

1 Introduction

In March 2013, Xi Jinping became president of the People's Republic of China. During the next two years, President Xi would unveil his grand vision for a new era of global connectivity, with China at its center. The first official expression of this vision occurred on September 7, 2013, during a visit to Kazakhstan, where he spoke about his ambition of connecting China to Europe with new infrastructure investments spanning the great Eurasian landmass. The next month, during a trip to Indonesia, President Xi introduced the Maritime Silk Road Initiative with the aim of enhancing China's seaborne connectivity via new investments in foreign countries' ports and surrounding economies, like a string of pearls. The aim of promoting global connectivity over land and sea was extended to information, later dubbed the Digital Silk Road (DSR), in a document published in March 2015, entitled "Visions and Actions on Jointly Building the Silk Road Economic Belt and 21st Century Maritime Silk Road."¹ This "Visions and Actions" statement provided the first coherent policy framework for the seemingly disparate and disconnected projects that collectively comprise the Belt and Road Initiative (BRI).

As signaled by President Xi's speech in October 2013, Indonesia appeared to be an ideal candidate for Chinese infrastructure spending. Yet, Malaysia emerged as a far more avid participant for reasons that are both surprising and puzzling. First, Indonesia had (and still has) the largest economy in the strategically important region of Southeast Asia, nearly three times larger than Malaysia's. Second, Indonesia's population of 250 million is nearly nine times larger than Malaysia's, making it the most populous country in Southeast Asia. Third, Indonesia has an abundance of natural resources and was already a major natural resources exporter to China whereas Malaysian natural resources exports

¹ The DSR was introduced by a white paper co-authored by the National Development and Reform Commission (NDRC) together with the Ministry of Foreign Affairs (MOFA) and the Ministry of Commerce (MOFCOM). See www.mfa.gov.cn/ce/ceuk/eng/zywl/t1251719.htm#:~:text=The%20Chinese%20government%20has%20drafted,African%20countries%20more%20closely%20and (accessed May 10, 2022).

to China were negligible.² Fourth, Malaysia's GDP per capita was more than three times larger than Indonesia's, suggesting a far greater need for infrastructure development in the latter.³ Finally, Indonesia possessed institutional arrangements that are widely regarded as more conducive to attracting inward FDI; its democratic institutions include more veto points which help ensure greater policy stability and thereby reduce political risk in comparison to Malaysia's government which was dominated by a single ruling party.

Despite Indonesia's numerous advantages, Malaysia attracted a far larger volume of Chinese infrastructure spending, including major investments into numerous new megaprojects. The value of newly announced infrastructure projects into Malaysia surged from USD3.5 billion in 2012 to over USD8.6 billion in 2016.⁴ For Indonesia during the same time period, the value of newly announced projects rose modestly from USD3.75 billion to USD3.77 billion, and there was a notable absence of similarly ambitious megaprojects.⁵

Malaysia also rapidly and enthusiastically participated in the DSR Initiative. In 2016, the Najib administration engaged Jack Ma of Alibaba as an advisor to develop e-commerce in Malaysia. This led to the creation in 2017 of a Digital Free Trade Zone (DFTZ), an international logistics hub, next to the Kuala Lumpur International Airport. It is dedicated to the delivery of e-commerce goods and includes an online service platform called the e-World Trade Platform (e-WTP). The cloud-based capabilities of the e-WTP and affiliated data center provided the digital foundation necessary to introduce Alibaba's City Brain smart city solution to Kuala Lumpur in January 2018, the first city outside China to adopt it.⁶ DSR projects into Indonesia have been far fewer, slower, and less ambitious.

What can account for these contrasting responses to China's new initiative? I argue we must consider the public-private orientation of the corporate sector and the extent of clientelism prevalent across different types of political regimes. Clientelism refers to the delivery of goods and services in exchange for political support; the public (or state) control of the corporate sector grants political rulers greater control over the

² For data on Malaysia's natural resources exports to China in relation to other export categories, see Hong, Sun, Beg, and Zhou (2020).

³ In 2013, Indonesian GDP per capita was USD3600, whereas Malaysia's was USD11000 according to data from the World Bank.

⁴ See Chapter 8 for a list of Chinese-funded megaprojects in Malaysia.

⁵ A partial exception to Indonesia's absence of megaprojects is the Jakarta-Bandung High Speed Rail project.

⁶ The smart city platform is an integrated AI-enabled system that conducts real-time data collection and integration of traffic and emergency response data from hundreds of traffic cameras and other sources.

allocation of clientelist benefits. These two features are most prominent in electoral autocracies, less prominent in closed autocracies and electoral democracies, and least prominent in liberal democracies.

1.1 Why It Matters

Why should we care about China's global connectivity ambitions in the context of the BRI? There are three main reasons. First, infrastructure spending promotes economic development and alleviates poverty, especially in low-income countries (Timilsina, Hochman, and Song 2020). A lack of infrastructure comes at an enormous economic and social cost. Billions of people around the world continue to suffer from poor access to water, sanitation, and hygiene (WHO/UNICEF 2022).⁷ In 2020, around one in four people lacked safely managed drinking water in their homes and nearly half the world's population lacked safely managed sanitation. At the onset of the COVID-19 pandemic, three in ten people worldwide could not wash their hands with soap and water within their homes. As of 2021, nearly 800 million people – 10 percent of the world's population – lacked access to electricity (IEA, IRENA, UNSD, World Bank, WHO 2022).⁸

For developing countries in general, there exists a huge demand for infrastructure relative to supply. The Asian Development Bank reported a financing gap of USD26 trillion between 2016 and 2030 in order to support expected rates of growth among its forty-five developing country members (Ra and Li 2018). After accounting for developing countries in Africa, the Middle East, Latin America, and Eastern Europe, this number rises to over USD35 trillion (African Development Bank 2018). Between 2005 and 2019, China's total foreign spending was over USD2 trillion; far short of addressing this gap, but very substantial when compared to foreign investment from other countries (only the United States and Japan were higher in 2019). China's substantial infrastructure spending in the context of the BRI could have a significant positive impact on economic development and poverty alleviation globally (Chen and Lin 2018).

Second, China's ambition to link infrastructure projects to new digital technologies will shape the contours of the global business environment in the coming decades. Many view the emergence of new digital technologies as contributing to the rise of a fourth industrial revolution

⁷ See www.unicef.org/press-releases/billions-people-will-lack-access-safe-water-sanitation-and-hygiene-2030-unless (accessed March 12 2022).

⁸ See www.worldbank.org/en/news/press-release/2021/06/07/report-universal-access-to-sustainable-energy-will-remain-elusive-without-addressing-inequalities (accessed March 14 2022).

termed Industry 4.0. It refers to adaptable manufacturing systems in which production processes automatically adjust for multiple types of products and changing conditions. This allows quality, productivity, and flexibility to increase while also enabling the production of customized products at a large scale and in a sustainable way with better resource utilization. In essence, it involves the development of new smart manufacturing capabilities that are integrated into smart supply chains, a labor force trained to use new emerging technologies, and smart products that are all integrated which enables companies to rapidly adjust their operational and market needs. By leading the development and deployment of these new technologies, China aims to set the technical standards that will shape the trajectory of future technologies and manufacturing processes in the coming decades.

But the implications of new digital technologies are not confined to business; they will also contribute to new smart infrastructure with digital sensors that provide real-time data and analysis to improve the use of those assets (railways, electricity grids, waste and water management, etc.). These new capabilities will in turn contribute to the emergence of smart cities which offer the most comprehensive application of these new digital technologies. Smart cities include the gathering of real-time data from physical and virtual sensors, the interconnectivity of services and technologies within a city, and the analysis of the data to optimize sustainable economic growth and quality of life for residents.

By developing the new technical standards to be utilized in these new emerging digital technologies, China aims to lock in Chinese digital products and services and lock out non-Chinese competitors wherever its standards are adopted. This is part of a grand ambition on the part of the Chinese leadership from Xi Jinping on down that calls for the “integrated development of the real economy and digital economy.”⁹ This requires constructing physical and virtual information infrastructure at home and abroad while simultaneously controlling the core technologies and technical standards that will shape the rules of the emerging network architecture. By incorporating digital technologies into hard infrastructure projects, China binds together new technologies in “bundles” that are enabled and linked together via key baseline technologies such as 5G telecommunications, artificial intelligence, cloud computing, big data and analytics, and the Internet of Things.¹⁰ The BRI presents the

⁹ Quoted in de la Bruyère (2021).

¹⁰ In the context of network infrastructure, “bundles” might include broadband networks, fiber to the home products, optical transmission networks, undersea cables, super fusion solid state drives, cache technology, and striping technology. See Table 9.1 for more examples.

opportunity to integrate and promote the adoption of these technologies and standards globally, thereby creating the scale to ensure China's dominance over the emerging digital economy.

Third, the global scale of the BRI presents China with the potential to reshape the world order by coordinating among and influencing recipient countries. Through the BRI, improving intergovernmental communication between China and recipients of Chinese spending may promote the alignment of high-level government policies like economic development strategies and plans for regional cooperation. Strengthening the coordination of hard infrastructure networks like transportation systems and power grids will help reduce transport times and costs. Encouraging the development of soft infrastructure such as the signing of trade deals, aligning of regulatory and technical standards, and improving financial integration will allow for a broader range of goods and services to be exchanged with fewer regulatory hurdles. China's strengthening capacity to promote and coordinate trade, investment, and connectivity with other developing economies may render these countries more dependent on the Chinese economy, increasing China's economic leverage over them. At the least, rising interdependence suggests increasing alignment of interests. For these reasons, many Western observers are concerned that the BRI may empower China to more readily reshape the rules and norms that govern global affairs.

These concerns are amplified by the scale of the BRI. As of August 2022, there were 149 countries formally affiliated with and endorsing the project, including 115 low- and middle-income countries as well as 34 high-income countries.¹¹ China's influence among developing countries is particularly noteworthy given the importance of infrastructure spending to their development needs. Since 2000, growth among low- and middle-income countries has been more than twice that of advanced economies. By 2030, the IMF projects developing countries will account for nearly two-thirds of global GDP. This is significant to understanding the potential for China to shape global affairs because *two-thirds* of low- and middle-income countries are autocracies as of 2019, with electoral autocracies accounting for one-half of all countries in the developing world.

1.2 Existing Explanations

How is Chinese foreign spending in the context of both infrastructure and digital technologies similar to and different from foreign investment

¹¹ See <https://greenfdc.org/countries-of-the-belt-and-road-initiative-bri/> (accessed March 15 2022). For the most part, OECD countries remain absent from this list, as well as India and numerous countries in Latin America including Brazil and Mexico.

by Western MNCs? I organize this overview of existing approaches to Chinese foreign spending into four parts. First, I review the prevailing explanations for FDI that is initiated by private investors, which I term "Twentieth-Century FDI Explanations." Second, I discuss the prevailing models that seek to account for Chinese state-led foreign spending, which I call "Explanations for FDI in the Twenty-First Century." Third, I narrow the discussion to explanations that focus on foreign spending in the context of the BRI. Finally, I call attention to gaps in our current understanding of Chinese foreign spending.

1.2.1 Twentieth-Century FDI Explanations

In the decades following World War II, the volume of foreign direct investment grew enormously and has been dominated by MNCs from advanced economies. Research has therefore focused on issues relating to supply and demand factors salient to private investors from advanced democracies. I call this the twentieth-century approach to foreign investment.

Supply factors commonly focus on the importance of interest rates (the supply of capital), imperfections in the credit market (e.g., a relatively lower exchange rate reduces the price of domestic assets), and technological changes that encourage investors to set up facilities in numerous locations (Fernandez-Arias 1996). For example, firms can integrate production facilities located around the world with real-time communications thanks to improvements in telecommunications contributing in turn to cost savings via just-in-time production networks.

Demand-side factors include both economic determinants (Dunning 1977; Markusen 1995; Caves 1996) and policy and institutional variables. Because FDI is characterized by cross-border jurisdiction and ex post liquidity issues, a central concern for foreign direct investors into developing countries is political risk, which relates especially to the policy and institutional domains (Vernon 1971; Frieden 1991). One of the earliest strands of research focusing on the institutional arrangements of recipient countries considers whether democratic or autocratic rule impacts foreign investment differently. Some have argued that autocracies are more attractive because democracies possess greater policy instability, interest groups can influence government policy, and democracies often possess a redistributive bias in favor of the poor which can produce higher tax rates adverse to the business sector (Huntington 1968; O'Donnell 1978; Oneal 1994; Tuman and Emmert 2004). Others contend democracies should receive more FDI because they lower political risk due to greater policy stability and credibility, foreign firms can

influence policy outcomes, democracies possess openness and transparency in the policymaking process, and political leaders incur high reputational costs if they expropriate foreign assets (North and Weingast 1989; Olson 1993, 2000; Tsebelis 1995, 2002; Li and Resnick 2003; Jensen 2003, 2008; Garland and Biglaiser 2009).

A second strand of institutional explanations of FDI focuses on transaction costs (Williamson 1979, 1983, 1985). More veto players in the policymaking process enhances the credibility of host country commitments by making policies more stable which investors are posited to favor (Henisz and Williamson 1999; Henisz 2000, 2002). However, political regimes with numerous veto points have often changed FDI policies, leading researchers to consider the underlying preferences of political actors. One branch of this literature examines the role of class conflict and the potential for host governments to collude with domestic and foreign capital to exploit the popular sectors (Evans and Gereffi 1982). Others point to the economic insecurity that arises from internationally mobile capital which can be especially harmful to workers (Schève and Slaughter 2001, 2004). Another branch examines variation in subnational political institutions on FDI inflows, such as the impact of federalism (Jensen and McGillivray 2005) and the beneficial effect of candidate-centered electoral systems (Garland and Biglaiser 2009).

In contrast to conventional FDI which focuses on greenfield investments and mergers and acquisitions, foreign direct investment in infrastructure (FDII) is characterized by high capital intensity, high vulnerability to political and regulatory interference, large economies of scale, long investment periods, and high transaction costs. Taken together, these characteristics of FDII elevate the salience of host country political risk (Ramamurti and Doh 2004; Kumari and Sharma 2017). Developing countries possess the greatest demand for infrastructure, but their weak legal, financial, and regulatory frameworks and weak institutions in general collectively contribute to higher levels of political risk for infrastructure projects as compared with developed countries. Consequently, research on infrastructure investments has found that host country *political* characteristics have an even greater influence on infrastructure spending as compared to conventional FDI (Henisz 2002; Doh and Ramamurti 2003; Jiang et al. 2019).

1.2.2 *Explanations for FDI in the Twenty-First Century*

The Chinese government announced its Go Global strategy in 2000, coinciding with its admission to the World Trade Organization, which contributed to a marked increase in outward FDI starting in the mid-2000s.

This prompted scholars to develop alternative approaches to account for the Chinese state's potential to influence the supply of FDI. There are three prevailing models. First, the economic statecraft perspective emphasizes the government's use of economic means to achieve political objectives (Kastner 2009; Norris 2016). Second, the state capitalism model reverses the direction of influence by arguing that powerful state-owned enterprises (SOEs) shape the country's foreign policy for their own commercial interests (Downs 2019). Third, the state-mobilized globalization approach views the state as operating within a network of political leaders, national bureaucracies, local governments, and SOEs that together shape firms' FDI behavior (Ye 2020). The BRI is viewed as a mechanism to counteract the fragmented structure of China's authoritarian state. A common thread running through each of these models is the distinctive role of the state and SOEs to Chinese foreign investment.

Regardless of the model one adopts, there remains the question of which policy priorities are most likely to influence FDI behavior. Chief among these has been access to strategically important natural resources to fuel China's rapid growth (Broadman 2006; Tuman and Shirali 2017). Others, however, point to the changing nature of China's priorities, as manifested by the government's "Investment Catalogue" (Buckley 2018). But underlying the specific policies is a recognition of SOEs' privileged access to capital at favorable rates through the state banking sector, their preferential access to capital markets (Sutherland 2009; Karreman and van de Knaap 2012), and the government's role in guiding and coordinating their investments to fulfill strategic policy aims. Consequently, these supply-side characteristics differ from those typically viewed as salient to private MNCs' foreign investment behavior, suggesting a different set of demand-side host country attributes may matter for attracting Chinese foreign investment (Liu et al. 2017; Tuman and Shirali 2017; Chen and Lin 2018). These new attributes are likely to be most apparent in the context of BRI infrastructure investments since these types of investments are especially sensitive to host country political risk. I therefore turn to an overview of prevailing explanations for the BRI.

1.2.3 Explanations for the Belt and Road Initiative

The initiation of the BRI shortly after Xi became president and asserted more centralized control over China's fragmented authoritarian political system has led some commentators to view the BRI through a geopolitical lens (Swaine 2015; Wang 2016; Yu 2017). They see the BRI and the establishment of the Asian Infrastructure Investment Bank

(AIIB) in 2014 as initiatives aiming to counter US moves such as the pivot to Asia and the TransPacific Partnership (Chatzky and McBride 2020), and reflecting a more assertive Chinese statecraft aimed at challenging US hegemony (Ferchen 2016; Economy 2018). From this perspective, the China-Pakistan economic corridor, granting access to Middle East oil and gas reserves via the port at Gwadar, is primarily driven by the need to reduce China's vulnerability to shipping via the Straits of Malacca which accounts for 60 percent of total maritime trade, including 80 percent of China's oil imports (CSIS 2020).¹² This could leave China vulnerable to a strategic blockade of the straits in the event of a conflict.

Even if national security objectives influence certain projects, others consider economic objectives to be the primary driver of the BRI. There are three main economic rationales typically identified for China to initiate the BRI. First, excess capacity in the wake of the government's financial stimulus during the global financial crisis contributed to "funding [that] has been heavily skewed towards state-linked construction firms facing collapsing domestic demand" (Jones and Hameiri 2020). A second economic motivation regards the effort to reduce regional income disparities between China's western and central regions in relation to the coastal provinces (Ye 2020). Improving connectivity and enhancing trade with neighboring countries will lift China's less developed regions. A third economic objective regards the effort to upgrade China's productivity via investments in digital technologies and the foreign adoption of its technical standards as signaled by the launch of the Digital Silk Road (Hemmings 2020; Naughton 2020; de la Bruyère 2021; Ding 2021; Kania 2021). China's aging population, the need to maintain agricultural output levels (requiring adequate labor that would be unavailable for manufacturing or services sectors), and limits to the growth of its export-dependent manufacturing industry all call for greater levels of productivity and innovation to sustain China's growth targets which are critical to social stability and the CCP's hold on power (Sasaki et al. 2021). To this end, BRI projects have explicitly incorporated technical standards into their construction since 2015. The effort to include technical standards into BRI projects stems from the "Vision and Actions" statement mentioned earlier (NDRC 2015).¹³ This policy framework statement identifies five priorities for enhancing cooperation and connectivity in

¹² CSIS 2020: "How much trade transits the South China Sea?"

¹³ The document was drafted by the National Development and Reform Commission (NDRC) together with the Ministry of Foreign Affairs (MOFA) and the Ministry of Commerce (MOFCOM). See http://de.china-embassy.org/det/zt/yidaiyilude/201503/t20150330_3126178.htm (accessed March 13 2022).

the context of the BRI, including: (1) policy coordination; (2) expediting international commerce by adhering to agreed Chinese technical standards, not only in traditional modes such as rail, road, and sea, but also in border and customs controls, power supplies, and telecommunications; (3) reducing costs and risks along supply chains via unimpeded trade; (4) financial integration under Beijing's guidance; and (5) closer people-to-people ties via scholarships and building relationships with overseas Chinese in bilateral relations.

But the multiple issue areas identified in the Vision and Actions statement raise doubts among outside observers for Chinese Communist Party (CCP) leadership to assert strong centralized coordination among the thousands of BRI projects. Moreover, despite efforts at asserting more centralized political control, China's domestic political system remains fragmented, undercutting the ability for a centralized coordinated strategy (Cai 2017; de Jonge 2017; He 2019; Jones and Hameiri 2020). While the Chinese government may provide guidance on where infrastructure spending should be directed, SOEs retain the power to decide which projects to participate in (Jones 2019). In this view, Chinese SOEs are best characterized as quasi-autonomous, profit-seeking firms, not simply instruments of economic statecraft (Jones and Zou 2017). Coordination failures at the apex of the Chinese state, between Beijing and the provinces, as well as between the provinces themselves problematize the assumption that SOEs are effectively controlled by the central government (Blanchard 2018; Gong 2019). The persistence of a fragmented development financing system gives greater weight to the role of recipient countries in driving BRI project implementation patterns.

Regardless of whether one views China's BRI as strongly or weakly controlled by the CCP leadership, there is a clear gap with regard to identifying systematic features of recipient countries and their influence on the selection and implementation of BRI projects. Indeed, the high stakes involved with the spread of Chinese technical standards coupled with the huge investments made through traditional infrastructure spending have invigorated scholars to understand countries' varying *demand* for Chinese BRI spending (Vangeli 2019; Jones and Hameiri 2020). Recent work has found that Chinese investments in BRI countries differ from non-BRI countries with regard to the institutional environment (Kang et al. 2018), and the political environment more specifically (Liu et al. 2017). A number of case studies provide detail to support these general findings (Chung and Voon 2017; Blanchard 2018; Chen 2018; Gong 2019; Jones and Hameiri 2020; Hutchinson and Yean 2021). However, there remain some important gaps.

1.2.4 *Gaps in the Existing Literature*

Existing work on FDI – both twentieth- and twenty-first-century approaches – has focused on a democracy-non-democracy continuum. To the extent institutional variation is examined, it has typically focused on characteristics found among democracies, such as veto points and electoral systems. However, two-thirds of developing countries are autocracies.

Recent scholarly work on the political structures of autocracies illuminates their heterogeneity (Svolik 2012; Truex 2016; Geddes et al. 2018). To the extent scholars have examined the relationship between autocratic political arrangements and socio-economic outcomes, attention has primarily focused on freedom of the press, civil liberties, and human rights (Maerz et al. 2020). But just as varying political characteristics have contributed to varying types of market institutions among advanced democracies (Hall and Soskice 2001; Iversen and Soskice 2019), varying types of autocratic political arrangements are likely to yield different types of economic outcomes. Yet, there remains little work that has systematically examined these relationships.¹⁴ With regard to Chinese foreign investment, including work on the Belt and Road Initiative, analyses tend to lump autocracies together (Liu et al. 2017; Tuman and Shirali 2017) or focus on country-specific dynamics (Hillman 2020; Jones and Hameiri 2020). The treatment of autocracies as relatively homogeneous, or falling along a linear democracy-non-democracy continuum, is also the prevalent approach to examining Chinese influence across other issue areas beyond foreign investment, as with the study of United Nations General Assembly voting patterns (Strüver 2016; Dreher et al. 2018). In sum, there is a clear need to identify and analyze how systematic institutional differences among autocratic regimes may impact Chinese BRI spending patterns.

1.3 **Summary of the Argument**

Although developing countries share many of the same types and magnitudes of market failures, they display varying levels of participation in the BRI. To explain this variation, I consider the factors driving demand on the part of recipient countries, supply factors on the part of China, and how the convergence of demand and supply factors varies by political regime. I conduct this analysis with regard to infrastructure spending first, and then theorize the implications for the spread of Chinese standards.

¹⁴ Notable exceptions include Jensen et al. (2014) and Carney (2018).

With regard to the demand side, two factors are highly salient to political incumbents' decision to seek BRI infrastructure spending, including: (1) the clientelist structure of the regime, which affects the volume of resources sought for redistribution to clients in exchange for political support; and (2) the public-private orientation of the corporate sector, which affects whether the provision of clientelist resources is under state or private control. Together, these factors influence the demand for Chinese spending and the power of government officials to address that demand.

With regard to the supply side, China's party-state promoted the rapid deployment of infrastructure spending to alleviate excess capacity; but in the long term it seeks to leverage infrastructure projects to boost its total factor productivity by moving low-end manufacturing offshore and by promoting the adoption of Chinese technical standards. To achieve both of these objectives, speed matters. Alleviating excess capacity requires speed so as to enable heavily indebted infrastructure SOEs to pay their debts and minimize layoffs; speed, in the form of a first-mover advantage, also matters for promoting the adoption of Chinese technical standards before other standards get adopted. Thus, China's SOEs have had access to abundant, cheap financing in order to promote rapid infrastructure development, with private firms engaging in DSR projects that occur in tandem with or following the initiation of infrastructure projects. While both SOEs and private firms have varying degrees of autonomy in deciding whether to engage with specific projects, in general they possess strong incentives to pursue them. Thus, the key question regards the compatibility of China's supply factors with the demand characteristics of host country political regimes.

I argue electoral autocracies have the highest compatibility with Chinese infrastructure spending. Electoral autocracies rely heavily on clientelism with resources distributed via SOEs which produces mutual interests with China in speed, opacity, and assigning greater weight to political priorities in relation to firm profitability. With regard to speed, electoral autocrats face regular elections that require a large and speedy delivery of clientelist resources to ensure regime support; this matches China's need to quickly alleviate excess infrastructure capacity so firms can pay their debts and minimize layoffs and to win the race for the adoption of technical standards. With regard to opacity, electoral autocrats have an interest in shielding the targeted distribution of funds from public scrutiny; China also favors opacity to prevent collective bargaining by BRI recipients and to shield BRI agreements from third-party scrutiny. Finally, both electoral autocrats and China's party-state align in assigning greater weight to political priorities relative to profit maximization,

as would occur with private firms. This convergence of interests yields the expectation that electoral autocracies will host the largest share of Chinese infrastructure spending.

Liberal democracies, which have private-oriented corporate sectors and do not rely heavily on clientelism, will display the lowest convergence. Closed autocracies and electoral democracies are predicted to be in the middle. Political rulers in closed autocracies do not possess the same concern about speed because they do not hold elections. Political incumbents in electoral democracies must adhere to higher standards of transparency than their autocratic counterparts, and they place a higher priority on the interests of private firms (i.e., maximizing profits).

The convergence of interests between electoral autocracies and China is amplified by two factors. First, rulers of electoral autocracies with a heightened fear of losing power will more avidly seek Chinese spending as a source of patronage to clientelist networks. Second, the relatively greater prevalence of the private sector in electoral autocracies in comparison to closed autocracies while retaining the state's residual control rights (in contrast to electoral and liberal democracies) makes them more appealing to China for utilizing public-private partnership funding models in the future as China looks to reduce state funding over time.

With regard to the adoption of technical standards by foreign firms and countries, this can occur either via *de facto* adoption whereby a particular standard is adopted due to its market dominance or via *formal* adoption which arises out of negotiations and agreements reached in the context of standards development organizations (SDOs). However, the market penetration of a standard will influence formal adoption decisions, thus elevating the importance of *de facto* adoption. China is aggressively pursuing the *de facto* adoption of its technical standards in three ways. First, China is promoting the adoption of its technical (digital) standards by directly incorporating them into its infrastructure projects. Second, China promotes the delivery of technology packages whereby a recipient country's adoption of numerous technology products effectively locks in Chinese standards, making it difficult and costly to switch to an alternative standard even if it is better. Third, China is promoting the development of global value chains that incorporate Industry 4.0 technologies and standards by encouraging the redeployment of low-end manufacturing facilities to foreign markets, which is enabled by the building of industrial parks in the context of the BRI.

Among political regimes, electoral autocracies are posited to display the highest rate of adoption of Chinese technology products and standards and to be most likely to embed themselves in China-led GVCs due to their avid pursuit of Chinese infrastructure spending and their lack

of domestic rivals to Chinese technical standards. In this way, the rapid adoption of China's de facto standards by electoral autocracies bolsters China's negotiating position for the formal adoption of its technical standards in the context of SDOs.

1.4 Organization of the Book

The book begins by providing the context for China's Belt and Road Initiative in Chapter 2. Developing countries possess market failures that limit their ability to address their infrastructure financing and development needs. This chapter begins by identifying these market failures. It then discusses the main alternatives for addressing these needs and why China stands out as particularly well positioned to address them via the BRI.

Chapter 3 empirically establishes the relationship between countries' market failures and their level of infrastructure spending. The findings demonstrate that countries with more developed banking systems spend more on infrastructure, as expected. But the most noteworthy result is that domestic spending declines as financing from international sources increases, suggesting a substitution effect for foreign investment and lending with infrastructure spending. This motivates the need to investigate foreign sources of spending more closely. To this end, I test the most likely explanations for Chinese BRI spending based on the FDI literature relating to Western MNCs. The results do not yield strong significant results, motivating the need for an alternative explanation.

In Chapter 4, I present a novel argument to explain varying levels of Chinese spending across countries in the context of the BRI. The chapter begins by discussing the characteristics of developing countries that influence their demand for infrastructure spending followed by the characteristics of Chinese foreign spending that affect its supply. The demand-side characteristics include the structure of the political regime, the corresponding structure of the clientelist network, and the public-private orientation of the corporate sector. Together, these yield regime-specific demand characteristics for infrastructure spending. On the supply side, I focus on the interests of three actors, including the Chinese Communist Party, Chinese state-owned entities (e.g., state-owned enterprises, the China Development Bank, the Export-Import Bank of China, and the Silk Road Fund), and private firms. I then consider the compatibility of recipient countries' demand characteristics with China's supply characteristics to generate specific predictions about countries' varying receptivity to Chinese infrastructure spending. Following these predictions, I then draw implications arising from two additional factors,

including political leaders with an insecure hold on power and the rising importance of private investment.

The latter portion of the chapter turns to the impact of Chinese infrastructure spending on the adoption of Chinese standards in the context of the Digital Silk Road. The adoption of Chinese standards can occur either via *de facto* or via formal standardization. The former refers to market dominance; the latter refers to agreements in the context of standards development organizations. I first consider the relative benefits of each type of standardization method to China's interests and theorize *de facto* standardization offers the greater benefit. I then turn to a more detailed consideration of the factors that affect countries' demand for Chinese standards which is critical to Chinese *de facto* standardization. The demand factors include commercial and development policy factors as well as political factors (e.g., surveillance of political opposition). I theorize the spread of Chinese technical standards depends on the initial desire for Chinese infrastructure spending. Thus, electoral autocracies are expected to be the most avid participants in the BRI and the most enthusiastic adopters of Chinese technical standards, especially electoral autocracies with political leaders whose rule is insecure.

Chapter 5 turns to empirics regarding the demand side; that is, the characteristics of countries which may host BRI projects. First, I discuss the measurement of political regimes. I then demonstrate that infrastructure spending is broadly similar across political regimes, thus calling for a novel approach to explain why Chinese spending varies across countries if it is not due to differences in infrastructure spending needs. I then discuss the prevalence of clientelism across political regimes followed by the public-private orientation of the corporate sector across political regimes.

Chapters 6 through 9 empirically assess my argument for why Chinese foreign spending varies across countries. Chapter 6 begins with an overview of China's foreign spending in the context of the BRI using a well-established dataset for this topic – the China Global Investment Tracker (CGIT).¹⁵ Analysis of the data by political regime reveals electoral autocracies are the major recipients, by far. I then conduct multivariate analyses to control for alternative explanatory factors. The results confirm the strong significant relationship between electoral autocracies and Chinese foreign construction spending. Electoral autocracies with unstable political rule display the strongest relationship to Chinese foreign construction spending. I then assess whether these patterns predate

¹⁵ The CGIT dataset is the primary data source for analyses of the BRI conducted by the OECD (2018) and the World Bank (Chen and Lin 2018).

the BRI with a broad overview of China's global investments between 2005 and 2019. While there is some weak evidence for a pre-BRI relationship, the results indicate electoral autocracies become newly important to Chinese foreign spending following the launch of the BRI at the end of 2013.

Given the importance of the BRI to Chinese foreign spending, Chapter 7 assesses how the characteristics of BRI projects vary across political regimes, including the number of projects initiated, project completion rates, the use of Chinese financing, and the prevalence of public-private-partnerships. To examine these characteristics, I turn to a newly constructed dataset that provides project-specific information for over 2,000 BRI projects located outside China.¹⁶ Analysis of this new dataset reveals that electoral autocracies host the largest share of BRI projects, they have the highest completion rate, and they host the largest share of BRI projects that are structured as public-private partnerships. Overall, the findings of this chapter corroborate and extend those of Chapter 6 that identify electoral autocracies as having a disproportionately important role in the BRI, especially those in which the leader possesses an insecure hold on power.

To provide context to the findings of the previous chapters, and to identify how political regimes engage differently with China's BRI, Chapter 8 conducts a structured comparison of five country cases. The cases are selected on the basis of representing the political regimes studied in prior chapters and because they each host a major BRI project implemented by a Chinese state-owned enterprise. The country cases include the United Arab Emirates (closed autocracy), Djibouti (strongly durable electoral autocracy), Malaysia (weakly durable electoral autocracy), Indonesia (electoral democracy), and Greece (liberal democracy). Each case begins with a background discussion of the country's political system, an overview of Chinese foreign spending in the country, and then a focused analysis of a specific BRI project. The conclusion discusses similarities and differences across the cases. Overall, the qualitative findings presented in this chapter are consistent with the quantitative findings of the previous chapters and provide evidence for the causal link between political regimes and varying levels of Chinese foreign spending as part of the BRI.

Chapter 9 turns to the export of Chinese technologies and standards, especially in relation to new and emerging digital technologies. The establishment of technical standards can occur either through negotiations

¹⁶ The dataset comes from Refinitiv, formed by a collaboration between Thomson Reuters and the Blackstone Group. Ten variables for each project are manually coded.

and decisions in the context of international professional associations (formal standardization) or by increasing the use of a standard in the marketplace by selling more products and services that adhere to it (de facto standardization). While China is gaining influence in standards development organizations, it has achieved greater success through the de facto adoption of its standards, especially among countries that participate in the BRI. The construction of railways, industrial parks, power stations, and other infrastructure creates opportunities to introduce bundles of technologies that lock in recipient nations to Chinese standards. Smart cities technologies are a particularly effective method of achieving the export of Chinese technologies and standards due to swelling urbanization rates across the developing world. In this chapter, I examine the prevalence of these exports by political regime with a new dataset that includes more than 50 Chinese companies with investments in 317 foreign projects in technologies related to the development of smart cities such as artificial intelligence, surveillance, and data storage. The findings indicate electoral autocracies are the most avid recipients of these technologies among developing countries. Because these technologies are reliant upon data transmission networks with adequate speed and volume, I also examine the prevalence of aid and loans affiliated with the ICT sector. I further examine whether these patterns continue during the pandemic when Huawei began an aggressive drive to grow its cloud business. The findings reaffirm the importance of electoral autocracies. Finally, I demonstrate with case studies that the adoption of Chinese technologies and standards is linked to the country hosting BRI projects in the context of an electoral autocracy (Malaysia), but less so in the context of a liberal democracy (Greece).

Chapter 10 is the concluding chapter. It begins with a brief summary of the theory and evidence. The findings demonstrate that electoral autocracies are major recipients of Chinese infrastructure spending and digital technologies. This raises the question of whether electoral autocracies display an increasing alignment with China across a wider range of issue areas. To answer this question, I analyze United Nations General Assembly votes between 1990 and 2019. The results indicate that since the launch of the BRI, the relative likelihood of electoral autocracies voting with China increased at a higher rate than closed autocracies or electoral democracies. This finding provides further motivation and context for considering the theoretical, policy, and business implications of this study.

The primary theoretical contribution of this study is to move beyond twentieth-century explanations for FDI that focus on demand and supply factors relating to private capital and democracies. The theory and

evidence presented in this book advances our understanding of FDI by developing and testing new theory relating to state-owned entities and autocracies. Specifically, the evidence indicates a stronger compatibility between China and electoral autocracies in comparison to other regimes. The second theoretical implication extends the political regimes framework of this book to a consideration of other economic phenomena. The third theoretical implication relates to the capacity for China to enhance international coordination due to network effects that enhance the depth and breadth of its foreign relations.

I discuss four main policy implications. First, I consider how infrastructure development needs to be more attentive to the political incentives of autocratic leaders, especially in electoral autocracies. This regards both the design of infrastructure financing arrangements and understanding the limits to which policy can work due to how it conflicts with leaders' underlying political incentives. With China now offering an important new source of infrastructure development financing, Western multilateral development banks (MDBs) must adjust their policy approach to developing countries to be competitive with Chinese proposals. Second, although the prevailing private-led approach to standards-setting (as in the EU and the United States; Büthe and Mattli 2011) has proven very successful over the past several decades, it possesses certain fundamental limitations that impede its competitiveness relative to China's state-led standards-promoting regime, such as an unwillingness on the part of private firms to invest in markets often considered too risky (developing countries). Consequently, the private-driven model is unable to compete effectively against China in many developing countries. This is concerning for Western actors given these economies have displayed faster growth rates over the past two decades than advanced economies and developing countries now account for a larger share of global GDP than advanced economies. This suggests Western governments need stronger public-private collaborations to compete against China in these politically risky locations. Third, this study offers novel insights into corporate social responsibility among autocracies. Clientelist benefits typically improve the working conditions of employees and the environment of designated neighborhoods; in other words, they may be viewed as promoting socially responsible corporate behavior when in fact they are simply mechanisms to promote political support of incumbent rulers. Consequently, the measurement of CSR among developing countries may be misconstrued as socially responsible corporate behavior when in fact improvements in social and environmental outcomes are driven by political expediency. Fourth, the findings of this book also offer a new perspective on the debt-trap diplomacy debate by demonstrating that

recipient countries possess greater agency and variation (depending on their regime type) in their borrowing decisions with China. Additionally, if host country leaders perceive China as exploiting its lending arrangements, then they will be reluctant to work with China in the future which is contrary to China's long-term interest of using the BRI (and the export of digital technologies and standards) to promote its own economic growth. In short, the view of China as a predatory lender is incorrect.

The chapter also discusses three business implications. First, this study offers helpful insights into how political risk varies among autocracies. The conventional approach tends to group these regimes together, but this book offers a novel way to distinguish between them to the benefit of foreign investors. Second, I discuss the benefits of public-private collaboration from the perspective of how it can benefit managers, paralleling the earlier discussion from the perspective of policymakers. The third implication concerns the business education curriculum. This was originally conceived and developed in the liberal democracies of the United States and the UK. But China's new model changes the two basic foundations on which business operates, shifting attention away from private ownership and democratic rule-making to state ownership and autocratic decision-making. The way managers of private firms analyze business opportunities and risks needs to be fundamentally re-examined, especially if they want to participate in countries that are likely to display the fastest growth in coming decades.

The book ends on an optimistic note about the likely benefits to flow to the poor in developing countries as a result of growing geopolitical rivalry for influence among this set of countries in the coming decades.