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Introduction

INSTITUTIONS MATTER?

Economic development, or long-run economic growth, is one of the most central questions in the social sciences, and arguably the most pressing challenge for developing countries. Robert Lucas Jr. (1988, 5) did not overstate it by much: “Once one starts to think about them [i.e., the vast differences in income and welfare across time and space, underpinned by their histories of economic development], it is hard to think about anything else.”

Today, the notion that institutions matter for economic development is widely accepted (North 1990; Olson 2000; Acemoglu, Johnson, and Robinson 2005a; World Bank 1997, 2002, 2005, 2017). In fact, other than neoclassical economics (NCE) and endogenous growth theory, the new institutional economics (NIE) is the other mainstream approach toward development.¹

Institutions can be understood as instruments for allocating production factors to different sectors or shifting an economy from one state to another. In Adam Smith’s ([1776] 1981, 10) penetrating words, “[*The wealth of nations*] must be regulated by two different circumstances; first, the skill, dexterity, and judgment with which its labor is generally applied; and secondly, the proportion between the number of those who are employed in useful labor, and that of those who are not so employed” (emphasis added). Thus, with an institutional component within a toy model, Tang and Gao (2020) have shown that many folds of differences in growth rates can materialize once the population growth rate reaches around 0.5%–1%, simply because institutions can

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channel production factors into very different production processes. One state channels production factors mostly to welfare-improving productive processes, whereas another state channels mostly to welfare-reducing ones. As a result, the income gap between them gradually becomes enormous after several decades. The model therefore makes it clear that the most critical role for institutions is to allocate production factors (i.e., land, labor, capital, technology), including talent (Murphy et al. 1991), to different production processes, and the outcomes of these production processes then determine the overall welfare.

Thus, it was perhaps no accident that although Adam Smith and Karl Marx disagreed on fundamental things, they agreed on one particular point: at least since the emergence of capitalism, institutions (with capitalism as an overarching institutional system) have been a critical force, if not the primary mover, behind development.

But what exactly is the institutional foundation of economic development, or IFED? Despite much ink spilled, social scientists, including (institutional) economists, have not provided a systematic statement on what constitutes IFED. North and his followers may believe that it is mostly property rights and constraining the executive (or the state) with parliament or democracy as an “open access order” (e.g., North et al. 2009; see also Olson 2000) or an “inclusive (economic and political) institutional system” (e.g., Acemoglu and Robinson 2012). This answer, however, is simplistic and tautological (Boldrin et al. 2013). Others may hold that it is “development clusters” (Besley and Persson 2011). This answer smacks of all-good-things-go-together: it is like pointing to a fresco of prosperity to the least developed countries (LDCs) and telling them, “Just get there!” As such, they are of little help to policymakers and their advisers in developing countries for engineering development (Jennings 2013; Bardhan 2016; see chapter 1 for details).²

A key shortcoming of the above-mentioned works is that they have taken a mostly inductive approach, either by extrapolating from the British (or Western European) experience or by identifying correlations between institutional factors and indicators of economic performance. As such, they cannot possibly offer a systematic statement of IFED.

This book thus tackles the puzzle with a mostly deductive approach. Starting with the metaphor of “Big Bills Left on the Sidewalk” (Olson 1996), I ask the question, What institutions will *encourage* and *enable* an individual to pick up those “big bills” *in a socially productive way* (i.e., welfare-improving) and discourage and prevent an individual from picking up those big bills *in a*

socially unproductive if not destructive way (i.e., welfare-decreasing)? Hence, I focus on the *functions* performed by institutions rather than the *forms* of institutions (on this key understanding, see Chang 2007b, 17–21), explicitly admitting that the same function can be performed by different forms (and combinations) of institutions.

Here, it is important to note that “socially productive” is different from “Pareto-improving.” Most critically, socially productive initiatives may well reduce the welfare of some members within a society even though collectively the overall welfare of the society improves because those initiatives increase the welfare of more members within a society. In other words, an initiative is socially productive as long as it increases the overall welfare of the society. For instance, land reform is often considered a socially productive initiative in most LDCs, and yet it almost certainly reduces the welfare of large landlords, at least in the short run. The deep reason for staking the seemingly “collectivist” stance is that (almost) all institutions are made and backed by power and have distributional effects (Tang 2011b).³

Through logical deduction, I then contend that for an individual to pick up those big bills in a socially productive way, “four big things” must be in place: *possibility*, *incentive*, *capability*, and *opportunity*. I further contend that these four big things must be understood interactively rather than independently. Thus, NIE’s overselling of incentives following North (1990, 3), often in conjunction with restraining the executive, is at least too simplistic, if not misleading, because incentives can be for unproductive activities as well as productive activities (e.g., Baumol 1990; see chapter 1 for details).⁴

Assuming the four big things are to be underpinned by IFED, then IFED must contain at least six major dimensions, namely, (political) hierarchy, property rights, social mobility, good redistribution (as empowering), liberty for protecting innovation, and equality of opportunity.⁵ To elaborate on the six dimensions, I draw insights from the economics literature on economic development but also from the literature on economic (and political) development in comparative politics, sociology (e.g., the sociology of development), social psychology, and political theory.

Combining growth modeling, econometrics, and in-depth case studies, I then provide evidence that countries with the right combination of institutions at the right stage of development have indeed managed to grow robustly for a significant period of time and transform their economies. As such, in order to achieve economic development, states should get key dimensions within IFED *roughly* right for their particular stages of development. I also argue for an evolutionary and pragmatic, rather than a static and

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dogmatic, understanding about IFED: different stages of economic development need different combinations of specific institutions within the six dimensions of IFED.

I, however, explicitly recognize that economic development is a challenge without any institutional panacea (e.g., property rights plus democracy), contrary to what North and his followers have explicitly or implicitly preached (e.g., North 1990; North et al. 2009; Acemoglu and Robinson 2012). In short, I reject “institutional determinism” as just another one of those “X-theories” of economic development (Adelman 2001; see also below).

In fact, IFED is only one component of the “new development triangle” (NDT), which contains state capacity and socioeconomic policy in addition to IFED (cf. Besley and Persson 2011; Aghion and Roulet 2014; Bardhan 2016). Essentially, for a state to achieve economic development, it has to become a “developmental state” underpinned by NDT, by working with what it has rather than with what is ideal.

Before going any further, four caveats regarding terms are in order. First, this book addresses the question of economic development or economic growth in the long run, rather than economic growth per se. Economic development is more than economic growth (Myrdal 1974). The former implies not just growth over a significant period of time but also progressive changes in the structure of an economy (see Herrendorf et al. 2014 for a review). More concretely, economic development means that an economy has climbed up the technological ladder: growth of income from oil or gas (e.g., Saudi Arabia, Venezuela) does not mean development. Our discussion here is about development,⁶ although for simplicity I often use development and growth interchangeably.

Second, when referring to institutions, I adopt North’s (1990, 3) definition: institutions are formal or informal rules, not organizations (or “institutes”), because organizations are agents rather than rules for agents.⁷ Although organizations are underpinned by institutions and they are often makers and enforcers of institutions (e.g., in the case of states), organizations are not institutions. Hence, the state is a highly complex organization but not an institution. Of course, a state must use or deploy institutions and policies and rely on suborganizations within it (e.g., bureaucracies) to rule and govern.

Also, although economic and sociopolitical policies are also rules, following many others (Easterly 2005; Rodrik 2007; Lin and Nugent 1995; Lin 2009) I use “institutions” to denote rules that cast a long shadow on how an economy operates and “policies” to denote measures or rules that are

mostly designed to address short- to medium-term fluctuations (e.g., interest rate changes, fiscal stimuli), while admitting that the boundary between institutions and rules is not always clear-cut. Indeed, I address the interplay of institutions, state capacity, and socioeconomic policy in chapter 8.

I, however, explicitly reject two critical elements associated with North's definition. When North (1990, 3) followed his definition of institutions with the sentence "[Institutions] structure incentives in human exchange," and then centered his whole theory of institutions and institutional change on transaction costs (North 1990, esp. ch. 4), he sowed the seeds for NIE's overselling of both incentives and transaction costs. More critically, his focus on incentives and transaction costs almost inevitably leads to a functionalism theory of institutions that cannot possibly explain the making and persistence of welfare-reducing institutions. Institutions do far more than reducing uncertainties, structuring incentives, and regulating transaction costs: because institutions are made and backed by power, the foremost role of institutions is to allocate and (re)distribute resources and payoffs (for a detailed critique, see Tang 2011b).⁸ Moreover, institutions not only constrain but also enable agents: there is duality associated with institutions as part of the social (and power) structure (Tang 2011b, esp. 56–60; see also Giddens 1976, 1979, 1984; Foucault 2000; Sewell 1992).

Third, *even though I am a firm institutionalist, this volume does not argue that only institutions matter*. As becomes clear below and especially in chapter 8, I actually admit that both state capacities and (development) policies also matter a great deal, and together with institutions they form a (new) development triangle (NDT). The purpose of this book is to map out the exact dimensions of IFED only because a systematic statement on IFED has yet to exist. Moreover, a systematic statement on IFED contributes to a more integrated and evolutionary understanding of economic development (see chapters 7 and 8).⁹

Finally, although my project is mostly a deductive project with empirical evidence, I cannot possibly provide supporting evidence for all my theoretical conjectures. What I do is provide enough evidence to suggest that the theory developed here is plausible and hence point to new directions for future inquiries.

The rest of this introduction unfolds as follows. Section I briefly identifies key shortcomings within the existing literature on institutions and development, and section II then foreshadows what this volume is and is not about. Section III lays out the structure of the book, with a brief summary of each chapter.

I. Searching for the (Prime) Movers behind Development

Ever since Kaldor (1961), it has been a cliché to begin any discussion of economic development with “stylized facts” (e.g., Pritchett 2003, 126–28; Jones and Romer 2010; Jones 2015; see also Jones 1997; Hall and Jones 1999; Pritchett 1997, 2000; Easterly and Levine 2001). While different authors may differ in their exact listing of facts, one is common to all of them: there remain large per capita income and total factor productivity (TFP) differences across countries. What, then, accounts for this “divergence, big time”?

An immediate answer to this puzzle is obviously that some countries have managed to grow robustly for a significant period of time and become rich, whereas most countries have failed to do so despite some episodes of robust growth. This has indeed been the case. As shown in table I.1, with reliable data (1970–2015), only 43 countries have managed to grow their per capita GDP at a rate of 4% or more over a period of two decades or more.

So the puzzle of “divergence, big time” becomes, *Why* have some countries managed to grow robustly for a significant period of time and become rich, whereas most countries have failed to do so despite some (shorter) episodes of robust growth?

The first factors we can exclude are the usual suspects: labor, capital, and technology, or production factors. As noted by both Abramovitz (1956) and Solow (1957), measured input of production factors can only account for 13%–14% of the growth. In other words, the “big three” of capital, labor, and technology (or knowledge), either treated exogenously or endogenously (Solow 1956; Swan 1956; Romer 1989, 1990; Grossman and Helpman 1991; Jones 2001, 2005), cannot account for this significant disparity (Jones and Romer 2010, 237; see also Pritchett 2003; Subramanian and Roy 2003).¹⁰

In light of this fact, several alternative “primary movers” have been put forward for explaining the divergence.¹¹ Five have been most prominent: biology, geography, culture, (developmental) strategies and policies,¹² and institutions.

We can readily reject biology: economic development is not genetic or biological (Tang 2020). Contrary to Ashraf and Galor (2013), there is no plausible (direct and indirect) link between the genetic or biological makeup of the human population and complex social outcomes such as economic development. Indeed, the supposedly robust regression results in Ashraf and Galor (2013) suggesting genetic diversity is linked to development are

TABLE I.1. The “Lucky” Few: Countries with at Least 10 Years of $\geq 4\%$ Growth in GDPpc

Only 10 years (then stagnated)	Only 20 years	Only 30 years	Only 40 years	50 years or more
Argentina	Albania	Bhutan	Iraq	Botswana
Bulgaria	Algeria	Chile	Ireland	China
Burundi	Angola	Cyprus	Malaysia	Korea, South
Cameroon	Bangladesh	Equatorial Guinea	Portugal	Oman
Chad	Brazil	India	Sri Lanka	Singapore
Costa Rica	Cambodia	Indonesia		Thailand
Cote d’Ivoire	Congo, Rep.	Lao PDR		
Ecuador	Cuba	Mauritius		
Egypt, Arab Rep.	Dominican Republic	Mozambique		
Eritrea	Ethiopia	Vietnam		
Fiji	Gabon			
Ghana	Greece			
Guyana	Lebanon			
Hungary	Lesotho			
Iran, Islamic Rep.	Mongolia			
Israel	Poland			
Jordan	Rwanda			
Kenya	Spain			
Malawi	Sudan			
Mauritius	Swaziland			
Mexico	Syrian Arab Republic			
Morocco	Trinidad and Tobago			
Nigeria				
Pakistan				
Papua New Guinea				
Peru				
Panama				
Paraguay				
Romania				
Sierra Leone				
Togo				
Tunisia				
Turkey				
Uganda				
Uruguay				
Venezuela, RB				
Zambia				
Zimbabwe				

Note: Of course, countries with more than 20 years of $\geq 4\%$ growth of GDPpc must also have been countries with more than 10 years of $\geq 4\%$ growth of GDPpc. Likewise, countries with more than 30 years of $\geq 4\%$ growth of GDPpc must also have been countries with more than 20 years of $\geq 4\%$ growth of GDPpc.

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not robust at all: they vanish after controlling for a single dummy variable, the Eurasian advantage (Tang 2016a; see Diamond 1997). Ashraf and Galor's (2013) thesis is untenable, if not pseudoscientific. The same criticism applies to Gregory Clark's (2007) fuzziest biological thesis that the Industrial Revolution had been mostly driven by bourgeoisies having more offspring than nonbourgeoisies (for earlier critiques, see Allen 2008; Mokyr 2017, 22–24).

Geography has been a real primary mover, at least before AD 1500. In his majestic *Guns, Germs and Steel* (1997), Jared Diamond provides a sweeping account for the puzzle of economic development before 1500: Why had all the earliest civilizations emerged from the Eurasia supercontinent, but not from Africa, the Americas, Oceania, or Antarctica? The reason was simple: the Eurasia supercontinent possessed immense advantages in terms of biodiversity for the development of settled agriculture. Thus, at least before 1500, geography had dominated the fate of human societies, more or less (see also Tang 2016a).

After 1500, however, institutions (and policies) became more significant. Today, one can plausibly argue that institutions are the more critical force for determining economic performance. Of course, this does not mean that geography is no longer important (Easterly and Levine 2003; Sachs 2003). In fact, other than Australia, Canada, New Zealand, the United States, and oil-producing countries, most of the richest countries are still from the Eurasia supercontinent. Thus, contrary to Acemoglu and Robinson (2012, ch. 2), just because institutions are more critical today, it does not mean that geography no longer matters. Likewise, contrary to Easterly and Levine (2003) and Sachs (2003), just because geography has cast a long shadow on development, it does not mean that institutions are unimportant. Both stands reflect a nonevolutionary approach to understanding human society (Tang 2020).

Geography can shape economic development through at least four channels. The first channel is the most direct: geography shapes development by providing the biodiversity foundation for settled agriculture (Diamond 1997). The second is also quite direct: geography impacts the diffusion of technology and institutions (Diamond 1997). The third and fourth are indirect. On one hand, geography can shape institutions directly and then indirectly impact development (Engerman and Sokoloff 2012). On the other hand, geography can shape culture, which can in turn shape institutions, which in turn shapes development. Hence, the relationship between geography, institutions, and development is interactive, nonlinear, systematic, and both direct and indirect, rather than linear or either-or (Nugent and

Robinson 2010; Engerman and Sokoloff 2012; see also Herbst 2000; Garcia-Jimeno and Robinson 2011; Williamson 2012).

After briefly addressing biology and geography, I now discuss culture and strategies in some detail before taking on institutions in the rest of the book.

A. CULTURE MATTERS, BUT ONLY VIA INSTITUTIONS (AND STRATEGIES)

Culture has been suggested as a second primary mover, beginning with Weber's (1958) "Protestant ethic," followed by the "achievement motive" by McClelland et al. (1976), and then more loosely as "cultural beliefs" or "cultural values" by Greif (1994), Granato et al. (1996), Landes (1998, 2000), Harrison and Huntington (2000), McCloskey (2006), and Mokyr (2014, 2017). Unfortunately, none of these earlier theses have received any systematic and convincing empirical support. Rather, most of these works were based on a selective reading of economic history in a few cases (e.g., Britain versus China and India; for a pithy critique, see Tilly 1999). Moreover, they cannot answer these embarrassing questions: (1) If one's theory is static (i.e., a culture is conducive or unconducive to development), how can one know that culture has been the lone decisive factor out of a universe of factors? (2) If one's theory is dynamic (i.e., one uses cultural changes to explain changes in economic fortune) and yet culture is supposed to change slowly, then why does culture change?

More recently, with econometrics, cultural traits have been found to affect both individual decisions (Tabellini 2008, 2010; Guiso et al. 2009) and macroeconomic outcomes (Barro and McCleary 2003; Guiso et al. 2006, 2009, 2016; Gorodnichenko and Roland 2017; for a review, see Alesina and Giuliano 2015). These studies, however, still suffer from some serious deficiencies.¹³

First of all, while it is sound to code "values" as cultural, it is not so to code "beliefs" as cultural because beliefs can change quite readily whereas culture is supposed to be sticky. Second, almost all recent empirical studies on culture and development have been based on the World Values Survey (Inglehart et al. 2000) or some other self-reported surveys; all of them have been shown to be quite problematic, with serious measurement biases (Jackman and Miller 1996a, 1996b; Clarke et al. 1999), even though few economists seem to be aware of the criticism directed against them. Third, many econometric results in these more recent studies have been seriously

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questioned (Herrmann-Pillath 2010). Fourth, while cultural traits may impact individual behaviors at the micro level, whether they can account for macro outcomes, such as “divergence, big time,” is doubtful. Indeed, few recent empirical studies on culture and development have proposed and tested plausible mechanisms that can link cultural traits or values with macroeconomic outcomes.

Fifth, and most critically, as the great sociologist Norbert Elias ([1939] 1994) argued long ago, many supposedly cultural values or traits (especially, trust as social capital, self-control, obedience) are sediments of institutional outcomes in the long run (see also Mokyr 2014). Certainly, the level of trust (generalized or not) and obedience cannot but be a sediment of institutional history rather than cultural (cf. Putnam 1993). Likewise, the prioritization of interests (or profit) over honor (or passion) (as the capitalist spirit) too has been an institutional outcome in *the long duress* (Elias [1939] 1994; Hirschman 1977). The only trait in the literature that is essentially cultural might be individualism versus collectivism (Gorodnichenko and Roland 2017), but even this trait may have been the residue of the institutional past of these societies. Hence, while there is a plausible link from culture to economic outcomes via institutions, the opposite direction (i.e., from institutions to economic outcomes, sometimes but not always via culture) is not only more plausible but also potentially far more powerful (Alesina and Giuliano 2015). At the very least, institutions have a more powerful impact on development outcomes than culture and social norms (cf. Greif 2006), even though culture and institutions work together (Keefer and Knack 2005).

Finally, these new waves of econometric studies of culture and development have the same difficulties in answering the two challenging questions faced by earlier cultural theories.

B. DEVELOPMENT STRATEGIES AND POLICIES REQUIRE INSTITUTIONS

After rejecting biology, culture, and geography (to a less extent) as the prime movers for modern economic development, we are left with two critical ingredients: (developmental) strategies and policies versus institutions.

As I argue in detail in chapter 8, these two ingredients are complementary rather than competing: they are the primary instruments that a state deploys in shaping economic development. Moreover, both can be understood as instruments for shifting or reallocating production factors to different sectors

(Tang and Gao 2020). As a result, I contend that institutions, policies, and state capacity form the new development triangle (NDT).

The focus on developmental strategies and policies has a long pedigree, dating back at least to Lewis (1955), Myrdal (1957), and Hirschman (1958). Justin Yifu Lin (2009, 2012b, 2012c) has been the most vocal proponent recently. Staking a “new structural economics” (NSE) school, Lin and his collaborators have argued that the key to successful development must lie with whether an economy has followed a developmental strategy of defying or following its (latent) comparative advantages: a comparative advantage defying strategy usually focuses on heavy industry and import substitution, whereas a comparative advantage following one starts with light industries that aim for export. Countries following the former have generally failed (exemplified by numerous newly independent countries after WWII), whereas those following the latter have succeeded (exemplified primarily by a few East Asian countries).¹⁴

I share Lin’s conviction that mainstream NIE’s singular focus on the long-run impact of institutions and state capacities is potentially misleading and inevitably leads to dreadful pessimism. Because many institutions are difficult to change and state capacities are slow to build, emphasizing the shackles of institutions and state capacities implies that LDCs have no real chance of moving out of their poverty trap (Lin 2012c). Once we realize that policies, especially industrial policies,¹⁵ are also instruments for shifting an economy from one state to another state, we arrive at a more hopeful stance: states can indeed jump-start growth with some pushes and then try to sustain their growth momentum with institutional changes and new state capacities (see also Rodrik 2007; World Bank 2008). *Thus, despite the fact that I am a firm institutionalist, the purpose of this volume is not to argue that only institutions matter.*

Ultimately, however, I insist that institutions are more fundamental (for similar arguments, see Rodrik 2007 and Bardhan 2016), because there are a few key weaknesses in insisting that strategies and policies are the primary movers behind development in the long run.

First of all, when trying to slight the role of institutions, Lin has focused on only meta-institutions, such as political regime type and power structure (e.g., 2009, 14). This is misleading. Take post-1978 China and post-1989 Vietnam, Lin’s two primary supporting cases, for example. While the regime type of both countries did not change and the overall power structure did not change, at least two key institutional changes were instrumental

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in igniting and sustaining their reform. (1) Before their open and reform policies, these two countries were mostly planned economies. When they launched their reforms, however, both allowed the market to play a much more prominent role. (2) Both countries reopened the channel of upward social mobility via education by supporting higher education. These two reforms were institutional changes that put incentives in both the material market and the positional market back in place (see chapters 2 and 3). Thus, although the role of important shifts in strategies and policies should be appreciated, it is difficult to imagine that these two countries could have succeeded as they have so far without these two key institutional changes, even if they employed a comparative advantage following strategy.

Second, although a developmental strategy can be long term, policies (including industrial policies) within the strategy must constantly adjust to changing situations. In contrast, institutions are generally more stable or more difficult to change (North 1990; Lin 1989; Lin and Nugent 1995). Moreover, whereas policies may operate as external shocks for jump-starting growth, institutions are necessary for sustaining the momentum (Rodrik 2007). In this sense, institutions are again more fundamental.

Third, and perhaps most critically, *all strategies and policies require some institutions to operate*. When Lin (2009) rightly identified the state as the most critical actor in development, as many institutionalists have done (e.g., Lewis 1955, 376; North 1981; Aghion and Roulet 2014), he was in fact admitting a more central role for institutions since states must be underpinned by institutions (see also Haggard 1990, ch. 1). Thus, in numerous pages within his new manifesto for NSE, Lin (2009, 2012c) had to admit critical roles for institutions.¹⁶

Finally, even if we admit that leaders (and their close associates) play instrumental roles in shaping developmental strategies and policies (and they do), they can only do so with the help of organizations that are underpinned by institutions. Even an omnipotent leader has to rely on an able bureaucracy, and such a bureaucracy can only be built with meritocracy that promotes upward social mobility for able technocrats (see chapter 3). In fact, all the good things that sound developmental strategies and (industrial) policies can bring to an economy depend on a state with a decent threshold of state capacity!

Here, North's (1990, 113–16) brief discussion regarding the role of ideas and ideologies in shaping the different outcomes of Britain and Spain during the seventeenth century is especially illuminating. The Count-Duke of Olivares (in power, 1621–1640) was keenly aware of the right directions and

even procedures for reforming and restoring Spain. Unfortunately, he was severely constrained by Spain's morbid institutions, and his efforts to save Spain eventually pushed the country into disaster (Elliott [1963] 2002, ch. 9; 1989, ch. 10). In short, "ideas and ideologies [and development strategies] matter, [but] institutions play a major role in determining just how much they matter" (North 1990, 111).

II. How This Book Approaches Institutions

Following Smith, Marx, and many others, this book is unabashedly institutional toward the puzzle of development. But then, what is the institutional foundation of economic development (IFED)? There have been many courageous attacks of this puzzle. This book draws and builds upon all of them, but also differs from them quite significantly.

I first reject the simple dichotomy of "extractive versus inclusive," "market augmenting versus market depressing," or "natural state versus open access order" (e.g., Olson 2000; North et al. 2009; Acemoglu and Robinson 2012). These dichotomies are simply too blunt to be helpful. Worse, explanations based on them are often tautological (see chapter 1 for details).

We must also go beyond the orthodoxy of strong but limited states (e.g., North and Weingast 1989; Acemoglu and Robinson 2012), because it hinders our understanding of the role of states and institutions in economic development (Aghion and Roulet 2014; Bardhan 2016, esp. 866–74). After all, unless a state can extract effectively, it cannot build anything, including institutions (Elias [1939] 1994; Tilly 1990).

Fundamentally, despite economics' claim to deduction, North, Olson, and their followers were inducing and extrapolating from the British experience without admitting it. By the same logic, we therefore have to reject the purely inductive exercises based on regressions without theorization. Growth regressions can only produce a laundry list of institutional (and cultural) factors that at best are correlated with development,¹⁷ but they cannot tell us the institutional causes of development (Rodrik 1999; Pritchett 2000). We need to guide growth regressions and any other empirical exercises with rigorous theorization. Moreover, observational data will always limit the kind of techniques we can deploy to obtain reliable causal inference.

My approach here is thus foremost a deductive approach. By a deductive approach, however, I do not mean modeling alone (and there are models within this project). A model is one way of developing theoretical insights,

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but it is not the only way. Economists confuse themselves by taking mathematical models as the only method of theorization. In most cases, a model is too simplified to solve a task like the systemic foundation of economic growth, whereas a model that is too complex (even if it is tractable) is not easily accessible to most policymakers and hence of little practical value.

For supporting evidence, I combine both statistics and in-depth case studies: we need them both. Furthermore, because there is so much heterogeneity across countries, it is not so useful to pool all countries with data in econometric exercises. To be consistent with my overall concern and theorization, therefore, I perform regressions with only developing countries.¹⁸

The institutionalist approach adopted here is also historically systematic or, more precisely, evolutionary. It is systematic in the sense that I emphasize that IFED is a system, consisting of multiple dimensions. As such, I reject such blunt approaches that label growth-promoting institutions as “inclusive” or “market augmenting” and growth-retarding institutions as “extractive,” “excluding,” or “market restricting.” I also reject idealizing the British experience as the only path toward economic development.

My approach is historically systematic in the sense that development is not only a complex system but, more importantly, an evolutionary system. In fact, any thoroughly institutional approach, whether it is about development or other social outcomes, must be evolutionary because institutional change is a thoroughly evolutionary process and hence all institutions are the product of social evolution (Tang 2011b, 2020). Development itself, plus social and political developments, and even international developments (e.g., war, financial crisis from other places) can change or even transform a social system, thus changing the overall environment for development. When this is the case, it is imperative for us to adopt an evolutionary approach toward development. For understanding changes, an evolutionary approach promises greater payoffs than any nonevolutionary one (Tang 2020).

Hence, just because state capacity, internal peace, and prosperity tend to cluster with each other (Besley and Persson 2011), it does not mean that Britain and other European countries struck gold in one stroke (Jones 2003; Greif 2006; Mokyr 2008; McNeill [1963] 1991). The Northian imagination of economic history can hardly be helpful in the real world (Ankarloo 2002). Certainly, even in the modern age, the East Asian miracle was not necessarily the product of an “inclusive regime” (Pritchett 2003). When this is the case, if one follows the Northian message, developing countries would be at a loss as to where to start (Rodrik 2005).

Finally, three critical caveats are in order. First, adopting a mostly institutionalist approach does not discount the role of individuals in development. What I do reject is the atomic and utterly micro approach espoused by Banerjee and Duflo's (2011) *Poor Economics*. Their approach toward development is fundamentally flawed and presents an overly optimistic or even "romantic" picture of economic development (Karnani 2009; Ravallion 2012). They fail to grasp that different individuals' capabilities, visions, and even ways of calculating have a history and hence an institutional root (Sen 2000; Graham 2015). Put it bluntly, the poor do not make calculations and decisions in an institutional vacuum. In fact, Banerjee and Duflo (2011, 234–35) came close to admitting this depressing fact when they lamented: "The poor often lack critical pieces of information and believe things that are not true . . . some markets are missing for the poor, or . . . the poor face unfavorable prices in them."

Also, by heavily relying on randomized controlled trials (RCTs) or experimental methods (for critique of RCTs, see Cartwright 2010; Deaton 2010; Deaton and Cartwright 2018), Banerjee and Duflo and their followers can only limit their inquiries to how people make a decision within the present (micro) situation while neglecting the possibility that these people have limited possibilities, incentives, capabilities, and opportunities precisely because they have been handicapped by the larger institutional environment of their country (Ravallion 2012; Reddy 2012). As such, Banerjee and Duflo not only risk making governance and the state disappear (if we just let people choose and decide!) but also falling and staying in the trap of atomic individualism that has been proved false and harmful but that is so enshrined by many economists (Karnani 2009).¹⁹

Institutions and individual decisions are not incompatible with each other. In fact, the key to development is not to pit individuals against states or markets against states. Rather, it is to make states, by building better institutions, serve the people (individuals) better.

Second, adopting a mostly institutionalist approach does not mean that land, capital, labor, human capital, and technology are unimportant. Here, Abramovitz (1986), North (1990), and Nelson and Pack (1999) got it right: While land, capital, labor, and technology provide the upper bound or full potential for development, institutions provide the actual limitation on what a country can achieve, given fixed production inputs. Thus, the key is for countries to build capacities so that their people and organizations can absorb first and then invent new technologies as a result. Indeed, as

I have emphasized elsewhere (Tang 2005), if there is something called the “national learning capacity,” institutions mostly determine it—directly (e.g., via investing in R&D) or indirectly (e.g., via investing in education).

Third, and most critically, adopting a mostly institutionalist approach does not mean that politics is irrelevant (Sangmpam 2007). Indeed, it is exactly the opposite. Because institutions are rules and making and enforcing rules require political power most of the time (Evans 2007; Mahoney and Thelen 2010; Tang 2011b), an institutionalist approach makes politics a central force in shaping economic performance, especially in the long run. In chapter 8, I bring (or return) politics to the center of our discussion of state capacity, institutions, and socioeconomic policies. For now, taking an institutionalist approach means assuming that institutions, once in place, have a life of their own in shaping development, and I leave the politics behind institutional changes for now.

III. Structure of the Book

In chapter 1, “Laying the Groundwork: What Do We Know about IFED?,” I provide an in-depth and systematic critique of the existing literature on institutions and economic development, thus paving the way for the systematic statement on IFED to be advanced in chapter 2. I identify key defects in the existing literature and defend the approach taken in this book.

In chapter 2, “A Systematic Statement of IFED,” I start with the metaphor of “big bills left on the sidewalk,” and I ask the question, What institutions will encourage and enable an individual to pick up those “big bills”? Through logical deduction, induction, and drawing insights from the existing literature on economic development and beyond, I contend that for an individual to be able to pick up those big bills, four “big things” must be in place: *possibility*, *incentive*, *capability*, and *opportunity*.

I then ask the question, What institutions underpin the four big things? I arrive at a rigorous theoretical framework contending that IFED has six major dimensions, namely, (political) hierarchy, property rights, social mobility, good redistribution (as empowering), liberty for protecting innovation, and equality of opportunity. Hierarchy and liberty (protected by democracy), which can be understood as having a dialectical relationship when it comes to maintaining stability and promoting welfare-enhancing change, underpins possibility. The channel of property rights and the channel of social mobility underpin incentives in the material market and the

positional market. Good redistribution underpins empowering underserved individuals with capabilities so that they can achieve gains in the material market and the positional market: individuals should not be handicapped from picking up those big bills. Finally, equality of opportunity underpins opportunities for marginalized individuals in the sense that they will not be prevented from picking up those big bills in the material market and the positional market, usually by other individuals in more advantaged positions.

I then briefly discuss the two dimensions that have been well studied and supported: political hierarchy for order and (political and economic) stability, and property rights for the material market. I also briefly address a third dimension, equality of opportunity, due to the difficulty of measuring it and hence a lack of available data for rigorous empirical exercises, either qualitative or quantitative. The chapter then highlights the other three channels that are still subject to debate, paving the way for chapters 3–6 that provide original theoretical exposition and more systematic evidence for them.

Before going further, however, I present a brief digression on the subject of inequality, with a more detailed discussion to be advanced elsewhere.

“Excursion: Three Inequalities” briefly outlines three inequalities and discusses the importance of distinguishing between them as critical for understanding them. The three inequalities—inequality of capability (innate and acquired), inequality of opportunity, and factual (material and positional) inequality—can only be addressed with different institutions and means. Inequality of capability should be addressed by good redistribution. Inequality of opportunity should be addressed by affirmative action, broadly understood. Finally, factual inequality, an extremely complex social outcome with both biological and historical roots, can only be addressed by a combination of institutions and individual efforts.

Chapter 3, “The Positional Market and Development: Social Mobility as an Incentive,” contends that in addition to the material market, there is also a positional market in human society. The channel of social mobility—the institutional system that regulates individuals’ and groups’ performances in the positional market—is a critical dimension within IFED because it underpins the incentive structures in the positional market. As such, understanding the interaction between the incentive structures in the material market and those in the positional market sheds new light on economic history and some of the ongoing “natural experiments” in economic development today. Most importantly, understanding the relationship between the positional market and economic growth makes it clear that states should

strive to eliminate institutional discrimination because it is not only morally unjust but also economically costly. An earlier version of this chapter was published in the *Journal of Economic Issues* (2010).

Chapter 4, “Redistribution and Development: Good Redistribution as Empowerment” (with Shuo Chen and Chengcheng Ye), argues that good redistribution is about empowering marginalized individuals with capabilities so that they can achieve gains in the material market and the positional market. In other words, good redistribution is to address the inequality of capability among individuals and groups within a society.

We use public investment in basic education, a measure that has long been identified as one of the most beneficial redistributive measures, to substantiate our argument. Consistent with our overall position that good redistribution is about empowering underserved individuals with capabilities, we reason that the crucial constraint shaping a household’s decision to invest in human capital is the share rather than the amount of public investment in basic education. We construct a model that explicitly shows the share of public investment out of the total cost of basic education and a household’s budget as the two central factors that shape a household’s decision about investing in human capital. Our model yields the critical insight that the larger the share of public investment out of the total cost of basic education is, the less overall burden a household has to shoulder for investing in its human capital and the more a household is incentivized to invest in its human capital. Our model also yields other interesting insights. We then present empirical evidence that demonstrates the operation of the central mechanism and the effect upon households’ decisions of the two central factors identified in our model, taking advantage of some unique data opportunities provided by China’s reform in funding basic education.

Chapter 5, “Hierarchy, Liberty, and Innovation: A New Institutional Theory and Qualitative Evidence,” advances a new theory that identifies democracy’s unique advantage in prompting economic development. Bringing together the classic defense of liberty and democracy, the political economy of hierarchy, endogenous growth theory, and the new institutional economics on growth, I contend that *the channel of liberty-to-innovation is the most critical channel in which democracy holds a unique advantage over autocracy in promoting growth, especially during the stage of growth via innovation*. Because all human societies are hierarchical, and hierarchy facilitates growth by bringing stability and order yet harms innovation and growth by demanding obedience to authority, an economy must strike a balance between maintaining stability and facilitating innovation. Democracy

achieves this balance by protecting liberty, whereas autocracy sacrifices innovation for stability. Democracy thus does hold a unique advantage in promoting growth over autocracy, but this advantage is far more subtle and (fragile) than what North and his followers have argued: it is indirect, channel-specific, and conditional.

I then present evidence from three historical cases, demonstrating that although key scientific breakthroughs can indeed pop up under autocracies, democracy is a necessary, though insufficient, condition for protecting major scientific breakthroughs that may challenge religious and political orthodoxies.

Chapter 6, “Democracy’s Unique Advantage in Promoting Development: Quantitative Evidence” (coauthored with Rui Tang), continues the discussion on democracy and growth. The theory advanced in chapter 5 argues that the channel of liberty-to-innovation is the most critical channel in which democracy holds a unique advantage over autocracy in promoting growth, especially during the stage of growth via innovation. My theory thus predicts that democracy holds a positive but indirect effect upon growth via the channel of liberty-to-innovation, conditioned by the level of economic development. This means that there is a threshold above which democracy begins to have a conditional positive effect on growth. Chapter 6 presents quantitative evidence for this key hypothesis. An earlier version of chapter 6 was published in *Kyklos* (2018).

Together, chapters 5 and 6 propose an indirect and conditional effect of democracy on economic development and provide systematic evidence for my theory. Our theory and empirical evidence promise to integrate and reconcile many seemingly unrelated and often contradictory theories and evidence regarding regimes and growth, including providing a possible explanation for the inconclusive results from regressing an overall regime score against the rate of economic growth or the change in level of GDP per capita.

Turning to chapters 7–9, I present a wide and holistic understanding of economic development. Chapter 7, “Development as a Social Evolutionary Process,” advances two principal arguments. First and foremost, because different institutional arrangements interact with each other, “the efficiency of a particular institutional arrangement cannot be assessed without referring to the other related institutional arrangements in that society” (Lin 1989, 3). Many existing studies have neglected this interaction and its impact. As such, their interpretations of economic history, some of which may have become conventional wisdom, are open to question. Second, because economic

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development also transforms the social and political system of a society, different stages of economic development need different combinations of institutions. As such, we must adopt an evolutionary approach to IFED and economic development itself rather than simplistic and dogmatic notions of protecting property rights and constraining the executive. There is no simplistic dichotomy of inclusive versus extractive institutions as championed by North et al. (2009) and Acemoglu and Robinson (2011).

Chapter 8, “The New Development Triangle: State Capacity, Institutional Foundation, and Socioeconomic Policy,” argues that once we admit that institutions matter for economic development, it becomes inevitable that the state is a key player in engineering and sustaining, or hindering, economic growth (Olson 1993, 2000; North et al. 2009; Besley and Persson 2011; Bardhan 2016), because the state has been the most powerful actor in erecting and enforcing institutions. This in turn means that development requires a state with adequate state capacity. As Andrew Schrank (2015, 36), put it pithily: “*An effective state is all but indispensable to late development*” (emphasis added). In addition, we also need sound economic policy, including industrial policy (e.g., Oqubay 2015; Lee 2013a, 2013b; Lin 2012b; Stiglitz and Lin 2013), in the short to medium run to maintain growth momentum because policies in the short to medium run are surely going to impact long-run economic performance. Together, they point to a “new development triangle” (NDT) consisting of state capacity, institutions, and economic policy. While this development triangle is only a framework for further research, it clarifies and indeed dissolves several unproductive debates that pit institutions against state capacity and state intervention with economic policy, including industrial policies (Aghion and Roulet 2014; Bardhan 2016; Maloney and Nayyar 2018).

In the conclusion to the book, “Laying the Foundation for Development,” I argue that for developing countries the ultimate question for economic development can be put as this: How can a state become and then remain a “developmental state”? Unfortunately, this challenge has no simple institutional or policy panacea, and this is the primary reason why economic development has been so rare and difficult to sustain. Time and time again, the illusion of having found a solution by some economists and development consultants has been shattered. Without an easy answer, then, how can developing countries lay a broad foundation for economic development? Bringing my discussion together, I conclude with some practical principles for laying such a foundation without any pretense of a panacea.

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