On April 20th, 2015 the governments of China and Pakistan announced a series of MOU’s and project agreements focused on infrastructure and energy development within Pakistan. Total project funding included within the China Pakistan Economic Corridor [CPEC] will likely reach over 46 billion dollars, at least 35 billion of which is devoted to the energy sector. Observers have noted if all of these investments materialize, CPEC would equal all the foreign direct investment inflows into the country from 1970 to the present. The large energy focus of the Corridor makes it particularly important to ascertain the funding details for new energy projects that are part of the Corridor as well as the impacts of this funding on Pakistan’s energy regulatory landscape. Examining specific Pakistani regulatory bodies, public data from China/Pakistan project agreements and petitions to the government of Pakistan from energy industry actors provides a novel conclusion: CPEC funding is strongly associated with an increase in Pakistani private sector, Chinese state-owned enterprise sector, and intergovernmental domestic pressure to adopt Chinese state-owned insurance coverage for new/renewable energy projects. Case comparisons of regulatory organizations pre and post CPEC and assessment of Pakistan’s project bidding process pre and post CPEC demonstrates these conclusions. Changes to Pakistan’s formerly open and transparent regulatory process by introducing mandatory Chinese project insurance for new energy projects represents a substantial institutional shift for the recipient country. Fundamentally, these changes represent a substantial loss of agency and sovereignty over energy infrastructure by the government of Pakistan.
**Introduction and Research Question:**

The first decade-plus of the twenty first century has seen remarkable changes in the international political economy of foreign investment. Large development projects and project funding represent an important tangible strategic indicator of what regimes prioritize (particularly those regimes with closely tied economic and political structures). The focus of specific projects, payment conditions imposed by lenders upon recipients, and the resulting institutional changes this funding brings convey important strategic information. For example, western lenders often impose good governance conditions that indicate underlying political, economic and moral interests, and these conditions can substantially change the institutions of a given recipient state. The increasing emergence of a capital-rich People’s Republic of China into international project financing has added a new key lender and necessitates viewing Chinese lending with a similar critical lens. Both the PRC’s overall investment strategy as well as the impacts of this strategy on Global South states can and should be assessed by social scientists in related fields.

Nowhere is China’s emergence as a powerful international lender and project financier more apparent than in Pakistan. In some sense this should not come as a surprise. China and Pakistan have a long history of diplomatic, economic and military contact, starting in 1950 when Pakistan was one of the first states to officially recognize the PRC. Sino-Pakistani bilateral diplomatic relations were established in 1950, Chinese military assistance to Pakistan began in 1966, a strategic alliance was formed in 1972 and economic cooperation was initiated in 1979. This relationship has intensified in recent decades as both states have recognized the strategic value of the other in offsetting both the USA and
India in the region. Xi Jinping’s first visit to Islamabad in 2015 saw the PRC’s President go so far as to compare visiting Pakistan to visiting the home of a brother.\(^1\) Li Keqiang’s visit in 2013 witnessed Pakistani lawmakers pounding their tables in endorsement of his declaration to parliament that “If you love Pakistan, please also love China.”\(^2\) As such, Chinese development investment in Pakistan provides a useful case study of what the PRC’s international investment policy looks like with its closest allies and partners. Chinese development investment in Pakistan is thus a valuable outlier or extreme case, one demonstrating Chinese investment and development policy goals when political and social realities are most favorable.

One of the largest and most well-known of examples of China’s recent bilateral development investment collaborations is the China Pakistan Economic Corridor (and a much publicized sub-project at the port of Gwadar). CPEC is hard to overlook as a poster-child for China-Pakistan bilateralism in the 21st century due to both scale and breadth of projects. On April 20th, 2015 the governments of China and Pakistan announced a series of MOU’s and project agreements focused on energy and infrastructure development within Pakistan totaling over 46 billion dollars, at least 35 billion of which is devoted to the energy sector. Some observers have noted if all of these investments materialize, CPEC would equal all the foreign direct investment inflows into the country from 1970 to the present. For an energy strapped state like Pakistan the Corridor holds massive development promise.

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\(^1\) [http://politics.people.com.cn/n/2015/0420/c1001-26873284.html](http://politics.people.com.cn/n/2015/0420/c1001-26873284.html) 解读：习近平为何说访巴就像到自己兄弟家中探访？潘婧瑶实习生杨柳、张迎雪

The CCP mouthpiece of the People’s Daily also affirms that CPEC is an ever more important topic to the Chinese regime. It is also increasingly clear that regime-produced materials frequently conceive of an international investment policy that is a strategic realization of Beijing’s interests. Chinese state media and official government mouthpieces more and more frequently make reference to the China Pakistan Economic Corridor. This substantial official data suggests a focus on the region is important and that CPEC may provide a compelling treatment effect with which to view Sino-Pakistan relations.

Mirroring this official Chinese Communist Party focus is a marked increase in Chinese non-grant style funding. Some scholars have convincingly demonstrated that a

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4 Here, I greatly simplify a thorny definitional debate by working not to make parallels with other styles of investment but by comparing whether the intent and structure of the project is aid/grant like, or non-grant like. It is particularly this second category that is most open to critique, a fact of which I am well aware. To preempt such questions I note that China engages in a variety of market-based, profit seeking international investment modalities, including but not limited to engineering/procurement/construction bids, loans, export financing (often tied to EPC bids), concessional loans (where much of the payment is “in kind”), and loans with substantial debt rescheduling. For the purposes of this work it is enough to note the broad distinctions in profit motive between
real separation of the economic and political is impossible in the case of the PRC’s development policy, and looking at the PRC’s investment decisions in Pakistan from 2000-2016 this seems to play out.\(^5\) Pakistan has seen an explosion of growth in non-grant style project funding, following essentially a cyclical positive loop pattern which reaches its most recent highs in proximity to the CPEC rollout and the spike in People’s Daily coverage (it should be emphasized here the following chart has incomplete data for 2016).

Increasingly, Pakistan appears to be the recipient of increased market-based and profit-seeking project funding from China. This is despite an overall investment landscape in which Pakistan’s firms are seeing massive outflows of $194 million USD in the first five grant-like and non grant-like modalities. All systematic studies of Chinese foreign investment struggle with making parallels between China-origin activity and more “traditional” Western or OECD style projects.


\(^6\) Author’s own search data, ChinaAidData and American Enterprise Institute data sets.
months of 2017 and $334 million USD in 2016.\textsuperscript{7} Despite this exodus, China seems to prioritize CPEC and is following through on commitments made in official media. Recent scholarship has convincingly argued that the PRC uses a “strategic value logic” to regulate its domestic industry depending on sector and that domestic regulatory oversight is tighter for critical sectors like infrastructure or energy.\textsuperscript{8} Perhaps CPEC's sectoral emphases could indicate a similar focus abroad (at least where friendly political realities allow for it). Whatever China's motivations are for rushing into these particular sectors just as others flee Pakistan, CPEC should allow observers to glean what sectors are most important for China in the region.

While what CPEC means for China is a compelling puzzle in and of itself, perhaps more important are the myriad implications for Pakistan. The recipient state in this relationship is a populous nuclear power that qualifies as one of the key developing polities of the 21st century. Its population is relatively young, and it has an important geostrategic position at a crossroads of South, Southwest and Central Asia, and it is also a state currently faced with massive energy and infrastructure development deficits. Pakistan is also central ally and trade partner with the People's Republic of China with a relatively new, inchoate and underdeveloped regulatory regime. As such, the apparent unusual impacts of CPEC/Chinese funding on Pakistan's state capacity warrant further attention.

Examining case studies of specific Chinese backed energy projects within Pakistan/CPEC provides an important conclusion: CPEC funding appears causally associated with mandatory adoption of Chinese state-owned project insurance for new

\textsuperscript{7} Mangi, Faseeh and Dilawar, Ismail. This New Emerging Market Can't Seem to Lure Foreign Funds. May 1, 2017, 8:20 PM PDT May 2, 2017, 4:10 AM PDT. https://www.bloomberg.com/news/articles/2017-05-02/why-msci-upgrade-isn-t-enough-for-this-emerging-market-newbie

energy development projects. Pakistan case study evidence suggests a rather startling trend that appears to show that state ceding control over regulatory decision-making regarding its own critical energy and infrastructure spending. *Why would Pakistan take this extremely unusual step and give up elements of control of regulation and supervision of its own energy and infrastructure development investment?* At least as far as the adoption of mandatory Chinese state-owned insurance for energy projects is concerned, the draw of tens of billions of dollars for energy projects appears to be strong enough to warrant such sacrifices in state capacity.

**Hypotheses:**

To address the question of variance in Pakistan’s regulatory landscape, several hypotheses present themselves as both testable and potentially informative. The null hypothesis in regards to Pakistan’s regulatory state is that China’s foreign investment policy and an increase in China’s overall investment in Pakistan has a stochastic or random relationship with Pakistan’s domestic regulatory capacity. In other words, any potential research program must begin by assuming no relationship between these two variables. As is likely obvious however there would be no reason to explore a research project in any detail without substantive indications that the null hypothesis might be prime for rejection (or, more strictly speaking, failure to support).

Indeed, in examining the financial information coming from specific case studies there do appear to be grounds to reject or seriously question the null assumption that regulatory weakening in Pakistan is unrelated to Chinese project funding. Unpacking relevant data indicates there is substantial evidence to suggest possible rejection of the null hypothesis and warrant a full analytic inquiry. Building on the available literature on
China’s domestic development model several key hypotheses present themselves for testing.\(^9\)

The characteristics of Pakistan’s regulatory system pre and post CPEC point to a non-random impact of Chinese funding on these oversight systems.

As such, hypotheses to test consist of the following:

1. We should expect that with increased Chinese foreign aid, FAGIA, OFDI, ODI, and other types of grant and non-grant funding, there will be an increased likelihood and magnitude of procurement process capture in favor of Chinese actors. Following the introduction of CPEC, Pakistan is more likely to de-prioritize open and competitive international development standards and prioritize development systems that benefit China and Chinese firms.
2. Regulatory capture is more likely to occur in sectors central to the Chinese domestic development process. In other words, in so called “strategic” sectors, and sectors that were/are important to the Chinese development model.\(^10\)
3. We should expect more regulatory undermining in host states that exhibit relatively globally immature and/or inchoate structures of regulatory capacity.

Such a debate also necessitates a clear rubric for what constitutes procurement process capture. I propose a three-part delineation:

1. It denotes an abandonment of internationally agreed upon, IMF supported standards for open bidding and procurement.\(^11\)
2. It signifies other financial contractual elements moving from more open/optional to closed/mandatory forms.
3. Increasingly the regulatory system will de-prioritize Pakistani’s preferences, needs and desires for preferences of actors within the Chinese international project funding regime. This will visible through tariff, project, and project insurance pricing that favors viability and long term ROI for Chinese SOE’s, Policy Banks and EPC firms.

\(^9\) This project claims that funding from Chinese actors is associated with a decrease in domestic control of bidding/procurement processes, regulatory interference and energy infrastructure sovereignty for Pakistan. The implications of such a conclusion are both numerous and important for Pakistan itself. More work is needed to determine if these claims may be generalizable to other developing states receiving Chinese funding, or to China’s own wider international investment strategy.


\(^11\) I refer frequently to such standards throughout this piece. It should be noted a reference to such a system is not necessarily an endorsement of the morality or effectiveness of these processes. Indeed, the overall effect and effectiveness of conditional loans and grants is an important and largely separate discussion. My overall macro-goal is to discover what, if any, alternative processes China may prefer and deploy.
**Research Design and Variables:**

The case described here is one of several larger qualitative and quantitative projects that can be constructed to look at Pakistan’s overall regulatory and bidding environment for energy projects before and after the announcement of CPEC. It treats Pakistan’s project bidding/procurement regulatory regime, and specifically Pakistan’s National Electric Power Regulatory Authority (NEPRA), as the dependent variable, and China’s foreign development investment (specifically CPEC funding) as an independent variable. NEPRA allows for review of petitions made to it via its web portal, thereby allowing for a case-based examination of the types and content of private sector requests to the Pakistani government over time. The second case study views NEPRA and its regulatory decision making as a dependent variable, while Chinese foreign investment (specifically CPEC) functions as an independent variable. Concretely the dependent variable in this case is Pakistan’s largest and most important electricity regulatory body. Abstractly, it is Pakistan’s sovereign influence over key infrastructure decisionmaking.

A case study/temporal treatment effect model can also work hand in hand with tried and true causal logic tests. For the purposes of CPEC’s impacts on Pakistan’s regulatory regime both “hoop” and “doubly definitive” causal conditions can be demonstrated by examining qualitative data in a chronological manner. Data collected thus far indicates that hoop tests are passed in that the causal condition of CPEC’s announcement is not found without specific regulatory outcomes. Neither are the regulatory changes found without

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12 Much more can be said about definitions of these financial flows. There will be some elaboration on these points in the literature review included here, but for now it is enough to note that I largely ignore the definitional debates on Chinese funding flows for both logical and practical purposes. As will become clear, the diversity of definitions for China’s aid and loans are limited only by the amount of scholars attempting to do the defining. As such, it appears to this author that one more unique definition is hardly helpful in discerning the truth of the matter. More formally, it is also increasingly clear China does not conform to OECD standards for development flows (indeed, this is one of the larger motivations for this paper). As such, attempting to essentially fit a square peg into a round hole by deploying OECD-like definitions onto non-OECD like flows holds little utility.
These mixed qualitative and quantitative measures will allow for an assessment of the degree to which Pakistan’s regulatory regime is impacted by Chinese funding. If a robust relationship is observed, the mixed nature of this analysis will also allow for a qualitative assessment of why such regulatory changes are occurring and what this means for China’s overall external development investment policy. Because China’s overall international investment system shows high levels of integration and cooperation between SOE’s, Policy Banks and the Party State, extremely large projects like CPEC allow for an inductive look at the macro-objectives of each of these players and the system as a whole.

\[ A = \text{Overall Chinese development strategy/ objectives in Pakistan.} \]
\[ X = \text{Chinese development strategy/ objectives in Pakistan.} \]
\[ M = \text{Lobbying/ petitions to Pakistani regulators.} \]
\[ Y = \text{Project financing decisions/determinations/ realities.} \]
\[ C = \text{Possible confounders: 1. Personal relationships between heads of state. 2. Financing changes explained by global market forces/ standards. 3. Better offer from Chinese firms. Etc.} \]
\[ B = \text{Non-} \]
confounding causal variables (causes unrelated to contract details, but also unrelated to Chinese funding).

**Applied Literature Review/Contribution to Discipline:**

There is a clear “gap” in the literature surrounding emergent Chinese international investment. Important journals in the field like *Studies in Comparative International Development* have noted that “Curiously, analysis of China’s role in facilitating or hindering development in the Global South (or even the effect of the changing global context on China’s own development) has not been a topic that SCID authors have explored.”

There is an obvious need to fully understand China’s foreign investment policy and the impacts of this policy on developing countries like Pakistan. To do this, it is critical to triangulate and combine literatures in foreign investment, development policy, development regulation and domestic political economy as well as China-specific works.

China’s domestic development policy has of course been the focus of extensive inquiry. Arthur Kroeber is a critical mainstay here, providing an excellent overview of China’s political economy of development. He stresses that China has predicated low, developing country level labor costs in conjunction with highly developed infrastructure that rivals Western levels.

Kroeber notes “regulatory control” being key, but caveats this by adding a specifically Chinese definition of what can constitute regulatory processes. For much of what other states would delegate to regulators, China relies on state-owned firms with high level guanxi/networking and ministerial connections as a regulatory “framework”. Other scholars who have focused on the domestic political economy of the PRC are Helleiner and Kirshner in *Great Wall of Money* and Bell and Feng’s *The Rise of the* 

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13 Evans, Peter; Stallings, Barbara. *Development Studies: Enduring Debates and Possible Trajectories*. St Comp Int Dev. 51:1–31. Published online: 5 May 2016. Pg. 28.

People’s Bank of China. Works like these provide critical background in the levers of monetary and fiscal control within the Chinese economic system and also highlight the need for Chinese banks, Policy Banks, SOE’s and SOE-associated financial organizations to go abroad to seek new greenfield projects.

In terms of international development, Hugh Whittaker notes that progression through economic development stages has changed in drastic ways. They contend “late development” is largely impossible and suggest “compressed development” is the new reality. All stages of development (endowments-driven, resource-driven, assembly-driven, R&D-driven and internet-based) now occur simultaneously and states no longer move from one to the next. There is a strong application of this theory to China both domestically and externally, and we should expect its external financing to take on the sectoral forms of each of these five stages concurrently.

While broad analysis of China’s role in the international investment system is still in its infancy, substantial work in this regard has been conducted regarding the PRC’s regional neighbors. Kato, Page and Shimomura’s edited volume on Japan’s outward development policy is perhaps one of the most useful examples yet. Japan’s Development Assistance is an enlightening look as to how development lending and grants have been conducted in an East Asian context for decades. Kato et al also spend considerable time unpacking China’s “style” as an international lender by looking at historical origins of the “going out strategy” to support exports and create opportunities for domestic firms, its large

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17 A phenomenon clearly displayed in Pakistan over the last half decade.
preference for bilateral aid and loans (with only 15% from 2008 to 2013 being multilateral), and its preference for aid to developing countries (with 52.1% of this flowing to developing states between 2010-2012). The work also makes some questionable comparisons as well, particularly round the “shared” Japanese and Chinese emphases on recipient led investment in both grant and loan modalities. My own work shows this to be much more a point of divergence than convergence (at least in the substantial case of China and Pakistan).

Others have conducted work on Chinese development investment internationally, though this work tends to diverge from my own project in numerous ways. Perhaps the most prominent example of this work in the policy analysis discipline is Derek Scissors’ work at the American Enterprise Institute.\(^\text{19}\) His reports tend to be detailed debunks of commonly held American policy judgements of Chinese international investments. Of similar import is work done by RAND Corporation scholars Charles Wolf, Xiao Wang and Eric Warner. RAND studies attempt to compare Chinese lending and grants to more “traditional” sources of funding, a discussion that is very useful for researchers in this area.\(^\text{20}\) A related study bridging domestic and international foci is the Sanderson and Forsyth research project looking at the China Development Bank (CDB).\(^\text{21}\) This study creates interesting bridges between more China-focused financial and development research and literature concerned with outbound flows, though it is concerned exclusively with one financial actor. Another critical work in Chinese outward investment is Gallagher


and Irwin’s *Exporting National Champions*. These authors focus much more on ascertaining China’s macro role in the international lending economy, and comparing this role to other late developing states in East Asia. The work is fundamentally comparative and the researchers conclude that China has a greater incentive to give OFDI loans than Japan or Korea because 1.] Chinese borrowers are state-owned and/or heavily state affiliated, allowing for channeling of funds to targeted areas, and 2.] China’s high savings and foreign exchange reserves allow it to give OFDI loans at a greater percent of its GDP. They also emphasize China does not publish “disaggregated” China Development Bank or EXIM Bank data, and that classical distinctions between OFDI and export finance is blurred in China. Commodities focused work like Economy and Levi’s *By All Means Necessary* and David Dollar’s explorations of Chinese resource extraction in Africa depart from my work in both sectoral and geographic focus, but are nevertheless interesting for context building.

There is also salient research in the important “development state” literature that can be comparatively applied to China’s current behavior as well. This study must of course begin with Johnson’s seminal work *MITI and the Japanese Miracle*, in which the fundamentals of Japan’s regulation around development are outlined. Studwell’s *How Asia Works* builds on this by extending and contrasting differing development state models across East Asia. Martin King Whyte adds a sobering and contrarian view of the model by pointing out just how much China’s “development model” relied on factors outside any

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state or policy control. These cases establish a pattern of states, including China, that inherit a tradition of weak formal regulators displaced by strong state-oriented firms serving as the levers of macroeconomic control.

There are also specific area studies literatures important to frame the development state case study of Pakistan. Naseemullah and Arnold suggest that development state persistence emerges from fundamentally different causes than the inception or origin of development states. They conduct this comparison vis a vis different states’ individual ability (or lack thereof) in “co-opting” rural challengers. Building on this, Naseemullah notes in a separate article that Pakistan already deals with “indirect” or “hybrid” rule in the FATA. Struggle for sovereignty is real in this region of Pakistan without outside interference. Fatima and Waheed add to this by noting how South Asia is particularly primed for political volatility to impact overall economic performance. Both these sets of authors provide important references for why Pakistan would yearn for economic and development policy stability akin to what China has been able to accomplish. USAID has numerous reports on development projects in the area with some focusing specifically on Pakistan’s government procurement apparatus.

Finally, historical research on Pakistan’s regulatory regime itself is also important to ground this investigation. Reports from USAID, Pakistan’s Public Procurement Regulatory

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Authority and from the WTO and World Bank provide excellent background here. These sources detail a country moving from nationalized infrastructure and energy utilities to privatization to incremental reforms in procurement. Since the early 2000’s Pakistan’s federal government has increasingly emphasized improving procurement and bidding processes. Pakistan has worked extensively with the IMF and WTO to undertake structural reforms promoting growth in investment. On the IMF side this involves participation in the Extended Fund Facility (EFF), which enables disbursements of funds tied to short term economic reform programs. Pakistan eventually reached a new high water mark in 2015 when the country attained observer status in the WTO’s Government Procurement Agreement (GPA). These reforms have focused on a regulatory structure that is nationally and internationally competitive, contract based, cost aware, and that emphasizes “value for money”, fairness, efficiency, accountability, and transparency.

There are thus a series of in depth reviews regarding China’s domestic development policy, China’s domestic political economy and macroeconomic policymaking, development state investment policies in general, and Chinese investment activities in commodities and in other geographic areas. There is also substantial work on the overall international investment ecosystem, as well as work focused on other late developer’s international investment policies (Japan being a prominent example). Finally, there is

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Value for money is defined as “means best returns for each rupee spent in terms of quality, timeliness, reliability, after sales service, up-grade ability, price, source, and the combination of whole-life cost and quality to meet the procuring agency’s requirements.”
substantial work from area studies experts on Pakistan’s own development and regulatory challenges, although entirely in a pre-CPEC mode and largely without reference to the massively increasing investment flows coming into the country from Chinese firms, SOE’s and banks. Simply put, my own review of the extant literature points out many possible theoretical and methodological jumping off points for a study of the impact of Chinese investment in Pakistan. This research indicates that the earlier quoted statement from *Studies in Comparative International Development* regarding a gap in understanding China’s development role in the Global South is indeed accurate.

**Project Insurance Case Study:**

Chinese international project financing increasingly comes with various strings attached, particularly in regards to project insurance. This project insurance can run into the hundreds of millions of dollars for energy projects and are always a space for contention, negotiation and bargaining. Project insurance is also one of the most important points of comparison for different finance packages, along with debt/equity splits, production tariffs, operating/ownership/repayment periods and interest rates. Because Pakistan has a history of energy sector investment from a diverse variety of investors, ranging from China to USAID to the Asian Development Bank, the World Bank, and European private banking firms, interesting comparative project insurance comparisons are also possible over time. Additionally, previously established (and we shall see, threatened) energy project reporting requirements in Pakistan allow for much more detailed information of the bidding process than do aggregated and vague Chinese firm/state sources. This data environment makes it possible to see that project insurance rates in country can be 1.5% on equity and 1.5% on debt, and often substantially more. For
example, the Suki Kinari Hydroelectric Dam project ended up with 5.28% total project insurance fee, which amounts to 109.125 million USD. Energy sector project insurance is thus a financially sizeable and important element of foreign energy investment policy despite its rather bland moniker. It is one of the foundational elements of any large infrastructure or energy investment contract.

The financial and political realities of energy project insurance, as well as the aforementioned availability of data on the subject in Pakistan, combine to make this a rich area of social science inquiry. This inquiry will be contextualized temporally in relation to the “time treatment” of the announcement of the China Pakistan Economic Corridor. By examining petitions from private actors to regulatory bodies within the government of Pakistan novel conclusions about CPEC and Chinese funding in Pakistan in general begin to emerge. By organizing and collecting qualitative data on either side of the announcement of CPEC on the 20th of April, 2015 it is possible to examine whether my null hypothesis can be supported. Research into the NEPRA archives has indicated that in July of 2015 [CPEC start, April 2015] there began a flood of petitions filed consecutively for inclusion of Sinosure fees into wind power project financing. For NEPRA, this amounts to an unmatched influx of pressure unseen anywhere else in their operating history, and presents compelling evidence both in frequency and qualitative content to move to withdraw support from the null hypothesis. To demonstrate evidence for such a claim, this case study will proceed by setting the scene of Pakistan’s regulatory space with a brief history. The influx of petitions will then be discussed as an outlier both in frequency and content. Finally, a conclusion regard implications will be presented.

34 That there is no relationship between Pakistan’s regulatory capacity and an increase in China’s overall investment in Pakistan, or that this relationship is stochastic or random.
Pakistan's energy regulatory structure is underlined by the National Electric Power Regulatory Authority. NEPRA’s mission is to “[...] strive to develop and pursue a Regulatory Framework, which ensures the provision of safe, reliable, efficient and affordable electric power to the electricity consumers of Pakistan; we shall facilitate the transition from a protected monopoly service structure to a competitive environment where several power sector entities function in an efficiency oriented or market driven environment and shall maintain a balance between the interests of the consumers and service providers in unison with the broad economic and social policy objectives of the Government of Pakistan.”

The organization is obviously concerned with rulemaking surrounding energy projects, but also has a key role in both making the transition from state controlled energy provision to an open and competitive system. It is also tasked with making sure this process is in line with both consumer concerns and broader social goals. NEPRA’s main powers to achieve these goals are to: “Issue Licences for generation, transmission and distribution of electric power; Establish and enforce Standards to ensure quality and safety of operation and supply of electric power to consumers; Approve investment and power acquisition programs of the utility companies; and Determine Tariffs for generation, transmission and distribution of electric power.”

As such, on both the project investment and tariff setting side of the equation NEPRA is a serious regulatory bottleneck and an organization with legal “teeth”. At the same time, decisions around energy projects in Pakistan are rather notoriously corrupt, with some awards favoring friends of ruling elites. Unsurprisingly, these projects often underperform and deliver less value for money than would otherwise be the case, perhaps winning regulatory approval when none should be forthcoming. NEPRA is also

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limited downstream by circular debt issues resulting from widespread electricity theft.

Despite these greater limitations, NEPRA also appears to take its role as guarantor of competitiveness and apolitical decision making quite seriously. “By law, NEPRA is mandated to ensure that the interests of the investor and the customer are protected through judicious decisions based on transparent commercial principals (sic) and that the sector moves towards a competitive environment. A primary challenge is to quickly create a track record of NEPRA’s working such that it demonstrates its objectivity and impartiality. NEPRA has to demonstrate that its decisions are neither arbitrary nor influenced by individual and personal discretion. [...] The enactment of NEPRA clearly signifies the Government’s desire and effort to change from public to private ownership; from political to commercial priority in economic decision making; and from subjective to objective decision making in utility operations.”

To achieve this NEPRA has set up a system in which it receives a variety of petitions from private sector actors in regards to insurance rates/providers, as well as licenses, tariffs on electricity, cost adjustments, and interest rates. It acts through determinations of these cases to create statutory rulings that investors, utilities and firms must follow. Pakistan’s previous history of a corrupt, monopolized and protected system to provide electricity provided much of the original impetus for reform baked into NEPRA’s mission. This older, centralized system has in the last decade plus been slowly reworked to allow for a competitive provider space with supposed benefits to consumers, service providers and the government.

NEPRA is thus a critical lynchpin in creating a broadly accepted and concrete regulatory system that prioritizes the commercial sector. Attracting international foreign

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investment, promoting competitive structures for industry, protecting the interests of the investor and consumer, and demonstrating a dedication to “objectivity and impartiality” are key goals for the organization.  

Finally, NEPRA structural documents stress multiple times the critical need to transition from “political to commercial priority in economic decision making”. It is important to note that the body is dedicated to an open, transparent, competitive and un-protected regulatory ecosystem with energy consumers at its heart. The publicly available nature of NEPRA determinations is central here.

NEPRA, like many government bodies in Pakistan, makes available on its website substantial records open for public scrutiny. In a given year these petitions generally take the form of largely unrelated, stand-alone requests from private actors for specific project changes. The focus of the majority of these petitions relates to creating or revising generation tariffs (the cost of energy) on projects to increase profitability. For example, in 2014 all 20 of the petitions to NEPRA from private actors concerned tariff awards, negotiations, applications, petitions, EPC (Engineering, Procurement, Construction) contracts and consumer-end or so called pass-through tariffs. In 2014, as in every other year outside of 2015, it is extremely unusual for any single petition to match another in any important organizing details. These petition documents pertain to particular projects with specific operators and funders and often focus on entirely different sectors and geographic areas of the country. Specific energy projects, even those within the same sector of production or distribution, usually differ drastically on qualitative details. One dam is not really comparable to any other and all of these large projects deal with a variety of one off

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38 Ibid.  
39 Ibid.  

construction and operation related costs and fees. In this sense, NEPRA’s scattered and random catalogue of petitions and decisions makes sense. There simply are not cross-cutting issues for multiple projects. Outside of 2015, there are no instances of more than 5 sequential petitions to NEPRA that relate to the same subject, and even these document sets are always from either 1.] the same company filing multiple related petitions focused on one project, or 2.] regional government electricity suppliers filing quarterly tariff updates.41 Examples of shared petition demands between 2011-2014 and from 2016-2017 from multiple competing firms are entirely absent.

From 2007 to 2016 there is a remarkable lack of order to the NEPRA petition database. These records jump from one specific provider profit issue to the next. However, in 2015 this unorganized data changes starkly. 2015 petitions from private actors to the government of Pakistan in regards to wind power generation demonstrate an entirely different phenomenon. Between June and July of 2015 sixteen consecutive petitions to NEPRA from sixteen different private actors all push for accepting Chinese state-owned insurance provider Sinosure as the insurer for wind power projects in the country. These petitions all also occur within a few days of one another. The NEPRA petition database shows a large uptick in requests that the Government of Pakistan capitulate to Chinese requirements to utilize insurance through Sinosure. For Chinese projects abroad, project insurance flows through one provider. This firm is the China Export and Credit Insurance Corporation/中国出口信用保险公司, or Sinosure. This State Owned Enterprise is China’s main insurer of export financing and provides protection for SOE’s and other large firms against political, commercial and/or credit risks operating or exporting abroad. Critically,

41 Ibid.
Sinosure coverage is *mandatory* insurance for Chinese overseas bank loan and equity investment. In other words, it is required for anyone outside China who wants access to this type of capital from Chinese actors.

In stark contrast to previous years of highly diverse NEPRA petition data, Sinosure related documents show a high degree of coordination. They are unwavering in noting that Chinese state-owned insurance for project funding is required for Chinese capital. Five separate petitions from firms note that “[...] Plea: Sinosure Insurance is a contingent requirement of Debt from China. It is approved by NEPRA for other Projects (Coal etc.). It is a mandatory cost for Chinese Debt and should be incorporated as a pass-through cost by NEPRA.”42 This exact language is found in each of the five petitions originating from distinct wind energy firms. Highly similar language to this is also found in a petition from the Government of Sindh, Directorate of Alternative Energy/Energy Department in Karachi, signifying coordinated inter-governmental and private sector pressure.43 Furthermore, Harbin Electric International, a Chinese State Owned Enterprise, filed its own petition to


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NEPRA also pressuring for Sinosure fees. The five identical petitions, the Government of Sindh petition and Harbin Electric’s highly similar petition all include explicit language urging for Sinosure adoption.

Green energy firms in Pakistan view Sinosure inclusion in project costs as an increasingly key provision. One firm notes:

“as standard practice Chinese financial institutions require Sinosure to provide insurance coverage, etc. against all debt provided to projects/companies outside of their home country. It is highlighted that the only justification that the Authority [NEPRA] has given for not allowing the Sinosure or other export credit agency insurances is that the same was not allowed in the previous upfront tariff and still projects achieved financial close. In response to the Authority’s [NEPRA] justification it is again stressed that if the government and the Authority [NEPRA] desire to rapidly expand the wind power sector in Pakistan project developers would have to approach international commercial banks (secured through export credit agencies) in order to finance their projects as there is a limit to which local banks and multilaterals would finance further projects. The Authority’s justification would only work if the objective is to only set-up a limited number of wind power projects through only local and multilateral financing — a proposition that would be contrary to the government’s objectives and goals to develop the wind power sector [emphasis mine].”

Chinese funding for energy and infrastructure projects is thus a high enough priority that mandatory conditions set by the Chinese government are being pushed for across this competitive sector. The above quote also demonstrates both the domestic pressure exerted on the Pakistani government through repeated shortfalls in electricity provision as well as the harsh international realities of risk-averse financiers. There is clearly an explicit understanding between the firm and NEPRA that a huge investment is

required to markedly improve the country's energy network. These shortfalls are perhaps so desperate that any unusual mandatory fees are worth taking on to address them.

Another energy firm petitioning the government is equally honest about the dire straits of Pakistan's economic situation and the challenges of obtaining capital for energy improvements:

"An exclusion of Sino Shore [sic] premium will effectively shut the door for project financing from China which on account of its Foreign Exchange Reserves is fast emerging as the single most important source of capital. The appetite for 'Pakistan Risk' amongst the Western financial institutions is limited. This decision alone substantially reduces the potential capital sources as available to projects located in Pakistan. It is important to note that almost all of the wind projects under development in Pakistan has signed up for wind turbines manufactured in China, irrespective of the OEM's country of origin. In absence of Sino Shore [sic] premium, it will be extremely difficult to tap the Chinese ECA [Export Credit Agency] funding for such turbines [emphasis mine]."

The inside-view of the new energy industry in Pakistan contained within the NEPRA documents is striking. Chinese funding is an increasingly critical and indispensable source of development financing and western lenders are not motivated to make risky large sunk-cost investments in a restive region with an uncertain future. The soft power of Chinese manufacturing is also on full display as energy firms in countries lacking high-end production such as Pakistan are in desperate need of the components required for energy facilities. Firms wishing to construct such facilities are presumably well aware of the need to stay on friendly terms with Chinese SOE's, policy banks and insurance companies that likely share high-level political interests and communication. Other firms note that "Sinosure is a compulsory requirement and having Sinosure or not is becoming a Go — No

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Go situation at the moment” leaving little up for interpretation. From the perspective of private wind energy firms there is no choice in regards to capitulating to what amounts to a large extra fee for project funding. Sinosure’s rates are set at a maximum of 7% of the total loan benchmark or Chinese-originating debt (whichever comes in at a lower level). In an environment where the interest rate for debt on a project might only reach 5.5%, Sinosure fees can certainly be substantial.

It is important to note that these concerted and organized pleas to NEPRA from private industry, Chinese SOE’s and from within the Pakistani government are equally adamant that capitulating to Sinosure requirements is highly connected to CPEC itself.

“Moreover, due to the recent launch of the China Pakistan Economic Corridor, a number of local projects would be funded and/or set-up by Chinese companies and financial institutions and there would be a huge influx of Chinese investment into Pakistan, in particular into the power sector. Therefore, it is crucial that as part of the development and implementation of the China Pakistan Economic Corridor, the upfront tariff for wind power projects allows the cost of Sinosure insurance as part of the project costs — as the same would encourage Chinese investment [emphasis mine].”


This “Go-No Go” language is also found in:


Sinosure adoption across energy sectors represents a deep regulatory modification caused by the Corridor. Examining the NEPRA petition landscape pre and post CPEC gives a clear idea of the lobbying pressures facing the government.

The NEPRA files show a content association between CPEC and petitions for including Sinosure as a standard fee for projects. Content aside, these petitions also demonstrate significant increase in external pressure on NEPRA to capitulate to Chinese insurance requirements for project financing in close temporal proximity to the announcement of CPEC. Importantly, this flood of petitions proved extremely effective in securing this key project finance concession. The Sinosure fees were presented as required to obtain Chinese funding, intensely pressuring the cash-strapped state to “pay to play”. Prior to 2015 there were four upfront tariff decisions issued by NEPRA for wind power projects. Each of these documents goes into great detail to describe EPC costs, debt equity splits, loan repayment horizons, interest rates and other finance elements. However, none of these decisions spanning the 2011 to 2014 time period makes any mention of Sinosure or Chinese project insurance.

Closely following the announcement of CPEC we find the first mention of Sinosure in the context of NEPRA’s key regulatory oversight comes in a determination (not a petition) regarding what tariffs can be charged for wind energy projects. This June 24th


2015 comes two months after CPEC is announced and succinctly rejects any specialized insurance being included as a “pass through” (or included) item on the tariff. According to the determination:

“The Authority [NEPRA] has considered the issue in detail and has noted that although Sinosure/other agencies fees were not allowed in the upfront tariff, 2013, however, in spite of that, many projects were able to achieve financial close under the same. The Authority after due deliberation has decided to continue the decision taken in the upfront tariff, 2013 in this regard. Accordingly Sinosure/other agencies fees is not allowed as a separate cost head/pass through item in this upfront tariff [emphasis mine].”

In June of 2015 NEPRA sees no sufficient reason to extend pass through status to Sinosure fees. In other words, these costs are not to be included or considered in setting the rates of return for the asset being constructed. The regulator is matter of fact in noting that lack of Sinosure (or similar fees) in upfront project tariffs has not prevented success in the past and it sees no reason to extend this privilege to current projects. Within only a few weeks NEPRA would find itself bombarded by the sixteen petitions mentioned previously and shown below. The announcement of CPEC on the 20th of April 2015 sees the issue emerge in NEPRA’s records, and the flood of requests is both sequential as well as temporally clustered.

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Following the sixteen petitions clustered in very late June/early July or 2015, NEPRA substantially augmented its earlier determination. “Accordingly, the Authority after due consideration has decided that for wind power projects having foreign financing, an appropriate adjustment in the benchmark project cost will be allowed on account of Sinosure or other credit insurance fees, where applicable”51. Directly in response to the overwhelming amount of petitions NEPRA capitulated and removed the Sinosure restrictions it had previously deployed, listing the numerous petitions as reasons why. The

contrast in regulatory direction is stark: In April of 2015, CPEC is announced as a multi-billion dollar deal with the plurality of funds going to energy projects, and shortly thereafter NEPRA receives its first petitions and inquiries regarding CPEC projects. In mid-June NEPRA announces it will not be revising pass-through tariffs to include funding for Sinosure as a default. In late June and early July NEPRA receives the flood of petitions to include Sinosure. Finally, in October, NEPRA capitulates and includes pass-through tariff inclusion of Sinosure at up to 7%.

Adoption of millions or possibly billions of dollars of mandatory Chinese project insurance conducted through a State Owned Enterprise is thus highly associated with the NEPRA petitions stressing such an outcome immediately following the CPEC agreement. These petitions refer to CPEC and Chinese investment more broadly as the reason to include such fees in pass-through tariffs by default. Because NEPRA typically (always, until the 2015 Sinosure issue) receives a single petition per issue, and because these are often centered on specific project needs, the 2015 case is extremely unusual. Frequency-based and qualitative content also show the ultimate NEPRA decision can be tied conclusively to CPEC and its funding package.

Finally, the Sinosure/credit agency fee revision is the only element of the pre-CPEC NEPRA determination that changed in between the intervening decisions. NEPRA’s
October 6th document notes that: “The Authority is of the view that besides adjustments in the project cost on account of Sinosure or other credit agency fees, no change is required to be made in this account, therefore, decides to maintain its decision in this regard.”

Interestingly, even per megawatt project costs were also heavily contested by some petitioners (note, not necessarily the sixteen Sinosure petitioners). Despite these petitions, and despite the per megawatt project costs as being presumably an important and fundamental element to determining a tariff for an energy project, NEPRA refused to adjust such costs upward. The petitioners of this issue went so far as to note that lower than required per megawatt project costs would “compel investors to use less efficient turbines which will in turn reduce the reliability of wind power projects in Pakistan.” This is all to say there were other key issues brought before NEPRA during the same time period that were ignored or rejected. Only the existentially important go-no-go Sinosure issue, addressed through an unusual influx of diverse petitions, was subject to such prompt revision.

**Conclusion:**

This outcome has several wider implications. First, mandatory Sinosure premiums are a concrete example of the type of coordination frequently referenced in regards to Chinese international investment policy. The NEPRA/Sinosure case connects readily to a larger literature on Chinese lending practices and the advantages and disadvantages of this
program over others, as well as impacts on recipients. The previous thinking that China merely undercut other lenders has increasingly come under scrutiny, and in place of this advantage other factors have been looked at to address why states would choose Chinese funding for energy and other development projects. The flood of NEPRA petitions to include Sinosure fees followed a long history of pre and post CPEC state owned enterprise EPC contracts in Pakistan as well as exports of SOE produced energy equipment. This type of bundling of projects, materials, EPC work and funding is a possible feature unique to Chinese development abroad. Indeed, energy project financing in Pakistan increased markedly after the announcement of the Corridor. Following this, private, intergovernmental and Chinese pressure to adopt Sinosure for wind energy explicitly stressed this increase as a driver for adoption of SOE-based insurance. This pressure routinely referred to the precedent set by previous Chinese SOE and Policy Bank investments to support the case for Sinosure premiums. Often, Sinosure was conveyed not as a choice for the Government of Pakistan but as a strategic inevitability connected to the broader portfolio of critically needed energy projects.

A second implication to this case is that Sinosure premium inclusion demonstrates another instance of Chinese SOE’s and Policy Banks are making real efforts to behave less like state owned firms and more like private ones. Many scholars have noted Chinese Policy Banks and SOE’s work in concert on infrastructure investment and as such often overlook risk or outstrip real demand for project construction. “Real” risk assessment in the style of Western Banks and lenders is not completed, and the result is staggering amounts of bad
debt and nonperforming loans.54 Domestically and in the past this assessment certainly rings true, as China’s repeated flirtations with non-performing loan bubbles attests. However, in the context of CPEC and energy infrastructure investment in Pakistan recent events may point to a desire to reform and find a new way. Sinosure is after all an insurance provider, representing a pure form of capitalist risk hedging behavior. It has also been called upon in the past to support firms caught up in geopolitical crises. Sinosure presumably seeks to find the largest pool of premiums to offset inevitable losses in certain regions. For relatively risky locations like Pakistan, it would make sense that Sinosure would want complete buy-in from all Chinese funded projects, and that it would want to include these investments in a pool with others from less challenging locations. Furthermore, digging into NEPRA and WAPDA documents shows Chinese EPC firms, Policy Banks and Sinosure itself are all “speaking the language” of international finance. These documents demonstrate prolonged negotiations over debt-equity splits, end-stage tariffs on electricity, build-operation terms and handover horizons, and ecological and anthropological impact assessments. Overall, prioritizing a diversified Sinosure portfolio is smart on China’s part, especially as it pursues a path of investment in risky locales.

A third implication here is that mandated Sinosure premiums on all Chinese-involved projects represent another substantial challenge to the sovereignty of the government of Pakistan over its energy infrastructure. Insuring large energy projects and “mega projects” is a fundamental and standard element of international finance. However, the form, function and process of the mandatory Sinosure decision for Chinese wind projects (and energy projects in general) are a departure from the international norm. This

is because while requiring insurance on projects is quite typical for international
corporations, mandatory and seemingly closed channeling this insurance through a state-
owned enterprise is not. For example, German firms require insurance from Euler Hermes,
a French-based subsidiary of Allianz SE, for its foreign project financing. The large
distinction here is that Euler Hermes is not capitalized and directed by the German-
government. Selecting a competitive premium from this *publicly traded company* does not
involve German government funding or (critically) policy priorities. Pakistan is allowing a
foreign government to dictate both elements of project financing as well as outcomes in
the event of project disruptions. This is a much different reality than insuring projects
through publicly traded enterprises. Furthermore, the monopolistic nature of Sinosure
premiums needs further examination. How these rates compare to global norms and if
Sinosure rates are impacted by the lack of competition between providers are compelling
further questions. If Chinese projects really can only have insurance through Sinosure this
would likely result in a worse deal for Pakistan’s citizens, who would ultimately pay the
price set in any energy tariff.

The *qualitative* case study evidence presented here indicates the removal of open
bidding and procurement as a direct result of billions of dollars of Chinese financing and
engineering, procurement and construction work. An open, international and transparent
bidding process for large scale public services projects in energy and infrastructure is a
central responsibility for any functional sovereign state in the current global order. Quite
simply, how a country chooses to spend money on energy and infrastructure for its citizens

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55 Tricon Boston Consulting Corporation. “Motion for Leave for Review filed by Triconboston Consulting Corporation (Private)
Limited (the "Company") in relation to the determination of NEPRA in the matter of Upfront Tariff for Wind Power Generation.”
is a core component of government bureaucratic agency in both democracies and non-democracies alike. In emergent new energy fields like wind and solar this is an especially powerful precedent to set as well. The implications of CPEC funding being tied to this kind of regulation are enormous for Pakistan but also reverberate more broadly. Decades of work to mandate open and competitive bidding and procurement for development projects could be gravely threatened by these developments for several reasons. First and foremost there is the simple reality that China is either the first or second largest economy in the world and has shown rapid year over year international investment growth. Precisely because open/competitive bidding and procurement has been the focus of Western led development reforms for many years it is notable that some Chinese funding does not conform to this paradigm, nor does this nonconformity appear to be random. More critically, perhaps one of these systems outperforms the other for lenders and/or recipients. Time will tell, and more study is needed.

Pakistan is also a state just beginning to experience the potential reductions in corruption (or at least perceived corruption) that accompany years or decades of work on regulatory oversight. Transparency International data indicates that since survey records of public perception of corruption began in the late 1990’s Pakistan has slowly (and with fits and starts) improved its Corruption Perception Index score. From 2010 to 2015 this improvement is more consistently positive. While these numbers are hardly conclusive of a relationship between previous non-Chinese lending and alleviation of corruption for multiple reasons, it is important to note that country has been slowly improving both its world ranking as well as domestic perceptions.
Source: Corruption Perceptions Index. Transparency International. Pakistan specific data aggregated by the author. 
https://www.transparency.org/research/cpi/overview

Source: Corruption Perceptions Index. Transparency International. Pakistan specific data aggregated by the author.
Conclusions from the literature on traditional OECD-style conditional loans and their impact on good governance and corruption are of course still largely up in the air. Some scholars (Montinola, 2007) note that aid promotes fiscal reform really only in democracies, and that the level of reform impact positively correlates with increased democracy. Others (Akramov, 2009) note that aid to agriculture, manufacturing, mining and infrastructure (which they count as transport, communications and energy) all contribute to economic growth, while aid to social sectors like health and education are less constructive. Beuno de Mesquita has something to add here as well, noting that autocrats can stockpile funds they receive from the international community while democratic regimes typically must spend what they obtain. For this reason aid funding has a greater regime preservation effect on autocrats than democratically elected leaders. Kono and Montinola disagree, ascribing increased staying power to regimes that receive greater amounts of aid. Vis a vis Pakistan this debate is further complicated by realities on the ground as Pakistan has both a “hybrid rule” as described by Naseemullah earlier and a complex and turbulent electoral history. Pakistan in some ways demonstrates highly oligarchic trends in terms of corruption and electoral controversies, including both structural limitations that disenfranchise citizens in Azad Kashmir and Gilgit-Baltistan, as well as vote rigging. At the same time it has a free and active press, a comparatively strong judicial branch, and a contentious and active civil society. The 2013 election marks the first time a peaceful transition of administration has occurred in Pakistan after the previous government completed its full five year term. In this sense the structural issue of
governing also mirrors the above CPI data: Pakistan is at a transitional moment at the end of a long slog of reform and incremental improvement of government capacity. Concurrent to all of this is the reality that for the Sharif administration electricity provision is a foundational issue and one which many campaign promises rest upon.59 He was after all “swept to victory in the May 11 election in part on the appeal of slogans promising to deliver a ‘shining Pakistan’ and to ‘end the darkness.’”60 There is immense pressure on the government to provide reliable and affordable electricity. Sovereignty, agency and state regulatory control, especially over energy, are at a crossroads for one of the world’s most key developing countries. At the same time Pakistan’s institutions seem under enormous pressure to reform in favor of the billions of dollars of Chinese funding pouring in.

It is in this context of exactly this inchoate government capacity to regulate its own affairs that the above case study should ultimately be considered. Pakistan is a state with tremendous growing pains. In some ways these resemble China’s earlier challenges, but in other demographic, financial and infrastructural aspects is more akin to South Asian neighbors like India or even regions of quickly-developing Africa. An astonishing two-thirds of Pakistanis are under the age of 30, a fact all the more troubling considering the social, security, and economic challenges the country will face in the coming years.61 In this sense there is certainly a huge motivation for the central government to invest in development at all costs. In light of this Sinosure/NEPRA case study examined here it is increasingly clear what these costs may look like in terms of the actual capacity of the state to guide policy within its own territory. It remains to be seen just how revisionist this

60 Ibid.
energy investment policy is from the Chinese end. Does this represent a broader challenge to international finance standards, or simply a one off conducted in a polity highly sympathetic to China/the Chinese people. There is no way to tell at this relatively early point in the new collaborative relationship between the PRC and Pakistan. However, it is clear Chinese financing comes with new standards and new requirements that are tied intimately to the Chinese state apparatus. Increasingly, qualitative case studies demonstrate some of these standards come at the cost of indigenous regulatory capacity for this recipient of Chinese loans and grants.

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