabad Lake, itself a result of the landslides.

Under CPEC, the highway is being upgraded from Raikot to Thakot in Khyber Pakhtunkhwa province using a combination of a grant and a concessional loan from Beijing totaling \$150 million.¹⁰ Future work may need to be done along this 168-mile stretch. Pakistan's National Highway Authority explains that "major portion[s]...shall be submerged into the dam lake reservoirs," necessitating a realignment of the route.¹¹ A realignment is under way from Thakot to Havelian in Khyber Pakhtunkhwa using a \$1.3 billion concessional loan.¹² The work, which involves the construction of seven tunnels and sixty-eight large bridges, will be completed in 2020.¹³

The Karakoram Highway is the main artery connecting Islamabad and Rawalpindi with Kashgar.

Map 1. Highway Networks of CPEC



Source: Based on Planning Commission of Pakistan. Redrawn by Robert Cronan/Lucidity Information Design, LLC for USIP.

These projects will connect to the Hazara Motorway from Havelian to Burhan in Punjab, the construction of which is funded by the ADB and Britain's Department for International Development. The Hazara Motorway is slated for completion by the end of 2017.¹⁴

CPEC is a single route from Khunjerab north to Burhan. At Burhan, the Hazara Motorway will intersect the existing six-lane Peshawar-Islamabad M1, which feeds into the existing Islamabad-Lahore M2. According to Pakistan's National Highway Authority, the Hazara route will cut travel time from Mansehra in Khyber Pakhtunkhwa to Islamabad from four hours to two.¹⁵

Together, these projects are taking care of critical upgrades to connectivity between the Khunjerab border with China and Pakistan's high-speed motorway network, significantly reducing travel time, cutting logistics costs, and eliminating crippling bottlenecks. In good weather conditions, the trip from the Khunjerab border pass to Islamabad will be reduced from multiple days to one day, possibly as few as eleven to twelve hours.¹⁶ Transporters are likely to make pit stops along this route at the Sost Dry Port, about fifty miles from the border with China, where a customs facility is located, and at the dry port planned four hundred miles farther down the Karakoram Highway in Havelian, Khyber Pakhtunkhwa, which is about forty miles from the Peshawar-Islamabad Motorway. Havelian is also home to the railway station closest to China.

The Eastern Route

The CPEC eastern route begins in the Islamabad-Rawalpindi metropolitan area and connects to both Karachi and Gwadar via major urban centers in Punjab. The existing M2 begins near the Islamabad and Rawalpindi sister cities and connects to industrial and population centers in Punjab. Its terminus is in Lahore. Along the way to Lahore, a leg splits off and becomes the M3, which ends at the textile hub of Faisalabad. From Faisalabad, the M4—currently under construction and scheduled for completion in 2018—will link to Multan, the largest city in southern Punjab. Before Multan, a leg of the Karachi-Lahore Motorway merges into the M3. The remainder of the network heads to Karachi.

The Faisalabad-Multan M4 is funded primarily by the ADB, but some sections have received assistance from the Asian Infrastructure Investment Bank, the Islamic Development Bank, and the British government. None is funded through CPEC, but collectively they are part of a high-speed road network planned by the government of Pakistan to link the country's major cities.

The most critical infrastructure development along the eastern route will be the Karachi-Lahore Motorway, which will provide quicker travel between Pakistan's two largest cities, reducing travel time between them from between sixteen and eighteen hours to between ten and twelve hours. Like most Pakistani road network projects, the construction of the Karachi-Lahore Motorway is divided into multiple segments each with different contractors and funders. Only one segment is financed under CPEC. The Lahore to Abdul Hakeem section, a non-CPEC project, will be built by China Railway and is expected to be completed in 2018. It merges onto the last leg of the Faisalabad-Multan Motorway (funded by the Islamic Development Bank). Ninety percent of the next section, from Multan to Sukkur, is funded by CPEC concessional loans totaling \$2.85 billion.¹⁷ It will be completed in late 2018 or early 2019.¹⁸ The next stretch, from Sukkur to Hyderabad, is a non-CPEC project, the contract for which has yet to be tendered, though the project is expected to be completed by 2020.¹⁹ The final leg of the Karachi-Lahore route—upgrading the four-lane Hyderabad-Karachi superhighway into a six-lane motorway—is funded by a consortium of Pakistani banks. It is scheduled for completion in 2018.²⁰

The Karachi-Lahore Motorway connects to Karachi and Port Qasim, two established Indian Ocean deep-sea ports. From Karachi, Gwadar is a seven-hour drive along the existing Makran Coastal Highway—the construction of which was funded by China in the early 2000s. This, from Burhan to Karachi to Gwadar, is CPEC's eastern route.

The Western and Central Routes

From Burhan, trucks also have the option of using CPEC's western and central routes. By 2018, a new four-lane motorway (expandable to six lanes) will carry the western and central routes from Burhan to Dera Ismail Khan in Khyber Pakhtunkhwa via Mianwali in western Punjab, cutting travel time from the present six to eight hours to around three and a half. The 177-mile, \$1.36 billion project was expected to be added to CPEC but does not appear to have been included in the portfolio even though construction is under way.²¹

This motorway will circumvent many of the main industrial and ethnic Pashtun population centers in Khyber Pakhtunkhwa province. The northwestern city of Peshawar is treated as part of the eastern route because it is already connected to Islamabad via the M1—a mere two hours from Islamabad and five-and-a-half from Lahore. The CPEC includes no allocations to upgrade the north-south Indus Highway (or N-55) from Peshawar to Dera Ismail Khan, which is presently in abysmal condition. Under a \$300 million program using its own funds, the Pakistani government is upgrading the N-55 from Kohat (south of Peshawar) to Dera Ismail Khan. Rehabilitating a longer stretch—from Peshawar to Dera Ghazi Khan—would both help industries in Khyber Pakhtunkhwa and poor agrarian regions of southern Punjab, and provide the shortest and fastest route from Peshawar to both Gwadar and Karachi.

The western and central routes split in Dera Ismail Khan. The western then travels through mountainous western Balochistan, including Quetta, to Gwadar. The central moves east through southern Punjab and interior Sindh to connect by an east-west motorway to the western and eastern routes to Gwadar.

Now that the N-85 highway connecting Gwadar to Quetta is completed, the western route is operational. It is also, however, lengthy and inefficient. Sections are being rehabilitated with funding from CPEC and other international partners. The convoy of Chinese trucks that arrived in Gwadar for the first container shipment in mid-November 2016 used the N-85, taking the common CPEC route from Khunjerab in Gilgit-Baltistan to Burhan and exiting on to the N-80 highway toward Kohat in Khyber Pakhtunkhwa. From Kohat, it moved along the N-55 highway toward Dera Ismail Khan, then shifted onto the N-50 highway toward Zhob and Quetta in Balochistan. The N-50 will be rehabilitated with loans from both the ADB and China (via CPEC). In Quetta, the convoy then took the N-25 highway (whose upgrade was funded by USAID) through Kalat into Surab—passing by a short east-west highway funded by China under CPEC connecting Khuzdar and Basima. It then used the N-85 highway to travel through Panjgur to Hoshab, and then, finally, reached Gwadar via Turbat using the M8 and the Beijing-funded Makran Coastal Highway.

The Planning Commission identifies the central route as part of the CPEC long-term plan. The official map indicates that a new high-speed motorway is planned, connecting Dera Ismail Khan to Shahdadkot in northern Sindh, running roughly parallel to the existing, dilapidated N-55 highway.

China is currently providing more assistance to high-speed road network development linking to the Karachi port than going to the Gwadar port directly. CPEC road projects dovetail with those supported by other international agencies. Through the Central Asia Regional Economic Cooperation program, the ADB aims to strengthen connectivity between Pakistan,

Afghanistan, and the former Central Asian Republics. USAID is also supporting road network projects linking Pakistan and Afghanistan. These agencies and lenders have slightly different visions of regional connectivity, but they complement CPEC.

CPEC and CPEC-supporting projects will not only make Gwadar a more trade-viable option for China, but will also improve the attractiveness of the Karachi port and Port Qasim—two world-class deep-sea ports that have been operational for decades. At the Karachi port, a new container terminal—presently deeper than the Gwadar port—operated by Hutchison Port Holdings has opened. They make Karachi an optimal transshipment hub for western China and northwestern India, especially the state of Punjab, should inefficiencies in customs clearance and local ground connectivity and bureaucratic processing be overcome.

Public Transportation

A series of urban rail transport projects are also included in the CPEC infrastructure portfolio. Originally, the only urban rail transport project was the Orange Line Metro project, in Lahore. Because of the controversy stemming from the perception that the ruling party was favoring Punjab, commuter rail projects in other provinces have been added in principle after the December 2016 CPEC JCC meeting between the Chinese and Pakistani governments.

The \$1.62 billion Orange Line is slated for completion in late 2017 or early 2018, but may end up being a year behind schedule.²² As of April 2017, more than 60 percent of the civil works of the project have been completed.²³ But the project has been slowed by legal petitions that allege the project threatens eleven of the city's major heritage sites.²⁴ As a result, construction has been suspended in seven locations in response to a Lahore High Court stay order.

In addition to the public transportation projects for each of the remaining three provinces—the Karachi Circular Railway, the Greater Peshawar Region Mass Transit system, and the Quetta Mass Transit system²⁶—the railway has been on the backburner for more than a decade. Although the government of Japan had repeatedly expressed interest in financing it, the provincial government of Sindh requested that the project be included in the CPEC portfolio. The Japan International Cooperation Agency had estimated the cost to be \$2.5 billion.

A feasibility study for the Quetta Mass Transit system was reportedly completed in April 2017, but whether one has been performed for the Peshawar rail system is unclear. The system does use existing railway tracks to promote connectivity in Quetta and Peshawar and surrounding cities. Given the weakness of revenue collection in Balochistan and Khyber Pakhtunkhwa, it is also unclear whether these public transport systems will need subsidies and whether the provincial governments have the fiscal resources to provide them.

Other Infrastructure

In addition to road network development, China will upgrade Pakistan's main railway line, the ML-1, which connects Karachi to Peshawar. The \$8.6 billion project will allow for maximum speeds up to a hundred miles per hour, making the beleaguered Pakistan Railways a more viable passenger and cargo transit option. Rail cargo in Pakistan is particularly underutilized and these upgrades could help drive down freight costs.

In December 2016, China also agreed in principle to fund additional road networks linking Azad Jammu and Kashmir and Chitral to the CPEC route as well as the Keti Bunder seaport in Sindh province, east of Karachi and Port Qasim. The costs of these projects have not been publicly disclosed, and it is unclear whether feasibility studies have been conducted.

Gwadar Port

Through CPEC, China is developing the Gwadar port as a viable hub for global trade. At present, the port is functional and capable of handling both bulk and container traffic. Through a Chinese government concessional loan under CPEC, breakwaters are being constructed and berthing areas and channels are being dredged to allow for additional terminals.

A six-lane road, the Gwadar Eastbay Expressway, will connect the port to the Makran Coastal Highway. Funded through an interest-free loan, it will also have space for a railway corridor for future lines that could connect upcountry through existing lines in Jacobabad or Karachi as well as to mineral project sites in both Afghanistan and other parts of Balochistan.

Additional projects include infrastructure for the Gwadar Free Zone, which is being constructed within the premises of the port area and will be home to export-oriented industries. The free zone provides foreign investors with 100 percent ownership, a twenty-three-year tax holiday, and an exemption on custom duties for material used in the construction and operation of the port.²⁷ Its first phase targets fish processing, halal food, and other light industries.

Through a \$230 million Chinese government grant, Gwadar will also be home to a new international airport. The present Gwadar airport can handle only small ATR aircraft.

China is also funding the development of several goodwill projects in Gwadar, including the construction of a fresh water treatment and supply facility for the local population, a public hospital, and technical and vocational institutes.

Alongside CPEC projects, the Gwadar Development Authority (GDA), staffed by local Baloch, is also taking the lead in developing and managing projects within the city, such as the coastal Marine Road.

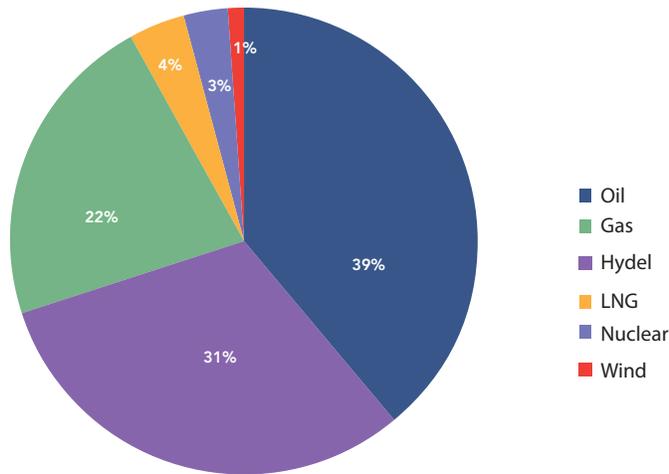
Energy Supply

CPEC's industrial potential cannot be realized without an ample and reliable energy supply—both electricity and gas. For the past decade, Pakistan has suffered from endemic electricity shortages, an expensive electricity fuel mix, an inefficient and lagging transmission system, and shortages of gas for industrial units. Adequate, cost-competitive electricity and fuel supplies are prerequisites for Pakistan's further industrialization. As a result, around 64 percent of CPEC's phase one expenditures will go toward electricity generation and transmission projects. Electricity projects offer guaranteed rates of return for independent power-producing companies and are attractive investments.

Most CPEC energy projects are coal fueled, in terms of both expenditure and electricity generated. Coal is currently a small component of Pakistan's fuel mix. Most of Pakistan's electricity is currently fueled by expensive furnace oil and high-speed diesel, which are being replaced by regasified liquefied natural gas, which is more expensive than furnace oil at current prices, but more efficient and less prone to price shocks.²⁸ An overreliance on furnace oil and high-speed diesel as electricity fuel sources increases Pakistan's vulnerability in the event of a surge in the price of oil.

CPEC is an integral part of Pakistan's shift toward a more diverse, less costly electricity fuel mix. Pakistan aims for, and will likely succeed in achieving, a massive reconfiguration of its electricity fuel mix by 2020 (see figure 4). Its Ministry for Water and Power projects that furnace oil's weight in the country's electricity fuel mix will drop to 14 percent by 2020 (from 39 percent in 2015). Within the same period, coal is expected to rise from a negligible percentage to 24 percent, hydroelectric generation will continue to be the top source at 26 percent,

CPEC's industrial potential cannot be realized without an ample and reliable energy supply.

Figure 4. Pakistan's Electricity Fuel Mix, 2015

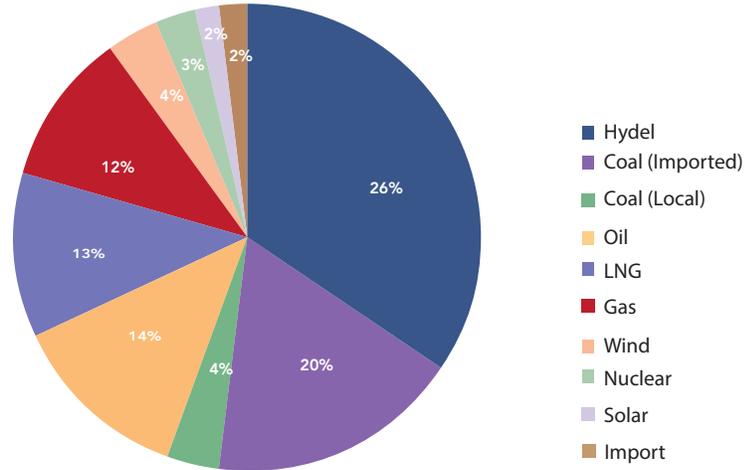
Source: Author's compilation based on Pakistan Ministry of Water and Power data.

and liquefied natural gas (LNG) will grow from 4 percent to 13 percent.²⁹ Non-hydroelectric renewables will also increase from 2 percent to 6 percent of the electricity fuel mix composition, but are presently not reliable enough to be the backbone of the grid (see figure 5).

Pakistan is not alone in the region in its shift toward coal. Bangladesh plans for an even more drastic embrace of coal as a long-term electricity fuel source as its recoverable natural gas reserves dwindle. Cheap electricity has helped propel Bangladesh's garment industry into a global leader, far eclipsing that of Pakistan. Cheap domestic natural gas has provided Bangladesh with upward of 75 percent of its electricity fuel in recent years, whereas Pakistan has relied on costly furnace oil. Bangladesh aims to fuel most of its electricity by coal by 2030; nuclear energy also plays an important role.³⁰

Pakistan's Planning Commission originally touted that a total of \$34 billion in CPEC electricity projects would generate around 17,000 megawatts (MW) by 2020.³¹ It also pledged that close to 9,000 MW of those projects would come on line before the 2018 elections, bringing an end to Pakistan's electricity shortfall.³² But it will not only fall short of ending the electricity deficit, it will also end up adding approximately 8,500 MW of installed electricity generation capacity to Pakistan's grid by 2020, roughly half of its original goal. As these deadlines near, Pakistani officials have begun to publicly recognize the commercial infeasibility of some proposed CPEC electric power projects. In May 2017, the Planning Commission officially dropped the Gadani Coal Power Project, Muzaffargarh Coal Power Project, Salt Range Mine Power Project, and Sunec Wind Farm from the CPEC portfolio. The Pakistani press has reported for well over a year that most of these dropped projects would likely be delisted from CPEC.³³ At the same time, three in four of the projects were not included on a list of CPEC projects that the Embassy of China published in Pakistan in 2016.

Pakistan also has a sizable number of energy projects being implemented outside of CPEC—many with Chinese partners—that are expected to add more installed electricity generation capacity as CPEC projects by 2020.³⁴ In total, more than 17,000 MW of installed electricity generation capacity will likely be added to Pakistan's grid by 2020 through CPEC

Figure 5. Projected Electricity Fuel Mix, 2019–20

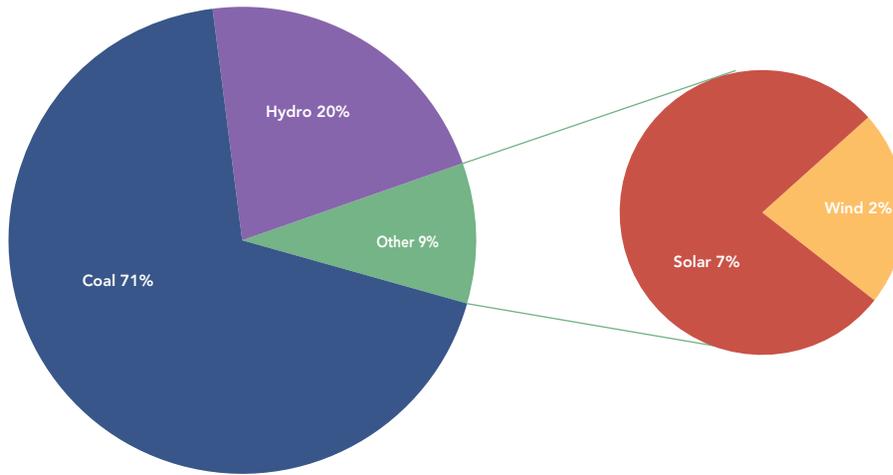
Source: Author's compilation based on Pakistan Ministry of Water and Power data.

and non-CPEC projects. Pakistan's National Electric Power Regulatory Authority (NEPRA) estimates peak demand to be close to 28,000 MW by 2020, annual demand growth averaging at 5.5 percent between FY 2015–16 and FY 2019–20.³⁵ But Pakistan will need to continue to add more power to its grid to both meet rising demand and secure a 20 percent reserve margin—that is, surplus electricity generation capacity above peak demand so as to handle unforeseen surges in demand and enable the grid to supply end users during power plant or grid maintenance and repair (see figure 6).

Although the Pakistan Muslim League (Nawaz) (PML-N) government is unlikely to meet its stated goal of ending the country's energy shortages by the 2018 general elections, it is likely to complete most of CPEC's first phase electricity projects by 2020. These, combined with non-CPEC initiatives, will likely bring an end to Pakistan's electricity deficit but require power sector reforms. Electricity transmission and distribution losses are at an estimated rate of 20 percent—due to poorly maintained lines, blatant theft, and nonpayment of bills by consumers. The phasing out of costly, short-term electricity projects using furnace oil and high-speed diesel fuel will also drive down the actual cost of electricity generation in the country and could aid in bill collection.

The portfolio of CPEC energy projects has often been subject to change. Five projects have been dropped from the portfolio, three of which involve coal power. Some have been dropped because of size, an inability to agree on commercial terms, or the lack of a viable fuel supply transport infrastructure.

The biggest failure is Gadani. The park, located in Balochistan but close to the Karachi city limits, was originally envisioned as a massive project of ten 660 MW coal-powered reactors. In May 2014, Prime Minister Sharif conducted the groundbreaking for the project, which was the centerpiece of his new government's energy policy, marked by fast-track projects with lower fuel costs.³⁶ Although Gadani's coastal location would provide savings on potential inland coal transportation costs, it would also require the construction of a jetty for loading imported

Figure 6. CPEC Electricity Fuel Sources (% installed capacity)

Source: Author's compilation based on Planning Commission of Pakistan data.

coal. Pakistan was unable to secure funding for the jetty and marine infrastructure, which alone would cost \$1 billion. By February 2015, Islamabad had downgraded the project to four reactors, but China still did not agree with the design and cost.³⁷

A power project in Jhelum using coal mined from Punjab's Salt Range region was also dropped from the CPEC portfolio after the China Machinery Engineering Corporation and Pakistan's NEPRA failed to agree on a tariff.³⁸ Other questions had to do with the sufficiency of the carbon content of the locally sourced coal.

Additional projects may be dropped because feasibility studies have yet to be completed. Indeed, part of the volatility of CPEC's energy projects stems from the wide variation in terms of maturation and the low standards for what constitutes a CPEC project. Some of the electricity projects agreed to in 2015 were ready for construction because they had been planned by previous governments. Others, such as the Rahimyar Khan Coal Power Project, still await feasibility studies. Although they have been described as CPEC projects, their economic viability has yet to be assessed and commercial contracts have yet to be finalized.

CPEC electricity projects have been dropped or face setbacks for other reasons as well. One is that electricity generation projects are in many ways far more complicated than road infrastructure projects. They require securing a fuel supply (for example, imported coal or natural gas) and the existence or establishment of a logistics infrastructure to transport the fuel supply (such as pipelines, port jetties, regasification terminals, or rail tracks). They also need a transmission line to connect a power generation source to the electricity grid. Coal projects, in particular, are complicated logistically. For most Punjab-based coal power projects, Pakistan needs to import coal via Port Qasim up country, and thus the capability of Pakistan Railways to transport the coal needs to be assessed and factored into the electricity costs. Political pressure to tap domestic sources of coal with low carbon content from parts of Punjab and Sindh is also a factor. An economic nationalism of sorts has produced unrealistic demands to use local fuel sources that may end up being economically inefficient when freight costs and carbon content are factored in.

Chinese companies, however, have aimed for higher returns on equity.

Two, CPEC energy projects are commercial ventures subject to approval from Pakistani government bodies and regulatory authorities (which often have competing interests) and agreement between independent, commercial power producers in China and Pakistan. At times, Chinese and Pakistani parties have been unable to settle on mutually agreeable terms, which has prolonged or terminated negotiations. As a result of these challenges, the terms as to which energy projects are included as part of CPEC have fluctuated.

Although Pakistan has a relatively liberal private power production policy and an efficient mechanism to facilitate such investments—Private Power and Infrastructure Board—and China’s Exim Bank and Silk Road Fund are willing to finance tens of billions of dollars of electricity projects, the predetermined (upfront) tariff rates at which independent power producers sell electricity to Pakistan’s National Transmission and Dispatch Company (NTDC) must first be approved by NEPRA.

Chinese companies, however, have aimed for higher returns on equity, which has led to pushback from some Pakistani regulatory authorities. For example, NEPRA has resisted offering higher tariffs for CPEC projects, including the Matiari-Lahore transmission line, which will transmit from Sindh to Punjab 4,000 MW of electricity generated from five CPEC coal projects. Both NTDC and the Private Power and Infrastructure Board have pushed to accommodate the Chinese company’s demands for a higher tariff. NEPRA objected, however, stating that it was “against the rules to offer an upfront tariff for a single project. It also objected to the tariff being executed without competitive bidding.”³⁹ As of November 2016, it appears that NEPRA will issue a revised, slightly higher compromise tariff.⁴⁰

NEPRA has general tariff rates and must strike a balance between institutional pressure to fast-track CPEC projects and maintain its autonomy to adjust tariff rates according to market shifts. For example, it cut the solar tariff by 34 percent in December 2015 after a global drop in solar energy costs, prompting the Chinese company Zonergy, which is installing 900 MW of solar electricity production in Punjab, to initiate legal action.⁴¹ In one instance, NEPRA held to its stance on the tariff and a potential Chinese investor backed out.⁴²

Despite these challenges, progress in implementing CPEC energy projects is unmistakable. The Dawood Wind Farm is now operational and connected to the electricity grid. Other wind projects will be completed this year. The first unit of the Sahiwal Coal Power Project was brought online in May 2017—ahead of schedule.⁴³ In January, the plant was connected to the electricity grid and received its first shipment of coal by Pakistan Railways. The freight business of Pakistan Railways has been in freefall for years. Nonetheless, it managed to secure a transport agreement with the operator of the Sahiwal Coal Power Project and procure freight locomotives from General Electric, which were delivered in January 2017.⁴⁴

The Block-II Thar coal mining and power plant projects are progressing and expected to be online in 2019. For years, Pakistan has struggled to find a commercially viable use of its vast lignite deposits in the Thar region of Sindh. The steady pace of progress in the Block-II region appears to be leading to a virtuous cycle, renewing the dormant mining and power plant project in Thar’s Block VI.⁴⁵

Phases II and III (2020–30)

Greater clarity on the next two phases of CPEC will emerge when the project’s long-term plan is finalized and made public.⁴⁶ Two versions of the long-term plan have been discussed in the Pakistani press: an abridged thirty-page document from 2017 and a full 231-page report from 2015.

In May 2017, excerpts from a draft of the full long-term plan dated from 2015 were leaked by the Pakistani English-language daily *Dawn*.⁴⁷ Planning Minister Ahsan Iqbal described the report as outdated, stating that the full long-term plan is actually a “live document” subject to change. Still, although the extent to which the full and abridged drafts are aspirational is unclear, they, combined with the new projects added to the portfolio, offer a sense of the future direction of CPEC.⁴⁸

Pakistani and Chinese officials have both said that the first phase of CPEC will enhance Gwadar-Kashgar road connectivity and that the second and third phases will build on the expanded electricity generation capacity. Additional electric power projects, particularly in the Indus Cascade region, which has a generation potential of 40,000 MW of hydroelectric power, are possible. The focus of future phases of CPEC, however, will be industrial zones to be established along the three CPEC routes. In December 2016, ten industrial zones were added to the portfolio, though it is unclear how far along in planning they are. The costs have also not been disclosed publicly and thus it is unclear how many will prove to be viable. A relatively equitable distribution of projects on a regional basis appears to be one factor in determining which industrial zone projects have been provisionally included in the CPEC portfolio. Pakistan’s two largest provinces, Punjab and Sindh, will each have two CPEC industrial zones. Balochistan and Khyber Pakhtunkhwa, as well as its four other regions—Azad Jammu and Kashmir, the Federally Administered Tribal Areas, Gilgit-Baltistan, and Islamabad—will all have one each.⁴⁹

Pakistani officials from all four provinces have visited China to learn more about its experience with special economic zones. The aim is to leverage local raw materials and low-cost labor as well as Chinese capital and expertise, and to develop value-added industries that can service both the domestic and export market, including China. These industries include food processing, household appliances, materials, mineral extraction and processing, and textiles.

The second and third phases will also involve further development of Gwadar City, to emphasize industrialization, most likely in the form of energy, materials, and petrochemicals, taking advantage of the coastal location and proximity to the Persian Gulf. Gwadar and Pakistan’s underexploited coastline, from the border with Iran all the way to the border with India, may also be developed into a tourism belt.

The leaked draft of the full long-term plan also places a heavy emphasis on agriculture, according to *Dawn*. It proposes establishing Chinese agricultural technology demonstration centers on leased land in Pakistan. China has used agricultural technology demonstration centers in Africa and other regions to train the local population in best practices, transfer technology, and create business opportunities for Chinese agriculture and agriculture technology companies.⁵⁰ Agriculture has received scant mention in either Chinese or Pakistani public statements on CPEC. As a result, the extent to which it still factors in the CPEC plan is unclear. But given that China is the world’s largest importer of food, and that agriculture makes up 20 percent of Pakistan’s gross domestic product (GDP) and is its largest employer, agriculture is an underexploited area of convergence between the two countries.⁵¹ Pakistan is among the global leaders in the production of cotton, rice, wheat, and a host of fruits and vegetables, but deficiencies in supply chain management inhibit the diversification of exports and value-added industries, leading to a high rate of wastage. Pakistan, which faces a long-term water crisis, also needs to adapt to less water-intensive crops.⁵²

In addition to agricultural and industrial projects, CPEC’s future phases could also see more infrastructure projects. Gwadar is likely to be connected to Pakistan’s existing rail network through one or more nodes—Jacobabad, Karachi, or Mastung. Rail connectivity from

Gwadar to Jacobabad would provide linkage to both central Pakistan and the border with Afghanistan. Connectivity to Mastung would allow access to Afghanistan and the Reko Diq region near Iran—both home to Chinese mineral investments. Pakistan's railway network could also be extended from Havelian to the border with China at Khunjerab. But the project could be cost prohibitive. A preliminary feasibility study has been conducted on extending an offshoot of the ML-1 from Havelian to the border with China at Khunjerab. According to a now former Planning Commission official, the project would take five to seven years and cost \$60 to \$100 billion. However, publicly, Pakistan's Railways Minister Khawaja Saad Rafique said that the preliminary study estimated a cost of \$10.5 billion.⁵³

Finally, future CPEC rail projects could connect Pakistan's railway network to Gwadar and China or rehabilitate its secondary lines, the ML-2 and ML-3. These projects, however, are of questionable economic value and likely contingent on the success of phase one efforts. Pakistan, in conjunction with China or other international partners, may establish additional routes to China, including one connecting Azad Jammu and Kashmir to Khunjerab and another through Gilgit-Baltistan to China. Pakistani government officials also hope for CPEC to link to other regional states, including Afghanistan, Iran, and Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. Links to India are also a possibility, through existing and dormant Indo-Pak border crossings. Links to Afghanistan and India are stymied by enduring geostrategic rivalry. A natural gas pipeline from Pakistan to Kashgar and electricity transmission line delivering energy from Xinjiang to Pakistan's Gilgit-Baltistan region have also been discussed.⁵⁴ None of these projects, however, appear to be reflected in the CPEC long-term plan.

Potential Impact

The near-term impact of CPEC on Pakistan will be quite visible. One, it will reshape the demographics of Gwadar city, the overall population of which will grow, led by an influx of non-Baloch economic migrants from other regions of Pakistan. Two, CPEC could help Pakistan move toward and sustain higher GDP growth rates of 7 to 8 percent, by ending the country's electric power shortages, making its ground transport system more efficient, improving the competitiveness of its value-added exports, and modernizing its agriculture and livestock industries. In the near-term future, Gwadar is unlikely to play a major military role for China or Pakistan, but in the long-term, it could serve as a dual-use port for the Chinese Navy.

Demographic

As Gwadar grows, an influx of migrant labor from other regions of Pakistan is likely if not a given. The area will be a magnet for non-Baloch laborers (particularly from the Pashtun areas of Balochistan), Punjabis from central Punjab, and Seraiki-speakers from southern Punjab. According to development economist Kaiser Bengali, although Punjab is Pakistan's most affluent province, it is also home to the country's most intense poverty. This has led to high levels of migration from Punjab to outside the province and abroad. Notably, the most illegal Pakistani immigrants abroad are from central Punjab, which is home to major human trafficking networks. Gwadar is likely to attract large numbers of economic migrants the same way Karachi has.

The influx of non-Baloch migrants to Gwadar, which is one of Pakistan's poorest districts, could pose risks to social cohesion in the area as ethnic Baloch become a minority and compete for jobs with economic migrants. Gwadar will also likely see a rise in property purchases by nonresidents. From 2003 to 2008, the surging Gwadar real estate market was matched by high levels of speculation and fraud.⁵⁵ An investigative report in Pakistan's *Herald* magazine

described it as “one of the biggest land scams in Pakistan’s history.”⁵⁶ Land was illegally allotted to influential elites and developers from other parts of Pakistan. Additionally, investors from other parts of Pakistan were sold nonexistent plots of land. Property values plunged by 2009 as political instability increased.⁵⁷ With the launch of CPEC, property values in Gwadar have risen, to the benefit of locals.⁵⁸

Economic

Pakistan’s economy is projected to grow comfortably, in a modest 5 percent range, in each of the next few fiscal years, buttressed by growing domestic demand and a rising services sector. The World Bank, factoring in CPEC investments, expects the GDP rate to rise to 5.5 percent by 2018 and to 5.8 percent in 2019.⁵⁹ Pakistani government officials are also optimistic. Khurram Dastgir-Khan, the former minister for commerce, in an interview described CPEC as the “anchor store for the Nawaz Sharif vision for developing Pakistan.”

On completion of CPEC’s first phase by 2020, a possible end to the energy crisis, and a more efficient ground logistics network, Pakistan could inch closer to the requisite 7 to 8 percent growth rate required to create enough jobs for new entrants into the labor market. The country has potential in value-added exports and agricultural output that has been held back by poor policymaking, energy shortages, political instability, terrorism, and climate change. As a result, exports as a percentage of GDP continue to decline, from 16.7 percent in 2003 to 13.3 percent in 2013 and 10.9 percent in 2015—currently the second lowest rate in South Asia after Afghanistan.⁶⁰

Political and security risks in Pakistan have not declined enough to change perceptions among US-based investors and merchandise buyers. Pakistan also remains vulnerable to shocks, such as a surge in global commodity prices, though its shift toward LNG will mitigate the impact of an upward shift in the price of oil. Another vulnerability is a potential drop in remittances due to anti-Muslim immigration policies in the West or political instability in the Persian Gulf. These factors could prevent Pakistan from being able to pay back its climbing external debt and may result in a return to an International Monetary Fund bailout and restrictive structural reform program that would inhibit growth.

Gwadar and Karachi Ports

In Gwadar, Pakistan is developing what is essentially an entirely new urban and industrial center—the first major settlement away from the Indus River, its tributaries, and other river networks. Although logistical and sociopolitical challenges will hobble rapid growth in the city, the new development will spur the growth of housing, infrastructure, and retail in an area that presently has little economic activity beyond fishing, smuggling, small-scale furniture manufacturing, and ice factories. New industries will be established, initially leveraging growing materials demand in the city due to construction, lower labor costs, as well as incentives provided by the Gwadar Free Zone, including long-term exemptions on income, dividends, and sales taxes as well as import duties.⁶¹ The Gwadar port region will feature an LNG terminal and serve as a hub for regional natural gas pipelines.⁶² An oil refinery, servicing the expected freight traffic in Gwadar and perhaps even the broader Pakistani market, is also possible.⁶³

Indications of progress on initializing the port area’s industrial operations are evident. As of April 2017, 60 percent of the first phase of the free zone was completed.⁶⁴ The remaining work is expected to be finished by the end of 2017.⁶⁵ In December 2016, the China Overseas Ports Holding Company signed a memorandum of understanding with China’s Foton Motor Group to establish an automobile assembly plant in Gwadar’s Free Zone.⁶⁶ BaoSteel, the

world's second-largest steel manufacturer, is also in talks with the Balochistan provincial government to establish a steel factory in Gwadar.⁶⁷

The lower cost of land and labor and proximity to other markets could make Gwadar more attractive for some niche industries: food processing and exports, fertilizer and petrochemicals, mineral processing, and shipbuilding and repair. Initial growth will be driven by infrastructure development—the Gwadar port, connecting roads, and an international airport. But Gwadar's industrial areas could serve as low-cost assembly locations for footwear and ready-made garments if provisions for energy and worker housing are made.

Although the China Overseas Ports Holding Company manages the Gwadar Free Zone, the provincial government operates two others: the Gwadar Export Processing Zone and the Gwadar Industrial Estate, both located at a distance from the port but along the Makran Coastal Highway. The Gwadar port region is expandable northeastward in this area along the coast, parallel to the Makran Coastal Highway. Gwadar Port Authority officials state that the seafront could extend as far as thirty miles (forty-eight kilometers), which would make it the largest in the region, a potential total of ten thousand hectares of port land. Gwadar Port Authority officials state that the port could be further dredged to a draft of twenty meters and expanded to accommodate a total of 120 berths.⁶⁸

Uniquely a Chinese-operated port in the Arabian Sea region with a direct connection to Eurasia, Gwadar has the potential to seize some of the regional transshipment market. The Chinese bring both a need and a capability to harness their expertise in making the port economically competitive. China operates seven of the world's ten busiest container ports, accounting for 10 percent of all global trade. Chinese companies have a mixed record of operating ports outside of the country. China's COSCO Holdings, for example, has established the Greek port of Pireaus as both “an important gateway to the EU” and “a major transshipment hub in the Mediterranean.”⁶⁹

Former minister of commerce Khurram Dastgir-Khan envisions Gwadar as the “port of choice” for Central Asian countries—particularly Tajikistan and Uzbekistan. But given the vast size of Central Asia, it is important not to view the region as a monolith. Iran's Bandar Abbas and Chabahar—the port that lies seventy miles from Gwadar and is being constructed by India—are likely better options for Central Asian states such as Kazakhstan and Turkmenistan.⁷⁰ Pakistani access to Central Asia requires Afghan acquiescence. But trade between Afghanistan and Pakistan has declined in the past year because of both a slowing economy in Afghanistan and blockage of cross-border trade at various times by both Islamabad and Kabul. As a result, prospects for Pakistani access of Afghanistan's road networks for Central Asia transit trade are currently dim—and may require Pakistani concessions to Afghanistan on India transit trade in return. Although Pakistan seeks greater economic ties with Afghanistan, and the Gwadar and Karachi ports are more viable options for southern and eastern Afghanistan than Chabahar is, Afghanistan has sought to move away from trade with Pakistan, regarding it as secondary to the differences between the two countries on cross-border terrorism. Dastgir-Khan stated that his ministry sent a preferential trade draft agreement to Kabul, but that “it has been languishing at their [Afghan] National Security Council for two years.” In lieu of the Afghanistan transit corridor, Pakistan could eventually access Kyrgyzstan, Uzbekistan, and Tajikistan via China, but the route would be lengthy.

Industrialization and road infrastructure development in Xinjiang is likely to drive an increase in freight traffic along the China-Pakistan border, some of which could use the Gwadar port. In addition to developing infrastructure inside Pakistan, China is investing \$25 billion in

road development in Xinjiang, including a massive realignment of Highway 314, which connects Kashgar to the Khunjerab border with Pakistan.⁷¹ At the same time, the Xinjiang government is providing incentives, such as heavily subsidized raw materials and electricity, to Chinese manufacturers that establish factories in the region. The incentives spurred approximately \$7 billion in investments in the area's textile industry in 2016.⁷² Beijing has an ambitious program to create a million textile jobs in Xinjiang by 2023.⁷³ Although textile products manufactured in Xinjiang are more likely to be exported to European markets through Central Asia via rail, some could make their way through Pakistan to either the Gwadar or Karachi ports.⁷⁴

In the view of Irfan Shahzad, an expert on Sino-Pak relations, the greatest competitor to the Gwadar port is not Chabahar, but Karachi. Indeed, the completion of the Pakistan deep water container port in Karachi in 2017 and the Karachi-Lahore Motorway by 2020 will make Karachi an attractive destination for transshipment and energy trade for Afghanistan, some Central Asian states, and even northwestern India. Historically, Karachi was the main port used by importers and exporters in the Indian city of Amritsar. After the completion of the Karachi-Lahore Motorway, Karachi will be closer to Amritsar by both distance and time than any Indian port, including Mumbai, Mundra, or Surat. Because of its sixteen-meter draft, Karachi will be able to handle larger vessels than Gwadar and its fourteen meters. Karachi is also located within a global megacity that has both a growing middle class and large industrial sector bolstered by upland connectivity along a six-lane motorway.

Still, the Gwadar port could offer some distinct advantages in transshipment. Congestion is a problem at the Karachi port and the resulting demurrage charges can be costly.⁷⁵ For example, edible vegetable oils, which are in high demand in Pakistan, can often wait for seven to eight days in Karachi. As a result, congestion in Karachi could make Gwadar a cheaper option even when factoring inland shipping to and from Gwadar. With a large, growing population, Pakistani officials see a future in which Gwadar and Karachi could share pieces of a growing pie. Gwadar also has the only roll-on or roll-off facility in Pakistan and could serve for automobile imports and exports.

Chinese freight companies could also use Gwadar and Karachi rather than Dubai as transshipments hubs for some of its eastern seaboard traffic, loading containers off larger ships onto smaller en route to other ports (and vice versa). Both Gwadar and Karachi will need to maintain competitive pricing to shipping companies and improve the efficiency of their operations, though, to be attractive as regional transshipment hubs and to maintain a leg up on the growing number of regional competitors, which include Colombo in Sri Lanka, Chabahar in Iran, Duqm, Salalah, and Sohar in Oman, Mundra and Vizhinjam in India, and Jebel Ali and Port Khalifa in the United Arab Emirates. The International North-South Transport Corridor that includes India, Iran, Oman, Russia, and several Central Asian states and connects India to Europe via Iran's Bandar Abbas and Chabahar ports is another alternative regional connectivity model to both CPEC and BRI.

Presently, Pakistani ports not only have higher dwell times than regional competitors, but also higher dock charges, port dues, and other fees. A leading shipping company executive estimates that "a Hyundai Merchant ship of 94,511 gross register tonnage for a two-day stay at Karachi will have to pay \$82,905, which is 77 percent higher than India's Nhava Sheva port and 51 percent more than Sri Lanka's Colombo port."⁷⁶

Some foreign observers have stated that Gwadar and CPEC also factor into China's energy security strategy, enabling Beijing to deleverage itself from the Straits of Malacca. China, though, has another existing and more economically viable option for importing energy that

avoids the Malacca. Parallel gas and oil pipelines run from the Myanmar coast to Kunming, the capital of China's southeastern province of Yunan. Initially Beijing faced local resistance, but royalties of almost \$1.76 billion a year, combined with \$25 million in social-sector spending helped ease opposition.⁷⁷ The Myanmar transit route is rarely mentioned in Pakistan's domestic discourse on the significance of CPEC for China.

Construction and Materials Sectors

CPEC is helping contribute to sustained growth in Pakistan's construction-related industries, including cement and steel.⁷⁸ Cement sales in October 2016 rose by 15.88 percent relative to the same month in the previous year.⁷⁹ Although Chinese companies are also importing raw materials from China for CPEC projects, much of the material is and will continue to be sourced from Pakistan.

A construction boom in Pakistan is providing short- to medium-term support for the local cement industry. Local consumption grew by 17 percent in 2015–16 as exports continued to decline. Although Pakistan is the world's sixth largest exporter of cement, local consumption continues to grow. Exports peaked in 2008–09. The decline since then is due to the withdrawal of foreign troops from Afghanistan, trade restrictions by Kabul, and protectionism from South Africa and east African states.⁸⁰ Opportunity exists, though, to develop cement factories in Gwadar to supply local construction and perhaps even an export market, targeting Afghanistan, the Gulf Cooperation Council, and East Africa.

Growing domestic demand for fast-moving consumer goods and ready-made garments has led to a bustling retail sector in Pakistan.

Value-Added Exports

Growing domestic demand for fast-moving consumer goods and ready-made garments has led to a bustling retail sector in Pakistan. Combined with real estate, they are among Pakistan's most promising sectors and subsectors. Given a new automobile industry policy and improvements in Pakistan's energy outlook, more foreign automobile manufacturers are interested in establishing assembly units in Pakistan. Currently, the domestic market is dominated by Honda, Suzuki, and Toyota, whose local partners have, until recently, successfully lobbied for a restrictive automobile market.⁸¹ Renault-Nissan and China's FAW Group are expected to establish assembly plants in Karachi within the next two years and could be followed by Volkswagen AG and Audi.⁸² Gwadar, as discussed, will also be home to its own heavy and light industries.

Although the domestic market is promising, Pakistan has lagged behind most of its South Asian peers in the pace of its economic growth as a result of declining exports. For CPEC to be a true game changer, it will have to increase the competitiveness of Pakistani exports. One risk is that Chinese imports could flood the Pakistani domestic market and that Chinese exports from Xinjiang could outcompete Pakistani products in the global market. Indeed, the first draft of the full version of the CPEC long-term plan mainly describes Pakistan as a supplier of low value-added inputs, such as cotton and fabrics, for Xinjiang's textile industry.⁸³

The impact of the 2007 FTA with China has been disastrous for Pakistan. Beijing has proved to be a tough negotiator. "China asks for every possible [trade] concession, but [does not reciprocate] when it is time to offer one in return," says Sino-Pak relations expert Irfan Shahzad. Pakistan will have to protect itself from Chinese dumping and underinvoicing, while also encouraging additional investment in local, export-oriented manufacturing.⁸⁴

Former commerce minister Dastgir-Khan believes that the worst effects of the Sino-Pak FTA are in the past: "Pakistan already has a ten-year-old free trade agreement with China.

Most of the disruption that could [have] happened has happened to Pakistan's economy. And we have borne that shock reasonably well.”

China is moving away from lower productivity manufacturing, which is an opportunity for Pakistan to claim (or reclaim) market share lost in areas such as textiles, which constitute the largest employer (30 percent of the workforce) and source of exports in the country (20 percent), and make up around 8 percent of Pakistan's GDP.⁸⁵

CPEC could help Pakistani exporters by driving down the cost of electricity and freight and improving efficiency through foreign direct investment. As mentioned, the Karachi-Lahore Motorway will shorten travel time between central Punjab and Karachi, reducing fuel costs. Presently, comparatively higher input costs put Pakistan at a disadvantage vis-à-vis regional garment industry competitors.⁸⁶

Pakistani textile manufacturers could benefit from investments from Chinese companies that have superior technology and management practices, according to interviewees in the industry, Chinese companies with government connections and early awareness of the CPEC plan having sought out partners in Pakistan for potential investments. But large-scale Chinese investment in Pakistan's textile industry has been scant since two Chinese companies invested in Masood Textiles Mills in 2015. The absence indicates little potential in terms of opportunity, Karachi-based entrepreneur Moazzam Husain explained in an interview. “The private sector moves much faster,” he added, “And I would have expected far greater [activity].”

According to a Faisalabad-based textile industry executive well acquainted with competitors in China, differences in business culture could inhibit Chinese investment in Pakistan's textile industry. Chinese companies, he added, have greater discipline and believe in multitasking and standard operating procedures. Their Pakistani peers, on the other hand, are on the whole far less regimented. Chinese manufacturers are also accustomed to lower costs of business and expect a host of incentives to operate, including fully constructed facilities and provision of gas, steam, and effluent treatment at below market rates. The Ruyi Group, for example, is provided electricity at its new Xinjiang factory at a rate of 5 cents per kilowatt hour, the Faisalabad executive explained, but Pakistani industrial units have paid double or triple that rate in recent years.

Pakistan's efforts to create industrial zones targeting the textile industry have failed because they have fallen short in providing such services. The Pakistan Textile City in Port Qasim, conceived in 2003, will soon be shelved because the government's inability to provide gas, electricity, and water prevented it from selling a single plot to investors.⁸⁷ Similarly, Faisalabad executives explained in interviews, tenancy at the Value Addition City near Faisalabad has been low because laborers were not offered onsite boarding and lodging, and factories were not provided with steam.

The Faisalabad Industrial Estate Development and Management Company, which operates Value Addition City, appears to have learned its lessons from that failure. Company personnel have in recent years visited industrial zones across Pakistan, the Gulf Cooperation Council, and East Asia to learn best practices. The company has since launched a new project, the M3 Industrial City, located just outside Faisalabad along a motorway that will connect to the Karachi-Lahore Motorway. According to a company official, the M3 Industrial City will reuse effluent water to generate power and will provide childcare and possibly even a shuttle service for workers using Faisalabad's railway stations. Affordable mass transportation for workers to the suburban location is part of a plan to “deindustrialize” the Faisalabad city and move industries to its periphery.⁸⁸ Many of Pakistan's top textile manufacturers have purchased plots.

A leading Pakistani textile executive with a sizable customer base in the United States fears that in five years Pakistan may no longer be a major player in the global textile industry. Nonetheless, he also believes that Pakistan's GSP+ status (Generalized System of Preferences) will still make it attractive to potential Chinese investors interested in accessing the European Union market. Additionally, Aamer Saleemi of the Faisalabad Industrial Estate Development and Management Company notes that Pakistani wages are far more competitive than China's and that these savings could offset some of the advantages China offers its manufacturers through subsidies.⁸⁹

Agriculture and Livestock

According to the leaked draft of the full long-term CPEC plan, China is keen on investing in agriculture and livestock industries in Pakistan. That said, no current CPEC projects deal directly with agriculture and livestock. The CPEC road networks and a \$500 million rural roads program by the government of Punjab, however, will indirectly aid agriculture in Pakistan by improving connectivity and the efficiency of road logistics.⁹⁰

The agriculture sector in Pakistan is hampered by the lack of investment and research and development, but retains considerable opportunity for growth and diversification. In 2016, agriculture accounted for 21 percent of Pakistan's GDP, employed 44 percent of the country's labor force, and contributed to 78 percent of its exports (including textile and leather). Growth in the industry has slowed since the 1990s, however. In the past decade, the sector has underperformed, growing at an average rate of 3.3 percent.⁹¹ In the 1980s, by contrast, Pakistan far surpassed Bangladesh, China, India, Indonesia, and Vietnam, but all five countries have far surpassed it since then. Although Pakistan is China's second-largest supplier of rice and among the world's top five exporters, the yields of its rice crop—2,479 kilograms per hectare (2,212 pounds per acre) in 2016—are far below China's (6,709) and India's Punjab state (6,000).⁹²

Investment in agriculture in Pakistan could help China, a net food importer, secure food supplies as well as export its technology, expertise, and equipment to a new market, as it has done in Africa and Latin America. Chinese private-sector and state-owned companies may, as they have in other parts of the world, involve limited leasing or purchasing of land and more investments in food supply chains and infrastructure, including processing facilities.⁹³ With Chinese expertise, Pakistan, which faces a long-term water crisis, could shift away from water-intensive crops.⁹⁴

Strategic

Pakistani and Chinese officials mainly speak of the economic aspects of CPEC and the Gwadar port. Other observers, however, particularly from India, focus on the project's dimensions and potential second-order effects.

Indian news outlets frequently publish reports with unfounded claims of large numbers of People's Liberation Army personnel in Gilgit-Baltistan and other regions of Pakistan. Similarly, the Gwadar port is also depicted not as a future trade hub, but as a potential Chinese naval base.⁹⁵

As discussed, until the 1990s, Pakistani officialdom largely viewed Gwadar as a potential military base. After the bin Laden raid, Pakistani officials—largely to spite Washington—renewed talk of militarizing the port city. Pakistani Defense Minister Ahmed Mukhtar invited China to open a naval base in Gwadar. A Chinese official subsequently told the press that she was “unaware” of such a proposal.⁹⁶

Gwadar is in fact already home to PNS Akram, a modest naval base from which the Pakistan Marines and Navy secure the commercial port and adjoining coastline. The facility

is undergoing expansion. According to Mushahid Hussain, chairman of the parliamentary CPEC committee, a joint cantonment in Gwadar will service the army, navy, and air force. Berthing space of six hundred meters has been allocated to the navy, according to a 2016 report by Pakistan's Senate Defense committee. The same report recognizes the Gwadar port as "a significant addition to our maritime infrastructure," but identifies it as "primarily a commercial venture [that] affords substantial operational flexibility to the Navy."⁹⁷

Former and retired Pakistani officials are quick to dismiss the idea that Gwadar will in the near- to mid-term future play a major military role for the Pakistan Navy. A former senior Pakistani military official with close ties to Beijing says that the naval base in Ormara, located in between Karachi and Gwadar, will play a more critical role in Pakistan's maritime security. In fact, the Pakistan Navy is in the midst of a multiyear program to transition the natural deep-sea port of Ormara to be its future base for its submarines. Four of the six diesel-powered electric submarines that Beijing has sold to Islamabad will be built either at Ormara's Submarine Rebuild Complex or in Karachi, which is home to a long-established shipbuilding yard. Ormara will be a military-only port. It provides quick access to both Gwadar and Karachi. It is home to a remote data sensing facility, the RDS-Mianwali, where traffic along the Arabian Sea coast is monitored. The Pakistan Navy also operates a facility at Jewani, which serves as a surveillance area for Arabian Sea traffic. A naval air station will soon be operationalized in Turbat, farther inland but close to the Arabian Sea coastline. The Karachi port will remain the Pakistan Navy's main base of operations. Pakistan does plan to construct shipbuilding and repair facilities in both Gwadar and Port Qasim, however. In March 2017, the Pakistan Navy "fully activated" Task Force-88—consisting of aircraft, drones, gunboats, fast attack craft, and frigates—to guard the Gwadar littoral space.⁹⁸

The navy is the least funded of Pakistan's three military services, and it is unlikely that Islamabad would spread itself thin by devoting a considerable number of naval assets to Gwadar. Doing so would require acquisitions well beyond Pakistan's budgetary capabilities. The notion of commercial ports such as Gwadar serving a dual purpose, though, has potential. They can serve military purposes in war time, for example. An Indian observer of China's evolving maritime strategy notes that a Chinese submarine docked in 2014 at the Colombo South Container Terminal, a commercial port operated by a Chinese company, instead of the berths operated by the Sri Lanka Port Authority designated for military vessels.⁹⁹ Similarly, the Chinese-operated Gwadar could serve as one of a number of refueling stations for the Peoples Liberation Army Navy in the Indian Ocean region. Karachi, though, could easily play that role as well. In May 2015, for the first time, a Chinese submarine docked in the Karachi port for refueling and resupply.¹⁰⁰

The Indian approach toward CPEC seems to be to "impede it and increase the cost to Pakistan and China" through an aggressive information operations campaign, offering at least public relations and moral support to separatist groups that operate along the corridor.¹⁰¹ The attendant risk is that Pakistan becomes locked into an escalatory trap with India. If Pakistan perceives Indian support for militants in Balochistan to grow, it could engage in retaliatory action in Indian-controlled Kashmir, leading to an unvirtuous cycle. Indian officials have gone on the record to oppose Chinese assistance for and participation in development projects in the Gilgit-Baltistan region, which it claims.¹⁰² Indian officials, however, have privately noted their fear that an economically strengthened Pakistan that has achieved greater regional integration exclusive of India could be further emboldened to use militant groups as tools for its security policy.

For more than a decade, India has been positioning the Chabahar port in Iran, which it has supported, as a rival to Gwadar. Chabahar not only provides India and Afghanistan with an alternative to the Pakistan-based overland transit route, but also, along with Bandar Abbas, is a node part of the International North-South Transport Corridor connecting India with Russia, Central Asia, and Europe.

The Chabahar port has superior upcountry connectivity via road relative to Gwadar. In 2009, India completed a road in Afghanistan from Zaranj to Delaram, connecting Afghanistan's national highway network to the border with Iran. A \$1.6 billion project to connect Chabahar to Iran's existing railway network via Zahedan has stalled since the agreement was signed in 2010, but recent reports indicate that it is 25 percent complete.¹⁰³ In May 2016, India and Iran signed a deal allowing India to operate two berths at the Chabahar port.

Progress in developing the Chabahar port has stalled due to international sanctions on Iran and the lethargy of the Indian government. The Gwadar and Chabahar port projects, though, have some potential for synergy. Mining projects in the Reko Diq area could use the rail network in Iran to connect to the Chabahar port, for example. It may be cheaper to connect Reko Diq to the existing rail line in Pakistan to Iran than to build a much lengthier line directly to Gwadar or indirectly via Quetta. In addition, Iranian officials have expressed interest in joining CPEC. Relatedly, Pakistani officials have said that China has aided in improving relations between Islamabad and Tehran over the past year.

Pakistani officials envision CPEC as connecting to Afghanistan and Central Asia as well as to China.¹⁰⁴ As Tariq Fatemi, a senior diplomatic adviser to former prime minister Sharif, explained, "We are not merely going to connect Pakistan and China through the Gwadar-Kashgar Motorway. Pakistan will build the Peshawar-Kabul Motorway that will connect to the Kabul-Kunduz Motorway, that will then get into [the Central Asian nation of] Kyrgyzstan." Although Afghanistan's ambassador to Pakistan has been bullish about connecting to CPEC, his government appears to be trying to reduce its economic dependence on Islamabad, disconnecting itself from the Pakistani economy.¹⁰⁵ Trade along the Pak-Afghan border has dropped and Afghanistan's use of the Chabahar port is rising. For CPEC to have positive spillover effects in the region, geostrategic issues, such as cross-border terrorism, that underlie Pakistan's problematic relations with its neighbors have to be resolved.

One risk is that over time CPEC could be impeded by broader geopolitical conflict, mainly the growing Sino-Indian rivalry and US efforts to contain China. Observers in New Delhi and to a lesser extent Washington have exaggerated the strategic dimensions of CPEC, framing the Gwadar port project as a way for China to gain a military foothold in the Indian Ocean region. This, combined with tensions over Chinese claims in the South China Sea and a tighter US embrace of India as the anchor of its South Asia policy, could result in an unvirtuous cycle of tit-for-tat moves. US attempts to reframe the Asia-Pacific as the "Indo-Pacific" could also induce the Chinese to bolster its strategic presence in the Indian Ocean region. In other words, an overly aggressive Indo-US posture in the South China Sea could have reverberations in the Indian Ocean region, making their claims about Chinese military ambitions in Gwadar and the Arabian Sea rim a self-fulfilling prophecy. To avert such a scenario, Washington—while continuing efforts to ensure open seas in the South China Sea—should also mitigate potential negative externalities in the Indian Ocean region by consistently expressing its support for regional connectivity and trade.

Political Barriers

Unanimity is nearly complete across the political spectrum in Pakistan in favor of CPEC. Baloch nationalists, residents of Gilgit-Baltistan, and most political leaders from Khyber Pakhtunkhwa, Punjab, and Sindh are in favor of it, seeing it as a potential opportunity to boost the fortunes of Pakistan as well as of their respective communities. The outliers are separatists in Balochistan and Sindh, who initially warmed to the idea of CPEC after it was announced but took a hostile stance after exploratory talks with Pakistan failed and India became more assertive in public support for them.

Pakistan's smaller provinces have understandably feared that CPEC might be a train that could pass them by. These apprehensions stem from a history of unequal development and resource distribution in Pakistan and from the Punjab-based Muslim League federal government's approach to CPEC. Since coming to power in June 2013, it has been opaque and inconsistent in its public statements on CPEC. Two major controversies—one over the CPEC route and the other over including a commuter train project in Lahore, Punjab—fostered opposition distrust. The government has also exaggerated the importance of CPEC to Pakistan's development, hoping to claim the project as an early achievement. As a result, the government has created unreasonable expectations of what CPEC can offer in the near term and may be setting up many for disappointment. The PML-N has also fallen short in spreading the early benefits of CPEC, concentrating projects in the Punjab province. Latent civil-military tensions over the pace of progress and the security plan are also an issue.

Since late 2016, consensus-building has improved and CPEC expenditures have been more equitably distributed. But the federal government of Pakistan needs to develop democratic, institutionalized mechanisms to ensure that a more inclusive approach to CPEC is sustained over the long-term.

Consensus-Building and Transparency

Governmental expenditures and resource allocations are inherently political. As Alexander Cooley notes in a study on the BRI, infrastructure investments could actually fuel political instability or become “the subjects of political posturing, nationalist appeals, and competitive political appeals.”¹⁰⁶ These risks are heightened in Pakistan, given the history of distrust between ethnic groups from the country's smaller provinces and power brokers from its largest, Punjab. The province of Punjab is home to roughly half the country's population. It also fares better on most social indicators and is here the army recruits most of its officers.¹⁰⁷ Punjab is also the base of the ruling party, the PML-N.

The PML-N has a simple majority at the center, rules in Punjab, and leads a coalition in Balochistan. This, though, belies the divided reality of the country. Two opposition parties are in control in two of Pakistan's four provinces, Khyber Pakhtunkhwa and Sindh. In Balochistan, an antistate insurgency continues and has some currency with the broader Baloch population. The PML-N has the constitutional authority to push forward policies that affect the entire country but its political mandate is concentrated in the densely populated regions.

Political consensus on the CPEC plan is necessary for the project's sustainability. Greater consultation and inclusion are needed for a number of reasons.

- One, CPEC is a project that not only touches all corners of Pakistan, but its most critical areas—Balochistan and Gilgit-Baltistan—are poorer regions that have inadequate representation in the power structure.

Governmental expenditures and resource allocations are inherently political.

- Two, CPEC is, notionally, a fifteen-year project: at least three democratically elected governments could serve during this time. Continuity is needed. But it requires that future potential governments are aware of Pakistan's sovereign guarantees and debt burden. Furthermore, an equitable distribution of projects from the outset would establish a healthy precedent and reduce the risk of future governments unilaterally canceling contracts or delaying projects. As Mustafa Sayeed, an observer of Sino-Pak relations, said in an interview, "This is a project not linked to one party or government. It is a national project. A project till 2030."
- Three, Pakistan has a history of distrust between ethnicities from smaller provinces and Punjab-based power brokers. To overcome that history, groups representing the center need to be especially magnanimous and accommodating of the interests and demands of those on the periphery.

The need for consensus building across the political divide is complicated, but not made impossible, by the demands of coordination between China and Pakistan at the bilateral level and between Pakistan's various federal ministries. Within Pakistan, the Planning Commission is the chief coordinating body. It must receive not only direction from the prime minister and his closest advisers, but also input from the various federal ministries and provincial governments on which projects should be included in the CPEC portfolio.

The CPEC JCC, which is chaired by the planning minister of Pakistan and the vice chairman of China's National Development and Reform Commission, approves CPEC projects and its long-term plan. Below it are a series of bilateral joint working committees: planning, energy, transportation, industrial parks and economic zones, and Gwadar. At the bilateral level is coordination and consultation between Pakistani and Chinese companies, both state owned and private. In December 2016, all of Pakistan's provincial chief ministers were included at the China-Pakistan JCC meeting, at which projects from the smaller provinces were added to the CPEC portfolio.

Planning Minister Ahsan Iqbal has been faulted by politicians from Pakistan's smaller provinces, some describing his treatment of them as "patronizing" and offensive. Afrasiab Khattak, a senior Awami National Party (ANP) official and former senator, described Iqbal as inattentive to his party's concerns, and asserted that Prime Minister Sharif had played a more positive role, committing to a four-lane western route that could be expanded to six, when Iqbal, Khattak alleged, had been unwilling to make that concession. However, although Iqbal, in Khattak's view, may have been obstinate, it is possible that he was simply refusing to guarantee the impossible. Pashtun activist Said Alam Mehsud believes that it is not possible to expand significant portions of the western route beyond two lanes. But given that Iqbal is the public face of CPEC, his dismissing of critics as politically motivated saboteurs is particularly counterproductive. Osman Saifullah Khan, a senator affiliated with the PPP, remarked, "The worst thing they can do, as the [Planning] Minister has done, is to say 'Don't bring politics into CPEC.' When you're distributing \$46 billion into the country, that's a political decision."

However, another senior official with the PPP spoke positively in an interview of Iqbal's role, describing his work ethic as tireless, and instead placed blame with the office of the now former prime minister: "The prime minister doesn't devolve power," the official said, noting that the federal cabinet has only met nine times in fifty-two weeks. He alleged that Sharif and his "kitchen cabinet" of his secretary Fawad Hussain Fawad and Finance Minister Ishaq Dar ultimately decide which projects are included. Although ANP's Afrasiab Khattak and others have made Iqbal a target of their criticism, the senior PPP official says he is not to blame, that

“the Sharifs have not evolved to a post-devolution Pakistan,” referring to the empowerment of the provinces under the 2010 18th Amendment, adding that “the center and the provinces have to work seamlessly.”

Mushahid Hussain, chairman of the Parliamentary Committee on CPEC, said in an interview that CPEC faces two interrelated challenges, one of transparency and the other of inclusion. These two challenges have produced a “trust issue” between other political parties and the PML-N, development economist Kaiser Bengali suggested. Former senator Khattak of the ANP felt that his party is being deceived when it is told by the federal government that the western route’s “two-lane roads are being called ‘highways.’” A senior bureaucrat with the Khyber Pakhtunkhwa provincial government complained that the Planning Commission withholds information on CPEC from the provincial government. Senator Khan of the PPP, a member of the Senate CPEC committee, said of the Sino-Pak CPEC JCC that “we still don’t know who’s on it or what’s the process for getting on it. Is it just bureaucrats? As a senator, I don’t know that.” Even the governor of the State Bank of Pakistan said in December 2015 that “CPEC needs to be made more transparent,” noting that key figures, such as the percentages of equity and debt of the various projects, have not been disclosed to him.¹⁰⁸ And a 2016 report by a Pakistani Senate committee tasked with monitoring CPEC states that “a shroud of secrecy hangs around major decisions taken by the [CPEC] Joint Coordination Committee.”¹⁰⁹ It requested that agreements made at the JCC as well as the minutes of its meetings be shared with the committee.

To its credit, the PML-N allowed the Baloch National Party (BNP) to lead the Balochistan provincial government coalition for two years after the 2013 elections. It also appointed Muhammad Khan Achakzai, the brother of Pashtun nationalist leader Mahmood Khan Achakzai, as governor of Balochistan. The BNP’s Mir Hasil Bizenjo, the son of prominent Baloch activist Mir Ghaus Bizenjo, was appointed as federal minister for ports and shipping in 2016, which would ostensibly give him a role in managing the Gwadar port.

But the PML-N government has moved away from the culture of institutionalized consensus-building it and the PPP fostered during the latter’s tenure in power at the federal level. The two parties, in conjunction with most smaller parties, helped push forward three constitutional amendments, including the landmark 18th Amendment and a host of electoral reforms. These amendments were drafted, discussed, and pushed through the Parliamentary Committee on Constitutional Reforms. Given that CPEC is a series of projects, there is little if any legislation to draft and thus the appropriate role for parliament is one of oversight, not of coordination and decision-making.

Legislative oversight committees have shown potential for playing both a consensus-building and a monitoring role. In the wake of the May 2015 all-parties conferences convened by the prime minister, a Parliamentary Committee on CPEC was formed. Mushahid Hussain—a former member of the PML-N now close to both the army and Beijing, and a consensus builder in Pakistan’s Senate—was unanimously elected chairman.

The Parliamentary Committee was founded even though a Senate Special Committee on CPEC already existed. Osman Saifullah Khan, a member of the Senate Committee, said he was unclear as how distinct the two mandates are. Both committees have an oversight role, but the Parliamentary Committee appears to take on consensus building and the Senate Committee a more critical approach, already having published three reports on the corridor project that involve a significant amount of field visits by committee members.

Other committees in parliament are also playing an oversight role. The Senate Standing Committee on Defense issued a report on the visit of its members to Gwadar, focusing on

maritime security issues in the Makran coastal region. The Senate Standing Committee on Communications, whose mandate includes transportation infrastructure, has been active in the debate on the western route, monitoring federal government expenditures for the project and attempting to hold federal officials to account.

Political controversies over the CPEC route and a mass transit project in Punjab, despite appearing to have since been resolved, demonstrate the need for a formal mechanism of consensus building and planning.

The Route Controversy

Beginning in mid-2014, politicians from the ANP and Jamiat Ulema-e Islam-Fazl—the two major political parties in Pakistan’s ethnic Pashtun belt—began to allege that the CPEC route had been shifted.¹¹⁰

The original route, unlike subsequent variants, had avoided Pakistan’s two largest cities, Karachi and Lahore, and crossed through impoverished areas of Balochistan and southern Punjab, as well as the central part of the Khyber Pakhtunkhwa province, including its capital, Peshawar. Significantly also, it was proposed in 2006, a time of relative security along the Afghanistan-Pakistan border—just as the Afghan Taliban resurged in Afghanistan and before the founding of the Tehrik-e-Taliban Pakistan network that would threaten most of the Federally Administered Tribal Areas and Khyber Pakhtunkhwa province by early 2009.

In June 2014, at the meeting of the Senate Standing Committee on Finance and Revenue, Hassan Nawaz Tarar, Pakistan’s planning and development secretary, told the committee that “the proposal [to change the route] was on the table,” attributing the change to Chinese unwillingness to fund a longer route. The next day, however, he said that the original route had never been discussed with Beijing. Other parties at the meeting weighed in, either agreeing or disputing each other’s assertions on whether and how Beijing was involved and why and how the route would change.¹¹¹

What exactly precipitated the change, meanwhile, is unclear.

Pakistan’s political process was then overwhelmed by a dharna (sit-in) by the Pakistan Tehreek-e-Insaf (PTI) party, aimed at dislodging the Sharif government for electoral fraud.¹¹² In February 2015, as political tensions eased, the debate on the CPEC routes resumed. Parliamentarians staged a walkout from the Senate in protest.¹¹³ The visit of Chinese President Xi Jinping to Pakistan in April precipitated even stiffer protests.

The government took reactive measures to placate critics, devising a compromise solution of one corridor and three routes, which would be referred to as the eastern, central, and western routes (see figure 4).¹¹⁴ In announcing it, the government continued to claim that—in essence—the original route was unchanged. The planning minister said that joint working groups on CPEC economic zones would be formed and that the western route would be operational first.¹¹⁵

In May, two all-parties conferences were convened. A resulting joint resolution called for restoration of the original route but misrepresented what the original route had in fact been.¹¹⁶ What the protesting parties were advocating for was not a restoration of the original route, but the creation of a motorway connecting the major cities in Pakistan’s Pashtun belt. Furthermore, no consideration was given to the economic viability of such a route and the difficulty in expanding the road network in dangerous and physically daunting territory. The conferences ended with the formation of a parliamentary committee on CPEC, which would have a non-binding oversight role, and a commitment to complete the western route first.¹¹⁷

It was an important development that seemed to definitively address the main contentions of the political opposition and smaller provinces. But the debates over the CPEC routes continue into today, with conflicting accounts over the course and size of the western route—whether the route will be a dual-lane highway or a six-lane motorway, and whether it will go through Peshawar, or divert out of Khyber Pakhtunkhwa after entering Dera Ismail Khan.

The Planning Commission's own CPEC maps seem to have changed over the course of 2015 into early 2016. Although the agreements in May 2015 and January 2016 do not appear to have included Peshawar as part of the western route, the Planning Commission's map did.¹¹⁸ With the change, cities such as Bannu, Karak, and Kohat, where the Khyber Pakhtunkhwa government has proposed economic zones, are excluded from all three CPEC routes.¹¹⁹ The Senate Committee on CPEC argued that there “is considerable substance in the complaint that the province will gain very little from this alignment.”¹²⁰ The western route's terminus is at Dera Ismail Khan, where it merges with the central route—and the report concedes that the central is the shortest one to the border with China.

The fear among some is that the absence of direct connectivity to CPEC will have negative externalities: cities not directly on the route will then be given lower priority for electricity generation and transmission projects, which will also hamper their potential industrial development. Pashtun nationalist political parties are likely to use the CPEC issue in the next general elections, scheduled for 2018.

As noted, Peshawar does connect to CPEC's eastern route, which will benefit from the upgrade of the highway connecting Lahore to Karachi into a six-lane, high-speed motorway. Lost in the west-east debate, though, is that the closest port to Peshawar is Karachi, not Gwadar. The distance between Peshawar and Gwadar is approximately 1,800 kilometers (1,100 miles) and between Peshawar and Karachi is only 1,400 (870). The eastern route also moves through dangerous areas such as Dara Adam Khel and requires convoys and security patrols—adding cost, time, and security risk.

The federal government appears to have pledged to acquire land for an eventual expansion of the western route into a six-lane motorway, but it is unclear whether such a road can even be built in the mountainous region between Dera Ismail Khan and Quetta. Opposition politicians have demanded that the eastern and western routes be identical in scope, and the government has attempted to placate them. They may be disappointed in the future, however.

The demand for equivalent-size road networks on the eastern and western routes is where the debate began and is more about political posturing and less about a desire to adhere to the original corridor route or bridge the economic gap between Pakistan's smaller provinces and Punjab.

Two interventions by nonpolitical but powerful voices proved significant. On January 9, 2016, Chinese Ambassador Sun Weidong issued a rare statement expressing his concern about the dispute. That April, Chief of Army Staff General Raheel Sharif noted that CPEC should have a degree of equity in its benefits for all of Pakistan. The careful public interventions by these two circumspect power brokers demonstrates the seriousness of the political infighting over CPEC.

By early 2017, Chief Minister Khattak said the route problem had been resolved.¹²¹ Opposition from Pashtun activists continues, however. Should the ANP come to power in the next elections, or the pace of development of the western route remain slow, the controversy could well resume.

Two interventions by nonpolitical but powerful voices proved significant.

The Orange Line

In April 2015, when President Xi visited Islamabad to formally launch CPEC, among the agreements Beijing and Islamabad signed were a commercial contract and financing arrangement for the Orange Line, a metropolitan train service for Lahore, the largest city in Punjab. The project stood out for being a municipal project lumped into a program otherwise focused on intercity and interregional connectivity.

An outcry ensued from political parties and civil society organizations representing Pakistan's smaller provinces. Subsequently, at the May 2015 all-parties conference, the government claimed that the Orange Line was not part of CPEC. Ten days later, at a second all-parties conference, Planning Minister Iqbal asserted that the Orange Line was simply a "bilateral agreement between the government of Punjab and the Chinese government" and that it had been in the works for four years. In January 2016, a senior PTI official and National Assembly member tweeted that Iqbal had told the Parliamentary Committee that the Orange Line "is part of CPEC" but told the National Assembly that "it is not part of CPEC."¹²²

The Orange Line, in fact, was and remains part of CPEC. Leaked documents from JCC meetings indicate that it was on the CPEC agenda early on. Although it was not formally added to the Planning Commission of Pakistan's list of CPEC projects until December 2016, both Chinese and Punjab government officials consistently recognized it as being one.

Some adjustments in the CPEC route can be justified on the basis of economic or security considerations. The same could be said for the inclusion of the Orange Line. No Pakistani city outside Punjab (save Islamabad, which is connected to Punjab) currently has a mass transit system. Punjab has bus rapid transit systems in Lahore and Rawalpindi and will add them in secondary cities in the province.

Using CPEC funds for the construction of Pakistan's first commuter train line in Punjab is more than bad optics: it points toward double standards. Like the bus rapid transit system projects in Punjab, the Orange Line will have to be subsidized at an estimated \$160 million per year to keep fares affordable.¹²³ The project is likely to have positive economic and environmental externalities, but it will not be profitable. Until December 2016, the same loosening of standards was not being done for projects elsewhere in Pakistan.

The subsequent obfuscation and lack of transparency damages the credibility of the PML-N government and the idea of CPEC as an all-Pakistan project. What projects will constitute CPEC is not clear. Many observers, including development economist Kaiser Bengali, as he remarked in an interview, point to a "trust issue" between Punjab and the other political parties. Similarly, a Pakistani Senate committee overseeing the CPEC project made a scathing observation in a 2016 report:

The clear bias against developing the backward provinces on priority has emerged once again in the shape of the "Early Harvest" economic concept and appears to have bulldozed political and economic wisdom under its heels.¹²⁴

This trust deficit builds on a history of grievances that ethnic groups from smaller provinces have with Punjab-based power brokers. Politicians from these provinces have warned on numerous occasions that CPEC "could become another Kalabagh Dam"—referring to the controversial megaproject advocated for decades mainly by Punjab-based power brokers and opposed by the lower riparian Sindh province, which could be negatively affected by it.¹²⁵ Historically, the perception is that Punjab has been numb to the plight of ethnic groups in other regions, whether the Bengalis who split from Pakistan in 1971, or the Baloch and others who remain in Pakistan today. Politically, the tendency has been for parties from smaller provinces to bandwagon against Punjab.

Like the route controversy, the Orange Line controversy was resolved by adding new projects to the CPEC framework. In December 2016, municipal rail projects for Pakistan's three other provinces were added. Cost estimates or financing terms have not been released, however, and no formal agreements have been signed. It is unclear whether the mass transit rail projects in Balochistan and Khyber Pakhtunkhwa, in particular, are fiscally viable and how exactly they serve the goals and objectives of CPEC.

The greatest roadblock in developing the Gwadar port has been the Baloch insurgency.

The Baloch Question

The greatest roadblock in developing the Gwadar port has been the Baloch insurgency: since 2014, at least forty-four workers in Balochistan have been killed while working on CPEC projects.¹²⁶

The genesis of the conflict goes back to Pakistan's earliest days as a nation-state. Mir Ahmad Yar Khan, who as the last khan of Kalat (a princely state from 1666 to 1955) led a sizable swath of what is now the province of Balochistan, acceded to Pakistan in 1948. His brother Agha Abdul Karim, however, opposed the move and waged an armed revolt, which was quickly suppressed. The insurgency has revived four more times in the decades since. None of these revolts, save the last, have approached what could be considered a unified Baloch revolt against the Pakistani state. Insurgencies have been largely limited to a few, albeit pivotal, tribes. The 1974 insurgency waged by the Marri and Mengal tribes, for example, was not supported by the prominent Bugti tribe.

The current wave of the insurgency began in 2003 after a natural gas concessions dispute between Islamabad and Nawab Akbar Bugti, the head of the Rajiha subtribe of the Bugtis. Despite a promising attempt at a negotiated settlement by senators from the ruling Pakistan Muslim League allied with Musharraf, Bugti was killed in an army operation in 2006. In a 2003 magazine interview, Sherbaz Mazari, a prominent Baloch politician, said, "If Bugti is victimized, he will become a hero for the whole of Balochistan."¹²⁷ Indeed, in the wake of his death, that is what he has become.

Bugti's grandson Brahmdagh fled to Kabul and then to Geneva. Hyrbyair and Mehran Marri, sons of the late nationalist leader Khair Bakhsh Marri, were already in London. Mir Suleman Dawood, the current khan of Kalat, also made his way to London in the years after Akbar Bugti's death. All remain in exile today. However, importantly, all have relatives who remain in Pakistan and have sided with the government. Brahmdagh's cousin, Shahzain, lives in Pakistan and is generally seen as favorable to Pakistan. Hyrbyair Marri's brother, Changez, is member of the Balochistan provincial assembly. Dawood's two brothers ran in the 2013 elections, and his sister is married to the former governor of Balochistan.¹²⁸

Still, with the killing of Bugti, a broader Baloch separatist movement was born. It included elements of the Marri and Mengal tribes as well as some of the Bugtis and middle-class Baloch, including residents of the Makran coastal area, where Gwadar is located. Insurgents have targeted gas pipelines, rail infrastructure, pro-government leaders, and security personnel. They have also targeted migrants from other parts of Pakistan, killing scores of laborers and teachers and civilians traveling on passenger rail northward toward Punjab.

Since 2013, the Baloch insurgency has subsided. Separatist sentiment continues in areas along the CPEC route, however. In an October 2016 interview, Shahzain Bugti, a grandson of Akbar Bugti and a pro-state leader, said, "From Mastung up to Gwadar and the Iranian border, a majority of the people support the independence movement."¹²⁹ An official with the National Party echoed this assessment, stating that the insurgency remains active in the Awaran region and the Makran coastal area, but asserting that the rest of the province was largely secure.

Still, the Baloch insurgency is divided and does not have a leader who can guide all factions. Even the Bugti tribe is factionalized. The Rajiha subtribe has led the revolt but gets no support from the rival Kalpar and Masoori subtribes, which it has suppressed. The current home minister in Balochistan, Sarfraz Bugti, comes from the Masoori subtribe.

The causes of Baloch armed revolts vary but have included disputes over natural resource control and profit distribution, provincial autonomy, language rights, and interethnic relations. These are recurring but largely resolvable issues that transcend the divide between political activists and militants, and nationalists (who favor provincial autonomy within the Pakistani federation) and separatists (who seek an independent Baloch state).

Following the 2013 general elections, the PML-N entered into a coalition with the BNP. The alliance between the two parties—one based in Punjab and the other representing middle-class Baloch nationalists—combined with the nascent CPEC project, has provided an opportunity to bring a sustainable end to the insurgency through equitable development. Maintaining the buy-in of Baloch nationalists is critical to reducing the risk of an intensified insurgency that threatens CPEC.

Although Baloch politicians have expressed serious concerns about the equity of the CPEC projects and potential negative externalities, a big tent—virtually all Baloch nationalist figures—has come out in support of CPEC. Liaquat Shahwani, an official with the BNP party, notes that Baloch nationalist politician Akhtar Mengal's support for CPEC today is a departure from his position in the 1990s, when he opposed the PML-N government's plans to develop the Gwadar port. Strikingly, in interviews with the author, Baloch (and Pashtun) nationalist politicians admired Beijing's ability to rapidly lift the standard of living in China. Resource nationalism endures in Balochistan, but alongside a desire for improvement in human development. CPEC is seen as an opportunity, if done right, to lift the Baloch people.

Baloch nationalists may have warmed to the idea of massive development projects in their province, but their view of CPEC, like that of Baloch separatists, is colored by what they see as a history of local resources being exploited by the Pakistani state for the benefit of those outside the region, particularly in Punjab. The route controversy is largely immaterial to Baloch nationalists. Shahwani described the eastern route as essentially for the PML-N, and the western route for the ANP and the Pashtunkhwa Milli Awami Party. Within the context of CPEC, Baloch resource nationalism complicates plans for the Gwadar port as well as for potential mineral extraction projects like Reko Diq. To isolate violent separatists and ensure the buy-in of the Baloch populace, it is critical that Islamabad be responsive to the concerns of Baloch nationalists and keep the BNP inside the tent and the Akhtar Mengal-led faction of the Balochistan National Party (BNP-M) close by.

Baloch nationalists assert that the Gwadar port should be under the control of the Balochistan provincial government. As Shahwani (the BNP official) said, "Without Gwadar, there is no CPEC." Akhtar Mengal has on numerous occasions called for the federal government to hand over control of the Gwadar port to the Balochistan provincial government. He has warned that CPEC "could become another Kalabagh Dam." His demand was echoed by Abdul Malik Baloch, who until recently served as Balochistan chief minister in a coalition government with the PML-N.¹³⁰ The federal government is unlikely to ever cede control of Gwadar or any other port in Pakistan, given their revenue generation and linkage with national security, to the provinces. In the spring of 2016, the PML-N government appointed Mir Hasil Bizenjo, a senior BNP official, as federal minister for ports and communications. This move allows for the Gwadar port to remain under federal control, but also in Baloch hands.

Beyond symbolic gestures, Islamabad must ensure that the Baloch immediately and materially benefit from CPEC projects. PML-N officials have touted the promise of CPEC and the Gwadar port, which are likely to figure into the party's 2018 general election campaign. Given the ambitions and scale of the projects, they have the potential to generate a peace dividend or serve as lightning rods for the insurgency's next round. It is imperative that the Baloch receive a disproportionately high benefit from infrastructure, industrial, energy, and mining projects related to CPEC.

Extraction of mineral resources will also be a hot-button issue in Balochistan. The province is a major natural gas supplier to the rest of Pakistan, but most of Balochistan lacks both natural gas and electricity grid connections. Both Baloch nationalists and separatists resent previous mining deals. For example, the Balochistan provincial government was awarded only 2 percent of revenue from the Saindak copper mine project.¹³¹ The concession holder, the Metallurgical Corporation of China, received 50 percent, and the remaining 48 percent went to the federal government of Pakistan. In 2011, the Balochistan provincial government rejected the mining license application of Tethyan Copper Company, a consortium that conducted the exploration of the Reko Diq gold and copper mine, valued at \$60 billion in 2012.¹³² The Balochistan provincial government issued a number of objections—one of which was a desire for processing to be in Pakistan—that resulted in its rejecting Tethyan's mining concession application. The case is currently in arbitration at the international level and is holding back what could bring in more than \$100 million in annual revenue for Pakistan.

A Balochistan Mineral Resources Development Board was formed in 2015 to grant and oversee exploration and mining licenses. Seven of the nine members are bureaucrats—the remaining two are elected politicians—which means that the federal government will indirectly control the board's decision-making.¹³³

CPEC appears to have triggered at least an initial interest in political reconciliation among Baloch separatist leaders. In mid-2015, after the CPEC projects were announced, some Baloch separatists based in Europe mulled returning to Pakistan. They were visited by senior ethnic Baloch officials in the Pakistani government.¹³⁴ By the next year, the talks had clearly failed, but why was unclear. In September 2016, Abdul Malik described the talks as an opportunity missed, adding not only that the military had endorsed the talks, but also that Brahmdagh Bugti was willing to accept the Pakistani constitution and end his party's involvement in violence.¹³⁵

The Europe-based Baloch separatist leadership is disparate and inconsistent when it comes to mutual cooperation. Brahmdagh Bugti and Mehran Marri appear to coordinate their activities closely. Mir Suleman Dawood has appeared at joint events with Bugti and Marri but operates more independently. Accusations between these groups are often traded about connections to Pakistan's Inter-Services Intelligence—a reflection of a culture of mistrust that inhibits enduring cooperation.

Although Dawood has distanced himself from the possibility of talks with Islamabad, he may not be pursuing a zero-sum game. In 2016, the top Pakistani military officer in Balochistan visited Dawood's family home in Kalat, met with his relatives, and offered a prayer for the Baloch leader's deceased wife. This suggests the potential for dialogue is not over. Dawood, according to Salman Shah, a former Pakistani minister of finance, already has a financial stake in some CPEC projects.¹³⁶

For the time being, however, the momentum for talks with separatist leaders has been quashed by India's assertive posturing on Balochistan that began in early 2016. Separatist leaders

have welcomed Indian Prime Minister Narendra Modi's statements on Balochistan. They have also become more assertive in their condemnations of Islamabad. Their public activity is largely symbolic, however, and at times verges on the comical. The importance of separatist leaders based abroad has diminished and that of local militant leaders like Allah Nazar Baloch, who heads the Balochistan Liberation Front, has grown.¹³⁷ Similarly, Baloch nationalist parties like the BNP-M and BNP that participate in the Pakistani electoral process appear to have stronger political support across the province.

The separatists, however, do pose a significant security threat along the CPEC route, particularly in Balochistan, though not to the cordoned-off Gwadar port. Security provisions for Chinese workers are substantial and reduce the threat of violence mainly to Pakistani nationals, not foreigners, though at least three attacks since the formal launch of CPEC in April 2015 have targeted Chinese workers.¹³⁸

Since 2015, the Balochistan province has witnessed a resurgence of antistate and sectarian violence. In April 2015, terrorists killed at least twenty workers at a dam construction site near Turbat. A number of killings have targeted government personnel and CPEC laborers in Balochistan and Sindh, including in Gwadar. In August 2015, the Balochistan Liberation Army claimed an attack on the Jiwani airport that damaged its radar system and killed two civil engineers. In August 2016, militants killed seven Balochistan police fifty miles from Gwadar. Later in the month, militants killed two security guards in the vehicle of an oil exploration company in the Gwadar district. Six people were killed in an October 2016 terrorist attack on a passenger train claimed by Baloch separatists. In November 2016, jihadists attacked a Sufi shrine in Khuzdar, killing more than fifty-two people. Political violence took the lives of more people in Balochistan in 2016 than each of the two previous years. Separate attacks on a bridge and electricity transmission tower in Gwadar district in March 2017. In April, an IED (improvised explosive device) blast along Gwadar's Airport Road—one of the city's main arteries—injured three people. In the same month, four Sindhi workers working on a CPEC highway project were killed by Baloch separatists.¹³⁹ Terrorists also continue to target gas pipelines and trains.

A retired senior Pakistani Army officer and former intelligence official identifies land-based threats as the CPEC's top security challenges. Though Pakistan is taking measures to enhance the coastal security of Gwadar, insurgents have no sea-based capacity and the city is at a safe distance from India. As the port's operations grow, Pakistan will need to enhance coastal security. Toward this, Pakistan has established Task Force-88.¹⁴⁰

The port area of Gwadar is at a distance from the local population, although a narrow local road that runs through a shantytown currently connects it to the coastal highway. On the completion of the Gwadar East Bay Expressway, the Gwadar port will connect to the Makran Coastal Highway without having to move through the old town.

The port itself will have residential facilities. Chinese workers are presently housed on the port site. Despite India's support for Baloch separatists, an equitable distribution of the gains of CPEC and a continued partnership between Islamabad and Baloch nationalist politicians can isolate militants in the province.

Civil-Military Relations

The PML-N government's handling of CPEC has been criticized not only by opposition political parties but also by the Pakistan Army, though civil-military relations in fact have been tense since Nawaz Sharif's return to the office of the prime minister in 2013. CPEC has figured

only as a secondary source of tensions—after the handling of the war with the Taliban, relations with neighboring states, and allegations of corruption.

The army's involvement in the country's security expanded under Prime Minister Sharif, however. It has led not just counterinsurgency operations in North Waziristan and elsewhere in the tribal areas, but also urban counterterrorism and counterinsurgency operations in Karachi. Through what are called provincial "apex committees," the army has had a powerful influence over operations in all provinces targeting organized crime and corruption as well as terrorism.

The army has a high profile in Balochistan as well, both leading counterinsurgency operations and, through the Frontier Works Organization, constructing road networks connecting Gwadar upcountry. As a result, its role in CPEC, which crosses through areas that have been affected by insurgents or are currently home to insurgents, is a critical one. Army Major Abid Rafique heads the CPEC Special Security Division. Now former Pakistan Army chief General Raheel Sharif has on numerous occasions guaranteed security for CPEC personnel, particularly after New Delhi saber rattling.¹⁴¹

The army's role in CPEC, though, has at times gone beyond security. Through occasional media leaks, it has also either expressed its dissatisfaction over the government's handling of CPEC or pressed for a greater if not dominant role for the army in overseeing implementation of CPEC.¹⁴² On August 1, 2016, for example, Mubashir Lucman, a Pakistani journalist widely believed to be close to Inter-Services Intelligence, hosted a talk show on CPEC, discussing the possibility of related civil-military tension. On the same program, Salman Shah, who served as finance minister during the military rule of the General Pervez Musharraf government, said that CPEC needs its own independent authority.¹⁴³

The army will undoubtedly undertake critical CPEC logistics (through the National Logistics Cell), road network development (through the Frontier Works Organization), and security responsibilities. The military's communications unit, Inter-Services Public Relations, held a conference in April 2016 to which it invited foreign journalists. It has produced a documentary on CPEC.¹⁴⁴ But army control over CPEC is more than unnecessary: it could over-securitize what is ultimately a project about economic connectivity and thus send the wrong message to potential investors.

Destabilizing civil-military tensions have also had a negative impact on CPEC. Protests in late 2014 by Imran Khan's PTI, purportedly backed by the chief of Inter-Services Intelligence, caused concern among Chinese officials, delaying the visit of the Chinese President Xi Jinping.¹⁴⁵ A senior official in the Khyber Pakhtunkhwa government assumed that Beijing was aware that the PTI protests were a type of controlled chaos, asking, "Don't they [the Chinese] know who's really behind these protests [the Pakistan Army]?" But critics of PTI allege that the party is a cause for concern among Chinese officials. One source claimed that security officials in Beijing identified "political instability as the highest risk factor" challenging CPEC, highlighting aggressive statements by senior PTI officials. Indeed, as debate over the CPEC routes festered in 2015, a Pakistani economist said that he was one of several experts who received calls from Chinese officials seeking explanation for the acrimonious debate.

The Pakistan Army, on the whole, is an important, stabilizing influence on CPEC. A former senior military official said that the army has also given the Chinese "guarantees" on the continuity of CPEC projects. At the same time, however, civilian mismanagement of CPEC projects—such as the redirecting of funds for the Gwadar LNG project to the Lahore Orange Line—has caused discomfit within the army brass.¹⁴⁶ Similar incidents could raise

The army's role in CPEC, though, has at times gone beyond security.

civil-military tensions. A senior civilian politician close to the military remarked, “The army is restive about Sharif’s inability [to carry through CPEC],” adding, “if the civilians are not able to complete the job, others will step in.”

Economic Barriers

Several structural economic and fiscal challenges have the potential to seriously hinder the next two phases of CPEC. If not addressed in the short term, some projects could prove to be white elephants. The challenges—which include premature industrialization, a heavy debt burden, and circular debt—can largely be prevented or overcome with appropriate policy remedies, however.

Premature Deindustrialization?

One of the broader aims of CPEC is to boost Pakistan’s industrial output and exports. But Pakistan, like India, might be facing premature deindustrialization—a transition to a service economy and a decline in industrial activity or capacity prior to full industrialization.¹⁴⁷

Agriculture has declined as a percentage of GDP since the 1970s, manufacturing has risen only modestly, and services are now more than half of the economy. A 2013 study on the country’s small manufacturing industries notes that the “structural transformation in Pakistan has been from agriculture to services, circumventing the manufacturing sector to a large extent.”¹⁴⁸ Industry value-added as a percentage of Pakistan’s GDP has been in relative decline over the past decade, peaking at 27 percent in 2005 and dropping to 19 percent in 2015.¹⁴⁹ Similarly, manufacturing value-added has also declined, from 18.6 percent in 2005 to 12.3 percent in 2015.¹⁵⁰ Over the past two years, exports have also begun a steep decline—dropping by 12.2 percent in the 2015–16 fiscal year over 2014–15, following a 5.7 percent drop from 2013–14. The drop in exports has continued into the first quarter of the 2016–17 fiscal year, 6.3 percent lower over the same period in 2015.¹⁵¹

The decline in Pakistani exports is partly due to a drop in global cotton prices and less-than-expected cotton production, which fell by 34 percent in 2015. The fall in cotton production was blamed on erratic weather believed to be caused by climate change as well as poor seed selection and inadequate use of pesticides.¹⁵² Pakistan also saw a steep drop (26 percent) in trade with Afghanistan in 2015–16 over the previous fiscal year, attributable to both tepid growth in Afghanistan and President Ashraf Ghani’s curbs on trade with Pakistan.

Slow growth in the global economy since 2012 has also affected Pakistan’s exports. But a broader structural problem is also a serious issue. Pakistani (and Indian) textile exporters are losing market share to competitors in Bangladesh and Vietnam. Bangladesh is now the world’s second-largest apparel exporter after China. Vietnam and India are tied for fourth.¹⁵³

The Bangladesh success story, though, is not an overnight phenomenon. It began in the late 1970s and early 1980s with a joint venture between South Korea’s Daewoo and Bangladesh’s Dosh Garments that involved the transfer of technology and expertise.¹⁵⁴ A leading Pakistani textile executive believes that his country is now a full decade behind Bangladesh in the garment industry. Despite political turmoil, Bangladesh’s various governments since the 1980s have had a consistent, pro-export textile policy, allowing for duty-free import of fabric for export-bound ready-made garments. This policy clarity has been enabled in part by its relatively low cotton production.

Pakistan, one of the world’s largest growers of cotton, has a more complicated, vertically integrated textile industry. Competition is stiff between trade associations representing cotton

growers and ginners, the spinning industry, and value-added manufacturers. The value-added industry depends on cotton as an input despite the growing demand for synthetic ready-made garments in Western markets.

Bangladesh relies heavily on imported fabric and yarn for its ready-made garment exports, producing only some 10 percent of the cloth needed.¹⁵⁵ The related import timeline for Bangladesh is three days. For India—whose ready-made garments industry faces challenges similar to Pakistan’s—it is ten.¹⁵⁶ Bangladesh also benefits from heavily subsidized domestic natural gas supplies as well as a higher foreign direct investments in textiles relative to Pakistan.

Trade liberalization and, in particular, Pakistan’s FTA with China, have hurt domestic manufacturers, particularly small and medium-sized enterprises. A Pakistani industrial company executive who had to shut down his tile manufacturing unit several years after the FTA said, for example, “Chinese manufacturers have captured almost 70 percent of the ceramic tiles market in Pakistan.... We cannot compete with them because of our higher cost of production.”¹⁵⁷

The 2007 Sino-Pak FTA has only widened Pakistan’s trade deficit with China (see figure 7). Beijing has proved to be a stiff negotiator in trade talks with Islamabad despite the close, strategic partnership between them. Islamabad will need to exact more favorable and relevant terms in future rounds of FTA negotiations. It “has so far utilized only five percent of the FTA concessions; China has utilized 60 percent of them.” Pakistan’s trade leverage with China, however, has been quite limited. According to a report in Pakistan’s *Herald* magazine, “Beijing also went back on its commitment to give tariff concessions to Pakistani textiles and fish exports in the first five years of the agreement’s operation.”¹⁵⁸ As Irfan Shahzad, an expert on Sino-Pak relations noted, rice exports from Pakistan to China are routed through Thailand, due to China’s FTA with the Association of Southeast Asian Nations. Pakistan has been unable to gain duty-free access from China for one of its major commodity exports.

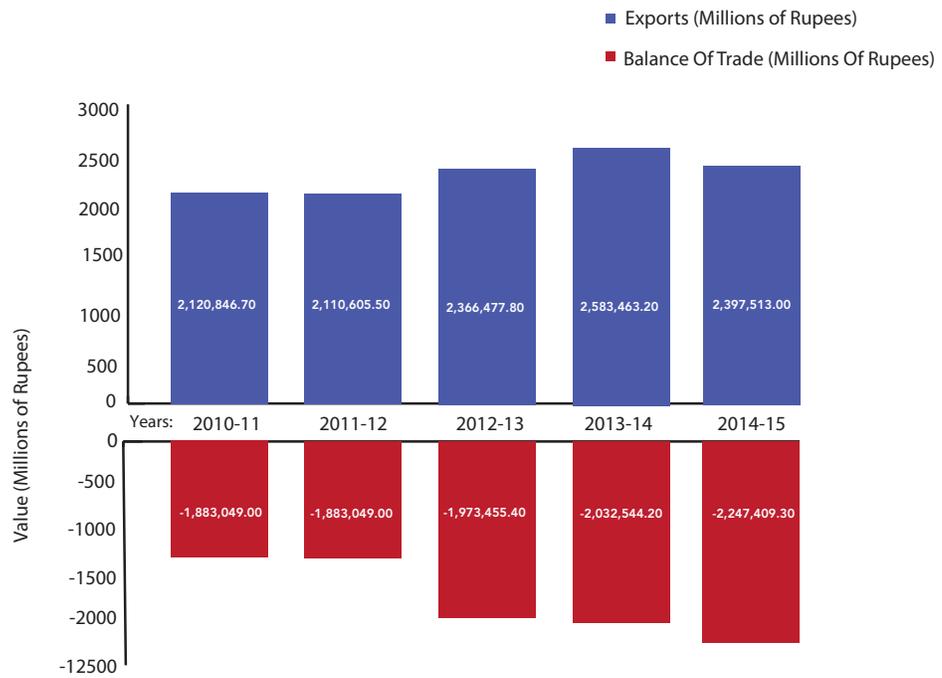
Underinvoicing by Pakistani importers of Chinese goods has affected a broad range of Pakistani industries, including tire manufacturing, and has led some Pakistani companies to move their manufacturing to China. The loss of manufacturing jobs in Pakistan has been considerable. One shoe industry executive, speaking of his industry, said that “at least 20,000 jobs have shifted from Pakistan to China.”¹⁵⁹

The decline in Pakistani industry may be reversible, however. A study by the Pakistan Institute for Development Economics suggests that industrial decline in Pakistan is largely due to “the acute energy shortage and frequent power breakdowns that prevent industries operating at their capacity level.”¹⁶⁰ CPEC is likely to help contribute to an end to Pakistan’s energy deficit, but it is critical that energy costs for Pakistani industries also be competitive. The challenge is for Pakistan to find its comparative advantage after losing market share to Bangladesh and Vietnam as lower-wage countries in East Africa, and to move up the value chain as automation potentially hits the textile industry.

Political instability, energy shortages, and terrorism have also driven away major global textile industry buyers from Pakistan.

Still, even if Pakistan addresses the structural issues affecting its export competitiveness, it may, like many developing countries, then be hit by a dual blow of rising global protectionism and automation in the textile industry.¹⁶¹ One precaution is to invest in research and development in its largest sectors, agriculture and textiles. As the economist Tyler Cowen notes, “Ongoing changes in the nature of production may penalize nations which do not have the capacity to compete in information technology, and therefore developing economy labor may

Figure 7. Pakistan's Declining Exports and Rising Trade Deficit



Source: Author's compilation based on Pakistan Ministry of Finance data.

be outcompeted by capital from wealthier countries.”¹⁶² Pakistan is well advised to diversify its industrial activity.

Pakistani officials point toward growing domestic demand for fast-moving consumer goods, which Procter & Gamble’s Pakistan Country Manager Faisal Sabzwari identifies as on the rise in rural areas.¹⁶³ Indeed, according to Shazia Syed, CEO of Unilever Pakistan, “Pakistan has the capability and a strategic geographic positioning to be a major exporting hub for multinational national companies.”¹⁶⁴

Loans and Circular Debt

CPEC’s lack of transparency has fostered uncertainty about Pakistan’s sovereign obligations and debt burden. Although the Planning Commission has largely been forthcoming about CPEC project funding, it has failed to provide details of the total costs and full terms of agreement. The absence of open bidding for many projects compounds the uncertainty.

In December 2015, Ashraf Mahmood Wathra, the governor of the State Bank of Pakistan, said that “CPEC needs to be made more transparent.” He has not been informed, he said, about the financing mechanisms of the CPEC projects in total, professing ignorance of “how much is debt, how much is equity and how much is in kind.”¹⁶⁵ About the same time, Ehtesham Rashid, the director general of the Ministry of Finance’s debt office, explained: “At the moment, we do not have details about the loans that will be taken under the CPEC.”¹⁶⁶ Osman Saifullah Khan, from the opposition PPP and a member of the Senate committee on CPEC said, “It should be made clear what are the sovereign obligations that are being created as a result of this investment.” In July 2016, Planning Minister Iqbal described the CPEC

agreement with China as “confidential,” but provided a sealed copy to the Senate chairman, who would make it available for members to read in his chamber.¹⁶⁷

In a 2016 report, the World Bank warned that the “sovereign guarantees associated with CPEC could pose substantial fiscal risks over the medium term.”¹⁶⁸ The government of Pakistan is still, after all, exposed to risk from private-sector investments, which make up the vast majority of CPEC proposed funding. Islamabad is expected to assume indirect liability for payment of electricity generation projects, which are private-sector investments. The Finance Ministry, meanwhile, is obligated to create a revolving fund equal to 22 percent of the monthly invoicing for CPEC electricity projects to ensure seamless repayment of Chinese independent power producers.¹⁶⁹ Islamabad must make up for any payment shortfall by purchasing powers, which could complicate Pakistan’s plans for privatizing the electricity industry.

Although Pakistan is likely to have enough installed electricity capacity to deal with demand by 2020, it may be too costly, especially relative to regional states and economic competitors. The Chinese have been tough negotiators with respect to Pakistan’s electricity tariffs. Islamabad has not indicated what its electricity basket price will be as a result of CPEC and non-CPEC power projects and is imposing a 1 percent surcharge on electricity power consumers to generate funds for securing CPEC.¹⁷⁰

Comparatively expensive electricity could weaken Pakistan’s ability to align its tariffs with changes in global commodity prices and phase out subsidies and will continue to make export-oriented industries less competitive. It is considering eliminating cross-subsidies, in which more affluent customers are charged a higher tariff to subsidize poorer customers and areas where rates of nonpayment are higher.¹⁷¹ Islamabad has also backtracked on plans to privatize electricity distribution and generation companies, which will place a greater burden on the state to guarantee payment to electric power producers.¹⁷² Although Pakistan has streamlined payment of independent power producers, the country remains vulnerable to an upsurge in global commodity prices.¹⁷³

As electricity generation capacity increases, so do the potential liabilities of the Pakistani state, especially if it fails to reform the power sector, increase collections, and reduce transmission and distribution losses—presently estimated at around 20 percent. The government, specifically the Central Power Purchasing Authority, is slow to repay independent power producers, who then have to shut off electric supply to the grid because they cannot pay for the fuel to run them. NEPRA is also slow to adjust price tariffs according to shifts in the global market and thus the actual cost of electricity and the price Pakistani consumers pay are often not aligned.

Pakistan faces several additional systemic challenges in terms of its electric power system.

- One, transmission development generally lags behind its production of new generation units. As of November 2016, the electricity grid has a transmission capacity of 17,400 MW—well below both supply and demand.¹⁷⁴ It also falls short of the 21,000 MW transmission capacity pledged last year by the minister of state for water and power.¹⁷⁵ The goal is to be able to handle 40,000 MW by the end of 2021, but most transmission projects are behind schedule.¹⁷⁶ NTDC has said that it is short on human resource talent, which it has lost to foreign employers. Two major transmission line projects will be up by 2019, however.¹⁷⁷
- Two, authorities could be underestimating the growth in demand. Forecasters generally assume a 5 percent annual demand increase but demand growth could accelerate if the pace of economic growth and urbanization become more rapid.

In a worst-case scenario, CPEC would result in a fiscal overload in Pakistan.

- Three, development of regasified liquefied natural gas plants requires a stable gas supply, which is subject to a variety of political and security risks. Pakistan has secured a long-term gas supply with Qatar and a number of private-sector entities are building terminals in Port Qasim. The Russia-constructed Karachi-Lahore natural gas pipeline will be on line by the second quarter of 2020.¹⁷⁸ Through CPEC, China is also financing and constructing an LNG terminal in Gwadar and a pipeline from Gwadar to Nawabshah in Sindh. Declining domestic gas supplies, however, will increase Pakistan's dependence on imported gas. The Iran-Pakistan and Turkmenistan-Afghanistan-Pakistan pipelines are particularly vulnerable to geopolitical and security risks.

In a worst-case scenario, CPEC would result in a fiscal overload in Pakistan, straining the country's financial system and requiring another international economic rescue package to allow Islamabad to service its debt portfolio, if other factors have not already driven it toward one. The state would be saddled with loans it cannot pay back because productivity gains are inadequate and toll-paying vehicular traffic along the CPEC route is minimal. Islamabad would also have to bear the burden of paying Chinese companies for electricity that Pakistani distribution companies would not be able to pay for, given the high cost of electricity and continued high transmission and distribution losses. The repatriation of profits by Chinese companies would result in a balance of payments crisis. Also, the Gwadar port, rendered useless by insurgent violence and lack of demand, would be a symbol of failed promise rather than a mechanism for uplifting Balochistan and regional connectivity. Pakistan would owe billions in sovereign obligations to China for white elephants such as the Gwadar port and expanded Karakoram Highway.

Indeed, some indicators in the Pakistani economy are troubling. The country's debt-to-GDP ratio is currently quite high, around 60 percent. Foreign exchange reserves dropped by around 10 percent between October 2016 and April 2017. A decline in exports and remittances, combined with CPEC-related imports, may continue to strain Pakistan's balance of payments position. In 2016 and 2017, China provided Pakistan with more than \$1 billion in rescue loans so as to avoid a return to the International Monetary Fund.¹⁷⁹ Some observers predict a return to the International Monetary Fund by 2019 after the next general elections.

However, although the fiscal risks posed by CPEC are overstated, the extent to which Pakistan has accurately forecast its ability to handle sovereign obligations is unclear. Ishrat Hussain, the former governor of Pakistan's state bank, estimates that annual debt servicing payments on CPEC loans would be approximately \$910 million, not in the multiple billions of dollars claimed by some.¹⁸⁰ He also estimates around \$2.4 billion in annual profit repatriation for electricity projects—a total impact of \$3.5 billion on the external account.

In an interview with *Reuters* in May 2017, the chief economist of Pakistan's Planning Commission, Nadeem Javaid, said that debt repayment and repatriation of profits would range from \$1.5 to \$1.9 billion beginning in 2019, double in 2020, and peak at \$5 billion in 2022. Javaid did not break down those figures into debt and repatriated profit, but a fair assumption is that around 75 percent of that would be profit repatriation, not debt servicing. In the 2015–16 fiscal year, Pakistan's external debt servicing amounted to \$5.3 billion. The rise in debt servicing is not insubstantial, but, according to Hussain, annual growth in exports by at least 14 percent (in US dollars) would compensate for the impact of CPEC outflows.¹⁸¹ This is certainly possible in Pakistan, but requires, given the continued decline in exports, revamping economic policymaking.

Astonishingly the *Reuters* report cited Javaid as forecasting that Pakistan would collect \$6 to \$8 billion annually in “toll tax[es]” and “rental fees,” claiming that 4 percent of global trade would cross the Gwadar-Xinjiang route by 2020. However, in an email interview with the author, Javaid clarified that the figures *Reuters* cited were partially incorrect, stating that he forecasts around 4 percent of China’s total trade to be routed through CPEC by 2020—amounting to approximately \$158 billion in 2015 figures. By comparison, in 2016 around \$80 billion in non-oil trade passed through the Jebel Ali Free Zone, including \$11.3 billion in direct trade with China.¹⁸² A total of \$430 billion in non-oil trade passed through United Arab Emirates ports, which include Jebel Ali, one of the world’s top ten container ports.¹⁸³

The rise in bilateral trade activity, transit trade volume, and toll collection Javaid anticipates is massive. It requires a colossal uptick in overland China-Pakistan trade, which comprised just \$312 million of the \$13 billion in China-Pakistan trade in 2015.¹⁸⁴ A surge in China’s use of Pakistan’s ports and road and rail networks for transshipment is also necessary to increase toll revenue. Annual highway toll revenue in Pakistan between 2013 and 2016 averaged about \$145 million, though it is likely to grow significantly with the direction of Karachi-Lahore traffic from the national highway to the costlier motorway.¹⁸⁵ Chinese traders will have to redirect some container and bulk shipments through Pakistan, using Gwadar instead of Dubai for transshipment of goods from its east coast economic hubs. Xinjiang’s economy and trade activity will also have to grow considerably. In 2016, the GDP of China’s Xinjiang region was \$139.8 billion, and its share in China’s foreign trade was around \$18 billion.¹⁸⁶

These challenges can be manageable if Pakistan, through CPEC and other investments and policy reforms, yields productivity gains and boosts exports. But if economic growth remains tepid, Pakistan could face a balance of payments crisis. Chinese companies generally receive duty-free import privileges for CPEC machinery and material and are likely to repatriate profits from CPEC, which would strain Pakistan’s current account deficit. Pakistan is projected to lose upward of \$2 billion in tax revenue from CPEC exemptions over a fifteen- to twenty-year period.¹⁸⁷ However, many Pakistani subcontractors as well as engineers, financial analysts, managers, and laborers—all under the Pakistani tax net—will benefit from CPEC contracts. Indeed, former CPEC Project Director Zahir Shah expects a shortage of engineers in Pakistan in the coming years due to high demand from CPEC projects.

Logistics

The emerging CPEC road network may face limitations in expansion that could cap the volume of vehicular traffic along the route in the future.

One, it might not be possible to widen the Karakoram Highway beyond two lanes. Zahir Shah, the CPEC project director at the Planning Commission of Pakistan, says that a future realignment might be necessary. A report by the Senate Special Committee on CPEC suggests that widening from two to four lanes is possible but would require the highway’s closure during construction. Instead, it recommends establishing alternative routes connecting Xinjiang to Gilgit-Baltistan, using historic trading routes that can be upgraded to modern paved highways. One is from Yakand in Xinjiang to Skardu in Gilgit-Baltistan. The road network could then connect to Muzaffarabad in Azad Jammu and Kashmir and a future motorway connecting the city to Islamabad and the Peshawar-Karachi Motorway.¹⁸⁸ No feasibility study appears to have been conducted on this and other alternative routes, and so their economic viability is unclear. Plans for upgrading the Gilgit-Skardu road into a \$380 million expressway have been delayed,

but such a road network could provide transporters flexibility in the event of high traffic volume from the Gilgit-Raikot-Thakot-Havelian route.¹⁸⁹

Two, it might not be possible to expand the western route into a six-lane motorway in between Dera Ismail Khan and Zhob given the technical difficulties the Dhana Sar mountain range presents.¹⁹⁰ The economic impact of a narrower highway along this route will be limited because the CPEC central route is a more efficient way to connect Dera Ismail Khan and both Gwadar and Karachi. Prime Minister Sharif, however, pledged to Pashtun political parties that the route would eventually be expanded into a six-lane motorway.

Three, the economic viability of a train link between Kashgar and Havelian is unclear. No full feasibility study has been conducted. The costs will likely be in the tens of billions. According to a 2010 assessment by two US-based scholars, transporting oil by railway from Gwadar to Kashgar would be neither cost effective nor capable of handling the significant volume needed to reduce China's dependence on sea-based imports via the Strait of Malacca. In 2016, Pakistan's Frontier Works Organization was granted permission to conduct a feasibility study for a Gwadar-Kashgar oil pipeline—a potentially more economically viable energy transport option.¹⁹¹

China's Mixed Record

China has a mixed record when it comes to overseas assistance and investments. According to a 2013 RAND study, "Actual deliveries of aid lag far behind pledges of assistance." The same study estimates that "China has delivered only 9.4 percent of the FAGIA [foreign aid and government-sponsored investment activities] it has pledged." However, the issue seems to be timeliness: "Most of these projects may require five years or more to complete," but—when assessed in a broader time frame—"pledges roughly match deliveries made six years later." In other words, China may not be punctual but it does eventually deliver. There are exceptions, of course. For example, in Indonesia, China's "rate of follow-through on pledged investments since 2005 is just 7%."¹⁹²

But China is becoming a more active global investor. Outward Chinese investment has grown tenfold, from \$10 to \$12 billion in 2005 to \$110 to \$113 billion in 2015. Chinese companies have also spent more than \$500 billion in overseas construction since 2005. China's foreign aid and government-sponsored investment are generally funded by loans, not grants. They have been spurred by excess capacity, a desire to acquire technologies and established brands, and massive current account surpluses that have led to an abundance of foreign exchange.¹⁹³ Much of this surplus has been used to purchase US Treasury bonds but increasingly is also being directed toward foreign aid and investment.

China's successes include the Greek port of Piraeus. After the investment of China's COSCO, a leading global shipping logistics company, the port "is not only becoming an important gateway to the European Union, but also a major transshipment hub in the Mediterranean." COSCO has improved the port's productivity while maintaining handling charges lower than other competitors in the Mediterranean. Leading global companies such as HP use the port as a bulk-break distribution hub in the region, aided by a value-added tax exemption from Greek government for shipments that move on to other countries.¹⁹⁴

Sri Lanka has been on the receiving end of several disappointing projects, including a deep-sea port in the city of Hambantota, an international airport, and a thirty-five-thousand-seat cricket stadium. Although Sri Lanka has become a regional transshipment hub, the Hambantota port lacked economic viability as it was far removed from Sri Lanka's industrial and population centers and took place alongside a massive expansion to the Port of Colombo. The Hambantota developments were vanity projects for then-Sri Lankan president Mahinda Rajapaksa, as they were

located in his home region. Financed at high interest rates, China Harbor Engineering Company brought in its own equipment and labor, bringing little to the local population and adding to Sri Lanka's skyrocketing debt. A new government resorted to change the project to a public-private partnership with debt-equity swaps.¹⁹⁵ Such a scenario is far less likely in Pakistan given the more favorable financing terms and close strategic partnership between the two countries.

From 2001 to 2014, Pakistan was the second-largest recipient of pledged assistance from China, totaling \$135 billion.¹⁹⁶ Investments have also been considerable. In 2001, Haier invested \$500 million as part of a joint venture with Pakistan's Ruba Group to manufacture home appliances in Lahore. By 2012, the group secured a 24 percent market share in Pakistan's growing home appliance market. Haier now assembles laptops in Pakistan and will add cell phones to its lineup. China's Gree Electric Appliances also has a factory in Pakistan. In 2007, China Mobile purchased a majority stake in Paktel, a mobile phone service provider, for \$284 million. It has since invested \$3 billion in 3G and 4G operational licenses and network upgrades.¹⁹⁷ In terms of mineral extraction, however, Chinese business practices are far from positive. For example, Metallurgical Construction Group reportedly exhausted the copper ore deposits from the Saindak mine during the five-year extension period following its initial ten-year lease. Although it employed 1,200 locals and a portion of the earnings purportedly went toward human development funds in Balochistan, the project was purely extractive. In October 2016, Pakistan's Senate Chairman Raza Rabbani called the Saindak project "the biggest loot sale in history."¹⁹⁸

Still, opinion of China remains highly positive in Pakistan. Over the past decade, Beijing has been broadening its outreach across the border, including to Islamist and regional political parties. It seems to have accelerated these efforts after the rancorous debate over CPEC emerged in early- to mid-2015. It has embarked on an impressive public engagement drive, reaching out to rising and mid-level officials in regional parties and offering scholarships to those connected to political influentials in Balochistan. A senior official with the PPP stated in an interview that the Communist Party of China officials frequently engage her on WhatsApp.

Through its outreach, China has developed a new set of partners in Pakistan. In August 2015, senior officials from multiple Pakistani political parties visited Urumqi, the capital of the Uighur Autonomous Region of Xinjiang. Among them was Afrasiab Khattak, a senior ANP leader. On returning from China, he tweeted, "Their vision of 'One Belt One Road' (Silk Road both Land & maritime) has great potential for us provided we focus on development."¹⁹⁹

Khattak, a leftist politician, said in an interview that China has conceived a totally different approach toward aid and development as compared to the West. He believes that Beijing is "really conscious of nineteenth-century colonialism" and aims to avoid replicating it in its global pivot. "I do not believe," he said, that "the Chinese are an East India Company marching into Pakistan." Baloch and Pashtun activists, journalists, and politicians, including Khattak, Safi, and Shahwani, speak admiringly of China's ability to develop its underdeveloped regions. Khattak praised the development in Urumqi and supported the Chinese government's campaign to combat what is described as Islamic extremism in the region. An ethnic Pashtun nationalist, Khattak is particularly heartened by the appreciation of Chinese experts of regional subcultures and discussions of potential connectivity between Pakistan, Afghanistan, and Tajikistan via the Wakhan Corridor.

In November 2015, the Chinese ambassador to Pakistan, Sun Weidong, met with Baloch tribal leaders and businessmen in Quetta.²⁰⁰ China's skills in managing political acrimony will be tested by PTI, which has at times adopted an almost confrontational approach with Beijing. It was PTI's protests that delayed the visit of President Xi Jinping in late 2014. Since then,

Beijing has been broadening its outreach across the border, including to Islamist and regional political parties.

PTI's Khyber Pakhtunkhwa leadership has been a vociferous critic of the CPEC plan, at times involving the Chinese embassy. In October 2016, Ambassador Weidong had to publicly refute a claim by Khyber Pakhtunkhwa Chief Minister Pervaiz Khattak that he told him that the western route was not part of CPEC.²⁰¹

Recommendations

Government of Pakistan

Create a multitier CPEC authority led by the prime minister, operated by the minister of planning, that incorporates the chief ministers of Pakistan's four provinces and Gilgit-Baltistan as well as the military service chiefs. A broader CPEC authority is necessary to building a sustainable consensus in favor of the corridor and its various projects. Although Pakistan has an existing body to build interprovincial consensus, the Council on Common Interests, its mandate is far too limited to deal with an initiative as vast as CPEC, and the government has failed to convene it within the period mandated by the constitution.²⁰² Reactive, ad hoc measures such as all-parties conferences are not enough to build trust and consensus. Legislative oversight committees have played an important role in CPEC's first two years, but parliamentary activity has declined since 2013, and such committees are inadequate as a mechanism for shaping consensus. In January 2016, Prime Minister Sharif agreed to head a steering committee on CPEC that would include the chief ministers of the four provinces and Gilgit-Baltistan, as well as three federal ministers and the head of the parliamentary CPEC committee. The committee has yet to meet, however. It also does not include any civilian or military security officials.²⁰³ The Planning Commission currently has a CPEC cell, but, according to a former Planning Commission consultant, it is understaffed and overwhelmed. The commission has also had trouble filling vacancies.

A CPEC authority would serve several functions: consensus-building between the federal government and provinces, interagency coordination, capacity building, and project facilitation.

The top-level tier—led by the prime minister and including the finance minister, planning minister, and chief ministers of the four provinces and Gilgit-Baltistan as well as the military service chiefs—would perform the role of consensus building so as to ensure an equitable distribution of projects and coordination on security. The mid-level tier would be led by the federal minister for planning, and include relevant federal and provincial ministers, such as finance and energy.

The planning minister would also operate the broader authority on a day-to-day basis—which would minimize disruption to the project's current decision-making framework. A semi-autonomous CPEC authority along the lines of Pakistan's Water and Power Development Authority would allow for the development of internal capacity to conduct feasibility studies and, in the future, manage projects currently operated by CPEC contractors.

The risk that opposition parties could use consensus building bodies to slow the CPEC project so as to deny the PML-N government a strong record of accomplishments ahead of the 2018 general elections needs to be acknowledged. But a politically inclusive CPEC authority—managed by the planning minister, staffed with its own high-caliber personnel, and including multiple tiers to incorporate federal and provincial government officials—would provide the federal government with the moral capital to overcome potential obstructive measures by opposition parties. An institutionalized, inclusive CPEC authority would also create a broader sense of ownership of the project and assist the PML-N in overcoming its failure to communicate CPEC priorities and the basis with which projects are included in its portfolio.

Disclose detailed information on all CPEC projects on the Planning Commission's CPEC website and address frequently asked questions on the site. From the onset, the government has been unclear about how fiscal constraints affect the sequencing of CPEC projects, the differing roles that China (as an investor) and international agencies (as lenders) play in Pakistan's various infrastructure projects, and the utility in upgrading existing road networks as opposed to creating entirely new ones. It also has been vague about the role Gwadar port will play in Pakistan's economy. And it has failed to explain how China's role as an investor differs from that of donor countries such as the United States—that is, the Chinese are not filling the void of the receding USAID. They aim for a win-win situation: Pakistan gets the infrastructure it wants, but Chinese contractors and operators make profits. Although much of the information is available on other Pakistani government websites, the CPEC site should disclose detailed information about projects, such as the debt-equity ratio and interest rate, and the CPEC debt repayment schedule.

Ensure maximal potential economic benefit for local Baloch in Gwadar, protect their political rights, and mitigate the disruption from the region's inevitable demographic changes. The federal government and the Balochistan provincial government should set employment quotas to give priority for public and possibly even private-sector employment to residents of the Gwadar district and others nearby or adjacent: Kech, Awaran, and Panjgur. The quota could be extended to other Baloch districts such as Dera Bugti, Kalat, and Khuzdar. According to development economist Kaiser Bengali, selection on the basis of residency by district would provide an alternative to directly requiring ethnic Baloch or Baloch speakers. A similar quota system in the Sindh province has ensured ethnic Sindhi employment in a province dominated by migrants from India and other provinces of Pakistan. The Gwadar Development Authority, security and regionalist Simbal Khan said in an interview, is developing a quota system privileging individuals whose grandfathers were residents of Gwadar.

Two, governmental bodies operating in Gwadar should give priority to contractors and subcontractors from Baloch-populated areas. Liaquat Shahwani, a mid-level official from the Baloch National Party, said that construction contractors generally hire laborers from their own region, regardless of where the job is. So, for example, a contractor from Gujranwala in Punjab working on a project in Gwadar would hire mainly locals from Gujranwala. Awarding contracts to Baloch-owned companies, particularly those from the Makran region, would ensure sizable Baloch representation in Gwadar labor and offset the shock from demographic changes. Shahwani identified a number of capable Baloch construction companies in Pakistan, including the Rakhshani Builders, which is a contractor of the Frontier Works Organization. An engineer with Pakistan's Frontier Works Organization—the main engineering command of the Pakistan Army—however, pointed out a dearth of local skilled and semiskilled labor. He noted that, for example, workers for some road projects in Balochistan had to be brought in from as far as Gilgit-Baltistan. The GDA, in concert with the federal and Chinese governments, is working to develop skilled labor, with upward of three thousand local youth at the high school level being sent to China for studies, senior GDA officials said.

Three, the GDA, with financial support from donors in Beijing and Islamabad, could help develop an indigenous service sector and provide microloans for local Baloch who want to open small businesses—such as automobile repair centers, mobile phone shops, restaurants, and tea shops—to cater to new arrivals. Microloans could also be provided to provide working capital to locals who want to serve as material suppliers or subcontractors in Gwadar projects.

Four, the federal and provincial government should protect the political rights of locals. A range of measures could be taken along these lines. Perhaps the most extreme measure would be to bar new migrants from receiving local domicile status. On top of this, new migrants could also be prevented from being counted on the census or not included on local voter lists. These measures could prove to be politically controversial in the long-term. An alternative, proposed by Maqbool Afridi, a retired Pakistan Army colonel and Gwadar investor, would be to divide local elected seats between those reserved for natives and new migrants. GDA officials say they may plan to limit voting rights to those whose grandfathers were residents of Gwadar.

Five, to prevent a reoccurrence of the massive real estate fraud of the 2003 to 2008 period, land records should be digitized. GDA officials have said that they are in the process of initiating the process this year and may do the same for revenue collection. This would both protect the property rights of locals as well as investors from outside the region and reduce the risk of arbitrary decision-making by land revenue officials.²⁰⁴ The BNP's Shahwani proposes putting the provincial land revenue department directly under the control of the provincial chief minister and chief secretary to increase its effectiveness. However, given the distance of Gwadar from the provincial capital, Quetta, an effective and transparent local system of records is necessary.

Six, the local and provincial governments, in concert with Beijing and Islamabad, could work to enhance local education. There is a need to match recent entrants into the labor pool with the demands of the market. GDA officials state an approximate two thousand unemployed local youth with at least a tenth grade education. In partnership with China, the government of Pakistan is establishing trade and vocational schools in Gwadar. Beijing has in fact established a primary school in Gwadar. Poor security conditions, however, will make it difficult to hire outside teachers. Baloch separatist groups have in the past killed school teachers who come from outside of Balochistan or have played the national anthem before school.²⁰⁵

Finally, the integration of ethnic Baloch into the local security forces should be accelerated. The size of the Balochistan police should be increased, with new recruitment for the provincial police, constabulary police, and rangers from Baloch-populated areas.

Reform and improve the capacity of governmental agencies that deal with electricity and trade. Customs procedures must be made more efficient and effective to reduce underinvoicing and improve the flow of goods. Corruption and ineptitude in the customs system has enabled dumping of goods by China, the risks of which grow in proportion to the rise in trade. Bottlenecks in the clearing process leave goods at the border for longer periods than competing transshipment hubs, placing Pakistan's ports at a disadvantage.

The independence of electric power regulator NEPRA should be maintained. Greater budgetary allocations for human resources in NTDC and distribution companies should be made to reduce transmission and distribution losses and ensure that the Pakistani electricity grid is able to bear growing loads.

Conduct open bidding for large-scale mining projects in Balochistan, including Reko Diq and devote a fixed percentage of the annual royalties toward human development projects in Balochistan or as direct cash transfers to poor Baloch, under the framework of the Benazir Income Support Program. It is critical that mineral exploration and mining contracts in Balochistan be tendered and awarded openly and include a process of educating key stakeholders as well as the general public about the standard practices of the mining industry. In addition to ensuring the employment of local Baloch, the Mineral Resources Development Board ought to consider offering a royalty to residents of Baloch-majority districts, using a direct cash transfer along the lines of (or as part of) the Benazir Income Support Program, similar to the basic

income offered to residents of Alaska through the Alaska Permanent Fund. Given the likelihood that the Reko Diq mining concession will be offered to the Metallurgy Corporation of China, and that Beijing could also fund the construction of a railroad network from the Reko Diq area to Gwadar as part of CPEC, it is imperative that the Reko Diq license be awarded and the subsequent extraction be conducted in a transparent and fair manner, with guarantees of legal protection to investors, along with local processing and distribution of royalties to locals. Indeed, if Reko Diq is done right, it can be a model replicated for other mining projects in Balochistan and other regions of Pakistan. However, if the project fails, it could not only jeopardize future potential mining projects in Pakistan, deterring foreign investment in the sector, but also foment an image of Chinese as colonizers and exploiters, problematizing or even jeopardizing the Gwadar port and broader CPEC project.

Consider additional connectivity projects for CPEC or to complement it. The Dera Ismail Khan-Peshawar portion of the Indus Highway should be upgraded either through CPEC, in partnership with another foreign or international agency, or using the government of Pakistan's own funds. East-west connectivity within Pakistan should also be strengthened by expanding the N-70 highway from Multan to Dera Ghazi Khan and Quetta into a motorway.

Avoid an escalatory trap with India. Islamabad should avoid overemphasizing the security aspects of CPEC in reaction to Indian provocations and instead consistently maintain that CPEC is open to all countries. Although the prospects of more liberal cross-border trade with India are presently dim, Pakistan should explore opportunities for opening the Port of Karachi to freight coming to and from Indian-controlled Kashmir as well as the Indian state of Punjab.

US Government

Continue moral support for CPEC, emphasize US desire for economic development for Pakistan, position the United States as a synergistic force and alternate source of financing vis-à-vis CPEC, encourage US private-sector investment in similar projects. The US government should maintain consistent public support for CPEC insofar as it promotes economic growth in Pakistan and regional connectivity. Although direct US participation in CPEC may not be possible given its present abstention from the Belt and Road Initiative and privileges given to non-Chinese companies, Washington could encourage American companies to serve as suppliers and perhaps even as subcontractors for CPEC projects. For example, Pakistan Railways procured locomotives from General Electric to haul coal from Port Qasim to the Sahiwal Coal Power Plant constructed under CPEC.

Additionally, Washington could position itself as an alternative financing source for Pakistani companies that would like foreign goods or services, focusing on niche industries in which American companies can compete with their Chinese counterparts. These include clean energy, infrastructure (such as modular bridges and railway cars), heavy machinery (such as tractors), and petrochemicals. The Export-Import Bank might also consider offering loans to Pakistani companies denominated in Pakistani rupees.

The US government should publicly note that it has provided funding for some projects now part of the western route of CPEC. Although those allocations were made prior to the conception and launch of CPEC, they could be used to demonstrate US goodwill toward the project and allay lingering concerns of a possible Indo-US entente against it.

Facilitate Afghan integration into a Gwadar-centric logistics infrastructure. Assist in the development of cold storage facilities for Afghan produce along the Chaman-Gwadar corridor. Iran has become Afghanistan's largest trading partner, the balance of trade overwhelmingly favoring Tehran. Afghanistan-Pakistan trade is more balanced. Stabilizing Afghanistan

requires easing the country's dependence on its neighbors with access to sea, not simply replacing one dominant power for another. Afghan dependence on Bandar Abbas and Chabahar and imports from Iran may, in the long-term, give Tehran excessive control over Afghanistan. Although Tehran in the past has supported US efforts to stabilize Afghanistan, its use of Afghans as foreign fighters in Iraq and Syria and tactical support for the Taliban demonstrates the potential for an even more destabilizing role.

The US government should consider helping facilitate Afghan agricultural exports through Pakistani ports, by supporting logistics networks, such as cold storage facilities, en route to the Pakistani ports of Gwadar and Karachi.

Government of China

Maintain noninterference in Pakistani politics, avoid public involvement in intra-Pakistan political disputes even if they relate to CPEC, and abstain from public criticism of Pakistani political parties and leaders. China's diplomatic mission in Islamabad is engaged in an unprecedented public diplomacy effort in Pakistan, particularly through the use of social media. A Chinese diplomat, for example, engaged in a Twitter question-and-answer session with Pakistanis in May 2017. However, the same diplomat is overly combative with critics of CPEC, including with politicians from Baloch nationalist parties. His derisive attitude is inconsistent with diplomatic norms.

Increase social expenditures in Pakistan, focusing on Balochistan and Gilgit-Baltistan. The government of China is providing aid for a hospital and school in Gwadar. It could expand these goodwill measures to other parts of Balochistan and the Gilgit-Baltistan region. In particular, funding for hospitals, primary and secondary schools, and clean water projects in insurgency-hit areas of Balochistan—such as Awaran, Khuzdar, and Panjgur—would earn goodwill among the local populace and reduce threats to Chinese personnel and investments.

Appendix

Table A1. Projects Likely to Be Completed by 2020

| Project Name | Type | Cost (US\$, millions) | MW | Location (Province) |
|--|-------|-----------------------|--------------|---------------------|
| Port Qasim Coal Power Project | Coal | 1,980 | 1,320 | Sindh |
| Sahiwal Coal-Fired Power Plant | Coal | 1,600 | 1,320 | Punjab |
| Dawood Wind Farm | Wind | 125 | 50 | Sindh |
| Hubco Coal Power Plant (1) | Coal | 970 | 660 | Balochistan |
| Hubco Coal Power Plant (2) | Coal | 970 | 660 | Balochistan |
| Jhimpir Wind Farm | Wind | 250 | 100 | Sindh |
| Karot Hydropower Plant | Hydel | 1,420 | 720 | Punjab |
| Quaid-e-Azam Solar Park in Bahawalpur | Solar | 1,350 | 900 | Punjab |
| Sachal Wind Farm | Wind | 134 | 50 | Sindh |
| Three Gorges 2nd and 3rd Wind Power Projects | Wind | 150 | 100 | Sindh |
| Total | | 8,949 | 5,880 | |

Table A2. Projects That Will Face Delays but Likely to Be Completed by 2020

| Project Name | Type | Cost (US\$, millions) | MW | Location (Province) |
|---|--------------------------|-----------------------|--------------|---------------------|
| Engro Thar Coal-Fired Power Plant (Thar Block II) | Coal | 2,000 | 1,320 | Sindh |
| Surface Mine in Block II of Thar Coal Field, 6.5 Mtpa | Coal | 1,470 | 0 | Punjab |
| Matiari-Lahore Transmission Line | Electricity transmission | 1,500 | 0 | Punjab |
| Matiari/Port Qasim-Faisala-bad Transmission Line | Electricity transmission | 1,500 | 0 | Punjab |
| SSRL Mine Mouth Power Plant (Block I - Thar) | Coal | 2,000 | 1,320 | Sindh |
| SSRL Thar Coal Block I, 6.5 Mtpa Mining | Coal | 1,300 | 0 | Sindh |
| Total | | 9,770 | 2,640 | |

Table A3. Additional Energy Generation Possible Under Near-Term Projects

| Project Name | Type | Cost (US\$, millions) | MW | Location (Province) |
|-----------------------------------|---------------|-----------------------|--------------|------------------------|
| Thar Mine Mouth Oracle (Block VI) | Coal | 1,300 | 1,320 | Sindh |
| Rahimyar Khan Coal Power Plant | Coal | 1,600 | 1,320 | Punjab |
| Gwadar Coal Power Project | Coal | 360 | 300 | Balochistan |
| Kohala Hydel Project | Hydroelectric | 2,397 | 1,100 | Azad Jammu and Kashmir |
| Suki Kinari Hydropower Project | Hydel | 1,802 | 870 | Khyber Pakhtunkhwa |
| Total | | 7,459 | 4,910 | |

Table A4. Deleted Projects

| Project Name | Type | Cost (US\$, millions) | MW | Location (Province) |
|--|------|-----------------------|--------------|---------------------|
| Gadani Power Park Project + Jetty and Infrastructure | Coal | 5,160 | 2,640 | Sindh |
| Muzafargarh Coal-Fired Power Plant | Coal | 1,600 | 1,320 | Punjab |
| Salt Range Mine Power Project (and mining) | Coal | 800 | 300 | Punjab |
| China-Sunec Wind Farm | Wind | 125 | 50 | Sindh |
| Gas Power Plant | Gas | 550 | 525 | N/A |
| Total | | 7,685 | 4,310 | |

Notes

1. Salman Siddiqui, "CPEC investment pushed from \$55b to \$62b," *Express Tribune*, April 12, 2017.
2. Andrew Small, *The China-Pakistan Axis: Asia's New Geopolitics* (New York: Oxford University Press, 2015), 9–25.
3. Ibid.
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