

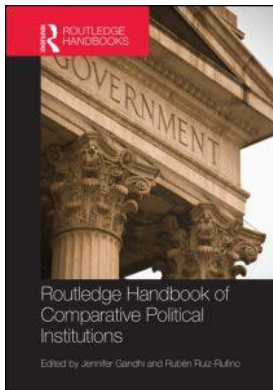
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### **Political institutions and economic development**

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# POLITICAL INSTITUTIONS AND ECONOMIC DEVELOPMENT

*Luz Marina Arias*

Why are some countries rich and others poor? Part of the variation in economic development across countries can be explained by accumulation of human and physical capital and investments in innovation. However, substantial variation in economic development across countries remains after accounting for these factors. A growing body of literature emphasizes political institutions as the “deeper” determinants of economic development (e.g. Rodrik 2003, Helpman 2008). Political institutions encourage or discourage the rate of accumulation and innovation by influencing policy decision-making and by enabling (or not) politicians to credibly commit to policies.

This chapter focuses on three determinants of the substantial variation in economic development across countries: (1) the ability of a government to credibly commit to not behave opportunistically; (2) the ability of a government to protect private property rights and enforce contracts; and (3) the ability of a government to provide public goods and infrastructure. The chapter also surveys the different historical factors that have been proposed as explanations for why institutions differ across countries.

Why are these three factors determinants of economic development? Credibility makes governments reliable by limiting the incentives for politicians to change policy opportunistically tomorrow. Settings of low government credibility can lead to misallocation of public funds and distorted public policy. Private property rights and contract enforcement promote investment, specialization and market exchange. Private actors will not make optimal accumulation and investment decisions without adequate legal guarantees; that is, in the face of risks of expropriation by the government, or by other private actors. Markets do not develop without a last resort guarantor of market transactions. Lastly, public goods foster economic development by providing physical and organizational infrastructure.

While many scholars agree that credibility, legal protections, and physical and organizational infrastructure are key determinants of economic development, there is less agreement on the specific political institutions that promote and maintain credibility, protect transactions and organize collective action. The next three sections discuss the major political institutions that have been proposed as sources of variation in government credibility, legal protection and enforcement, and public good provision. Emphasis is given to (i) the underlying mechanisms linking institutions and development, and (ii) empirical tests validating the proposed relations. Section 4 surveys various historical explanations for the variation in political institutions across countries. The last section concludes by discussing the challenges for future research.

## Which political institutions matter for credibility

There is scholarly agreement that institutions that foster credibility in the government's ability to keep its promises promote adequate private investment and public policy-making.<sup>1</sup> Which political institutions foster credible commitments? Recently, emphasis has been put on the role of institutional checks and balances, universal franchise and competitive elections.

### *Institutional checks and balances*

Institutional checks and balances enhance government credibility by limiting the ability of any one political actor to act unilaterally. One such form of institution is a legislative assembly, e.g a parliament. For North and Weingast (1989), a legislative assembly limits the extent to which a ruler can spend and borrow unchecked, enhancing thus the rulers' credibility to commit to sovereign obligations (see also Hoffman and Norberg 1994; Dincecco 2011). Similarly, Boix (2003) argues that legislatures constrain autocrats and can thus promote private investment. Besley and Kudamatsu (2008) argue that the presence of a selectorate able to replace the leader, without losing power itself, can encourage good policy.<sup>2</sup>

More generally, in this argument what limits the government is the presence of a veto point, the legislative assembly, which can prevent opportunistic policy changes. Also, some argue, the greater the number of veto points, the greater the likelihood that the government is obliged to keep its promises: ex post changes in regulation and policy become even more difficult (Levy and Spiller 1994). Stasavage (2002, 2003) shows, however, that limiting the government by means of veto points is neither a necessary nor a sufficient condition for an increase in the government's ability to commit.<sup>3</sup> We must also consider who controls different veto points. A legislative assembly can guarantee the government will pay its debts, say, as long as creditors are well represented within the legislature. Furthermore, with more veto players, more credibility is guaranteed on average as long as preferences over policies are independently distributed across veto players (Stasavage 2002: 161). But if one powerful group, say landowners, control all veto points, government commitment cannot be guaranteed for a policy not in the interest of landowners. If, however, we allow for more than one policy dimension and disciplined political parties, cross-issue bargains between members of the same political party may guarantee commitment even if the majority in the assembly prefers a change in policy.<sup>4</sup>

Gehlbach and Keefer (2012) emphasize another important reason for why institutions such as legislatures are able to foster credibility. By allowing supporters to organize collectively, a leader can enhance his ability to commit to not behave opportunistically. Some autocrats permit institutional arrangements that give their supporters capacity for collective action. These collectively organized groups are able to impose sanctions on the leader through, for example, fund-raising armed resistance, disrupting policy implementation, or withholding resources in the event that any member of the group was expropriated (Gehlbach and Keefer 2012: 622–23). In fact, the argument in North and Weingast (1989) is that in seventeenth century England the legislature allowed the nobility to act collectively against the king.

Another alternative is to delegate bureaucratic functions to the private actors that require guarantees. In doing so, a government ties its own hands by giving private actors the ability to withhold revenue, or otherwise punish the government, if politicians behave opportunistically (Jones 1994; Sargent and Velde 1995; Stasavage 2002). Henisz (2000*b*), for example, argues that investors can reduce the impact of institutional country risks by creating joint partnerships, and thus coordinating with other investors.

Relatedly, some have argued that providing independence to certain offices within the government can isolate policy makers from political pressures and thus allow for the implementation of optimal policy. Central bank independence, for example, grants credibility to monetary policy.<sup>5</sup> Governments unable to commit to controlling the money supply are less likely to hold down inflation (Keefer and Stasavage 2003). Recent empirical evidence, however, has shown that legally mandated central bank independence provides only a weak protection against political pressures whenever the career incentives of central bankers are guided by private banks and the government. Adolph (2013: ch. 3) shows the financial sector and bureaucratic experience of central bankers affect inflation as much as measures of central bank independence. Also, investments in the capacity to collect taxes can enhance the government's commitment to low inflation. By increasing fiscal reliance on taxation, and correspondingly reducing fiscal reliance on other sources of revenue, the government enhances its ability to commit to avoid seignorage, rent seeking, and corruption (Cukierman *et al.* 1992; Aisen and Veiga 2008).

A variety of measures of institutional checks and balances have been proposed in the literature, and typically have been shown to robustly predict economic growth. Henisz (2000a) constructs an indicator of the number of veto players in a country by considering whether the executive controls the other veto players: the legislature, the judiciary, and state governments (federalism). He then weights the indicator according to the fractionalization, or heterogeneity, of the different veto players' policy preferences. He finds that the measure is a robust predictor of economic growth, and that it predicts measures of security of property rights. Keefer and Knack (2002) link the presence of multiple veto players with measures of credit worthiness. Their analysis finds supporting evidence for a significant positive effect of checks and balances on the credit ratings of a country.

Because checks and balances, universal franchise, and competitive elections are typically analyzed jointly in the empirical literature, I postpone further review of the evidence until the following subsection.

### ***Universal franchise and competitive elections***

Competitive elections and universal franchise can also make governments credible by giving those not part of the political elite the means to punish opportunistic behavior. Acemoglu and Robinson (2001, 2006) argue that an expansion of the franchise enables the rich to credibly commit to redistribute to the poor. By making the poor the median voter, an expansion of the franchise allows the rich to credibly promise tax transfers and property rights protection to the (previously) disenfranchised to prevent strikes, riots, or a revolution. According to Acemoglu and Robinson, only in societies with intermediate levels of inequality do the demands of the poor and the low redistributive costs to the elite combine to support an extension of the franchise. Boix (2003) similarly understands democracy as a redistributive struggle between the rich and the poor, but advances a linear relationship between inequality and democratization. This view of democracy, however, leaves some room for debate.<sup>6</sup>

On theoretical grounds, it is not clear why the rich need to provide universal franchise to avoid a threat of revolution. Alternative institutional arrangements, such as limited franchise, can provide security to the median citizen while at the same time safeguarding the elite's control of assets (Keefer 2004: 265). The United States during the nineteenth century, for example, authorized a popular vote for one legislative chamber, while the other chamber remained insulated from the electorate. In this way, the median voter had some ability to constrain the government but institutions still gave the elite veto power to protect their privileges.

In addition, if franchise extension is to increase the government's commitment to redistribution, it should be more likely in unequal societies. Empirical assessments of the link between inequality and franchise extension provide conflicting results, however. Using measures of land inequality, both Boix (2003) and Ansell and Samuels (2010) find a negative relation between inequality and democratization. Yet using income inequality as measure, Ansell and Samuels (2010) find a positive relation between inequality and democratization. Przeworski *et al.* (2000), and others, have failed to find a relationship between different measures of inequality and regime type (Muller 1988; Houle 2009). In part, these conflicting results make manifest the difficulty of measuring inequality and of identifying the causal relationship between inequality and democracy.<sup>7</sup> All the same, the evidence seems to suggest democratic countries do not have on average less inequality, casting doubt on the argument that democratic institutions function as a means to commit governments to redistribution.<sup>8</sup>

Competitive elections may still make governments more accountable and, in so doing, promote productivity-enhancing investments. Through elections citizens not part of the political elite are able to punish politicians that do not follow through on their campaign promises or otherwise misbehave. The empirical literature linking regime type and economic development, however, provides contradictory evidence.<sup>9</sup>

Rodrik and Wacziarg (2005) find that transitions from authoritarian to democratic regimes do increase income growth per capita. Similarly, Giavazzi and Tabellini (2005) find a positive feedback between economic and political reform, yet the sequence of reforms matters. In groundbreaking work, Przeworski *et al.* (2000) find that higher income countries are more likely to remain democracies. However, they find no significant difference in growth rates between democratic and autocratic regimes. Glaeser *et al.* (2004) show that more developed countries are those that pursue good economic policies, often under dictatorships; democratization may come later. According to Gehlbach and Keefer (2012), countries without formal checks and balances and lacking competitive elections also manage to attract private investment: 40 percent of countries without competitive elections retained more private investment than the median country with competitive elections.

Authoritarian regimes, it seems, are also able to credibly commit under some circumstances. Gehlbach and Keefer (2012) argue that institutional arrangements that provide supporters effective capacity for collective action, grant credibility to autocrats. Two conditions are necessary: (1) information transmission within the group, and (2) coordinated behavior.<sup>10</sup> If, in contrast, a ruler creates competing organizations that report directly to the ruler, information transmission is debilitated and focal points suppressed (e.g. the Red Guard under Mao). Similarly, by exercising tight control over the agenda and group meetings, a leader limits independent initiative and thus hinders coordination among supporters.

Gehlbach and Keefer (2012) provide examples of this type of institutional arrangement under autocracies. Competitive legislative elections provide credibility as long as the support bases of legislators are independent of the autocrat. This arrangement allows the support group of the legislator to act collectively and impose sanctions on the autocrat through the legislator.<sup>11</sup> Other institutional arrangements that facilitate collective action are disciplined ruling parties in non-democracies (e.g. the PRI in Mexico; see Haber *et al.* 2003 and Magaloni 2006) and clear rules for leadership change.

Some scholars argue that long horizons and stable rule provide incentives for authoritarian rulers to not behave opportunistically. According to Olson (1993), stability gives autocrats incentives to promote investment and economic growth even if they are predatory: the larger the pie, the more they can get. McMillan (2003) argues that the communist government under Mao faced no challenges and so was motivated to not renege on contracts.<sup>12</sup> Even autocrats with

long horizons have turned out to be predatory despots, however, so stable rule seems not to be a sufficient condition to ensure an authoritarian ruler is benevolent and promotes economic success.

Although part of the lack of robustness in the empirical evidence is likely due to uncertainty and imperfections in political markets across countries, it is also clear that we need to better understand the conditions under which specific political institutions have different effects on credibility. The wide variation in development outcomes across autocracies suggests we need a more detailed understanding of the institutional variation within dictatorships. This may shed light on other political institutional arrangements (such as those suggested by Gehlbach and Keefer 2012) with the potential to increase government credibility. A greater understanding of the trade-offs and complementarities between public and private institutions is also critical to increase our knowledge of the institutional sources of government credibility.<sup>13</sup>

### **Property rights and contract enforcement**

An important strand of the literature argues that variation across states in their legal institutions helps explain why some are better able than others to commit to protect property rights and enforce the rule of law between private agents, and between private agents and the government.<sup>14</sup> Well-defined and protected property rights incentivize innovative entrepreneurship rather than predation, and diminish the need to protect against predation (Baumol 1990). Contract enforcement prevents parties from failing to honor their contracts. Asymmetric information and hold-up problems can provide incentives for contract renegeing. The parties will choose not to renege only if the cost from doing so is high. Repeated interactions and geographic proximity facilitate punishments in bilateral arrangements and thus reduce the need for formal legal institutions.<sup>15</sup> As markets grow and the geographic location of exchange expands, however, information asymmetries increase together with the probability of renegeing. Formal institutions enforced by a third party (i.e. the government) are then necessary to facilitate exchange and growth (Greif *et al.* 1994; Greif 2006; Brown *et al.* 2004).

Economic historians have been the first to document the importance of formal private property rights and contract enforcement for markets and development. Market-supporting legal institutions have been critical for the rise of capitalism and international trade (North and Thomas 1973) and for the development of the corporation (Rosenberg and Birdzell 1986). Greif (2006) argues that a functioning market economy failed to develop in China due to the absence of formal commercial arrangements.<sup>16</sup>

A growing empirical literature provides sharpened measures and channels of causality. Weak legal systems lead to slower firm growth and to pyramidal structures within firms, both with negative implications for innovation and growth. In Mexico, firms in states with a low measure of efficiency of judges (based on the quality, impartiality, and resources of judges, along with other dimensions) are smaller than in states with a high measure (Laeven and Woodruff 2007). Larger firms are more efficient and are able to expand their markets. Khanna and Palepu (2000) document that weak property right protection resulted in pyramidal structures. A pyramidal structure of firms relies more on intra-group resource allocation than free standing firms, reducing aggregate allocative efficiency (Almeida and Wolfenzon 2005), hampering competition,<sup>17</sup> and limiting externalities from innovation (Morck *et al.* 2005).

Formal entry and exit barriers also impact the allocation of resources. Entry barriers in the form of high registration costs hinder the entry of new firms, undermining innovation and competition (Berkowitz and Jackson 2006; Klapper *et al.* 2006; Fisman and Saria-Allende 2010; Bruhn 2011) and induce informality (Djankov *et al.* 2002).<sup>18</sup> Exit barriers in the form

of impartial and quick resolution of insolvencies appear to contribute to a more efficient firm selection: Gine and Love (2010) find that insolvency reform improved the allocation of assets in the Colombian economy. The evidence regarding creditor-friendly insolvency regimes is mixed, however. There is evidence that industries that depend on innovation in countries with stronger creditor rights see fewer patents (Acharya and Subramanian 2009).

Financial sector development has also been associated with legal protections and enforcement.<sup>19</sup> Countries with secure creditor and minority shareholder rights have larger credit and stock markets (La Porta *et al.* 1997), higher intermediation efficiency (Laeven and Majnoni 2005), and higher corporate valuations in the stock exchange (La Porta *et al.* 2002; Caprio *et al.* 2007). Djankov *et al.* (2007) find that the extent to which credit information is shared has an effect on the depth of the financial sector. Also, legal procedures and trial duration can limit access to credit markets. The introduction of new tribunals to resolve large-claim disputes in India resulted in lower interest rates for borrowers (Visaria 2009), while the duration of trials in India is negatively associated with farmers' access to credit markets (Chemin 2009a). Levine and Zervos (1998) and Levine (1998) find that various measures of financial development contribute to economic growth.

In addition, recent work has pointed to the importance of the political process in understanding how legal contracts are written and enforced. Pagano and Volpin (2005) argue that parties in proportional electoral systems favor low investor protection and high labor protection because obtaining a majority of votes is indispensable when competing with other parties. In contrast, in majoritarian electoral systems parties favor high investor and low labor protection because parties need to win more districts (and so the pivotal group becomes important). The authors also provide empirical evidence for the OECD countries in support of their argument. However, many of the changes in corporate governance after the 1930s took place under authoritarian regimes; an explanation based on electoral systems is therefore not sufficient (Musacchio 2010).

For Gourevitch and Shinn (2005), conflicts between firm owners, managers, and labor shape the regulation to protect shareholders. Shareholder protections are stronger and ownership less concentrated in countries in which owners of firms and labor are in dispute with managers. In contrast, when there is greater coordination between these players, ownership is more concentrated and there is higher government intervention.<sup>20</sup>

In addition to the specific indicators of investor protection mentioned, broader measures of institutional quality have also been linked to development. Besley and Persson (2011), for example, show that an index of property rights protection and an index of contract enforcement are both positively correlated with income.<sup>21</sup> These broad indices raise two concerns. First, the measures are constructed using expert surveys, which can be biased by the perceptions of each expert. Also, expert surveys may reflect outcomes rather than specific rules or institutional arrangements; importantly, if they reflect economic development outcomes, establishing a link between the index measures and development is problematic.<sup>22</sup>

Second, legal institutions impact development, but economic outcomes also influence the evolution of institutions. Concerns about reverse causation and simultaneity are especially important when using broad measures of institutional quality because identifying the various mechanisms that could be at play is tricky. The recent literature has therefore concentrated on identifying the exogenous component of measures of institutional quality in order to address the endogeneity problem. Pioneers in the literature are Hall and Jones (1999), Knack and Keefer (1997), and Mauro (1995). More recently, Acemoglu and Johnson (2005) examine separately the effect of property rights and contract enforcement institutions. As a proxy for property rights, they use risk of government expropriation and constraints on the executive. For contract enforcement

institutions, they use the indicators in Djankov *et al.* (2002, 2003). To handle the endogeneity problems of these measures, Acemoglu and Johnson (2005) further use their settler mortality variable (see Acemoglu *et al.* 2001) as an instrument for property rights institutions, and legal origin as an instrument for contract enforcement institutions. They find strong evidence for the importance of property rights institutions on income per capita. However, once the effect of property rights is accounted for, contract enforcement institutions do not appear to relate to income per capita.<sup>23</sup>

In sum, the literature documents the importance of formal private property rights and third-party enforcement for understanding economic development. Also, the literature provides an important contribution towards identifying the mechanisms through which specific legal institutions impact development. Our understanding of the effect of the political process and of political institutions on legal arrangements, however, remains limited. More generally, we need to understand why some countries have more effective institutions than others in order to venture policy changes. More on this in the next sections.

### **Public good provision and organizational infrastructure**

Decision-making rules within legislatures have an impact on regulation and policies. These rules determine who sets the agenda, who has veto power, and how transitions in and out of office take place. The literature typically focuses on clusters of these rules when analyzing the impact of these political rules on policy.

One strand of the literature contrasts presidential and parliamentary systems. Persson and Tabellini (2000) argue that in parliamentary systems the institutional framework gives rise to high public good provision, and correspondingly high rent seeking and high targeted transfers, because the legislature is able to propose a high tax rate. In contrast, under presidential systems, the tax committee sets low taxes, leading to a low public good provision, low rent seeking, and low targeted transfers. The variation is a result of the different abilities to veto proposals between the tax and the spending committees in legislatures.<sup>24</sup>

The empirical evidence confirms that presidential systems spend less than parliamentary systems (e.g. Persson and Tabellini 2000). However, the evidence is less robust regarding how the allocation of government spending differs across the two systems (Persson and Tabellini 1999). Presidential and parliamentary systems differ among many other dimensions, likely a reason why the findings are inconsistent (Keefer 2005). In addition, Persson and Tabellini (2003) demonstrate that the effect of parliamentarianism and presidentialism on economic policies depends on whether democracies are well established or weak. In well-established democracies, presidential regimes are more growth oriented than parliamentary regimes, while in weak democracies parliamentary regimes are more growth oriented than presidential regimes.

The literature has also focused on the effect of systems of representation on policies. Persson and Tabellini (2000) show that majoritarian systems provide fewer public goods and more targeted goods to specific constituencies than a system of proportional representation. Each system generates different electoral incentives. In proportional systems, representation is determined by the overall distribution of vote shares; in majoritarian systems what matters is the distribution of votes across districts (see also Milesi-Ferretti *et al.* 2002).

Persson and Tabellini (2003) further find that having small districts hinders economic development under majoritarian systems.<sup>25</sup> Small districts encourage politicians to satisfy a small rather than large constituency. Further, voters in small districts are able to influence policy more than voters in large districts (Samuels and Snyder 2001). For instance, by giving the same representation in Congress (two senators) to California (the largest state in the U.S.) and to the



smallest U.S. states, voters from smaller states receive more representation. This gives them more ability to influence legislation and in some cases a larger share of non-discretionary redistributive transfers (Lee 1998). Majoritarian rules, however, seem to deter corruption (Persson *et al.* 2003).

In sum, electoral and political rules seem to matter. However, the direction of the effect of different rules on public good provision and growth-promoting policies is not clear. Different countries have different combinations of electoral and political rules. To understand the overall effect we need to better understand the offsetting effects of individual rules.

## History, institutions, and economic development

Economic historians have provided the seminal contributions highlighting the importance of institutional differences across societies to explain development. These early contributions also provide theories and evidence about the determinants of those institutional differences. For instance, North and Weingast (1989), mentioned previously, argue that parliamentary institutions provided the grounds for democratic institutions. Greif's (1994) seminal work on the development of market institutions highlights cultural differences. These studies are analytic and qualitative in nature and focus on specific regions and time periods. Yet, the studies provide convincing support for the notion that history and institutions matter.

Building on this work, a growing empirical literature has emerged seeking to identify the causal effect of historic events and institutions on current outcomes. These studies exploit rich datasets and employ careful identification strategies. The literature highlights events such as the onset of colonialism and environmental factors such as soil suitability for certain crops as explanations for the divergent institutional paths of different regions.

Next, I first discuss two factors that have been posited as explanations for institutional variation: factor endowments and legal origins. Second, I explore the mechanisms that have been proposed to link historic institutions to current institutions, and the empirical literature that links historic events and historic institutions to development outcomes.

### *Resource endowments*

The colonial experience has been extensively analyzed to study the determinants of current institutional variation across countries. One of the main factors proposed in the literature is the endowment of resources at contact. The underlying argument is that initial endowment differences in the colonized regions led to the implementation of policies that resulted in “good” or “bad” colonial institutions. The effect of these institutions has persisted and shaped contemporary institutions.

Engerman and Sokoloff (1997, 2002) argue that in regions with the potential for obtaining economically profitable exports, such as soils with the potential for growing large-scale crops (sugar, tobacco, and cotton) or with mineral deposits, colonial practices (e.g. forced labor) led to substantial inequality in wealth and political power. The colonial elite in those regions was able to set up political institutions to perpetuate inequality and grant privileges to themselves (e.g. voting rights). In contrast, in regions with the potential for growing small-scale crops the organization of production resulted in a more equal distribution of wealth and power.<sup>26</sup>

Engerman and Sokoloff's argument has been subsequently tested empirically in the literature. Various studies have found a negative relationship between colonial slavery and various measures of economic development (e.g. Mitchener and McLean 2003; Nunn 2008). Nunn (2008) also finds a positive relationship between slavery and landholdings inequality; however, he

shows that large landholdings are not correlated with current levels of economic development. The latter result challenges the channel of causality proposed by Engerman and Sokoloff: although slavery is correlated with poor economic development, the relationship does not seem to be driven by large-scale plantation slavery.<sup>27</sup> As we will see, we still need to learn more about the channels through which institutions change and persist.

The argument in Acemoglu *et al.* (2001, 2002) is similar to Engerman and Sokoloff's yet emphasizes different factor endowments. Acemoglu *et al.* (2001) argue that environmental conditions that threatened the survival of Europeans, such as environments with potential for malaria and other diseases, discouraged European settlement. Lack of extensive settlement prompted colonists to maximize short-term extraction by relying on forced labor and trade monopolies that benefited the colonial elite. These practices resulted in political institutions that facilitated state extraction and did not foster market development. In contrast, regions where Europeans settled in large numbers, resulted in private property and political institutions that limited the government (Acemoglu *et al.* 2001: 1375).

Acemoglu *et al.* (2002) complement and expand the argument in Acemoglu *et al.* (2001) by incorporating the levels of indigenous population density and prosperity in the regions at contact. In regions sparsely populated by the natives and less prosperous the colonists set up what the authors call *property rights institutions*: "a cluster of (political, economic, and social) institutions ensuring that a broad cross section of society has effective property rights." In contrast, under *extractive institutions*, "the majority of the population faces a high risk of expropriation and holdup by the government, the ruling elite, or other agents" (Acemoglu *et al.* 2002: 1262). Colonists set up extractive institutions in regions where extraction was profitable: those with prosperous native economies and abundant indigenous labor.<sup>28</sup>

Although a strand of the literature on the effect of resources and geography argues that these have a direct impact on productivity,<sup>29</sup> the studies detailed previously defend that the effect of natural endowments is indirect, through their effect on institutional development rather than directly on productivity and growth.<sup>30</sup> Other scholars propose alternative mechanisms of transmission. Europeans brought with them other traits that could also explain colonial variation, such as their culture (Landes 1998), human capital (Glaeser *et al.* 2004), and economic ideology (Mahoney 2010). More work focusing on specific institutional elements is needed to better disentangle the effects of geography, institutions, and other transmission variables.

In this direction, Arias and Girod (2014) study the variation in early types of colonial forced labor and argue that two conditions influenced colonists' choice of forced labor: natural resources exploitable in large scale (e.g. minerals) and pre-colonial political organization of labor (labeled *hierarchy* by the authors). In territories with high pre-colonial hierarchy, indigenous forced labor was more likely regardless of natural resources. Foreign forced labor (e.g. African slavery), in contrast, was more likely in territories with low pre-colonial hierarchy *and* abundant natural resource potential. In high-hierarchy territories, co-optation of native leaders facilitated colonist control of indigenous forced labor. However, in regions lacking such organization colonists faced high costs of forcing indigenous peoples to work; doing so was only profitable if resources could be exploited and exported. Original data covering 439 subnational territories in the Americas provides support for the authors' hypotheses. By demonstrating that indigenous forced labor depended on factors other than foreign forced labor, the authors suggest that both pre-existing institutions and natural resources can account for institutional development during colonial rule.

Other institutional variables have been highlighted in the literature as determinants of contemporary institutional variation and economic development; the next subsections explore the literature.

### **Legal origin**

The legal origin of a country seems to be the common denominator of differences across states in the institutions that support markets. The most prevailing legal origins in the world are the English common law and the French civil law. Relevant differences between the two are the reliance on professional judges, a legal code, and written records in civil-law countries, while common-law countries rely on lay judges, broader legal principles, and oral arguments (Glaeser and Shleifer 2002).

La Porta *et al.* (1998) show that common-law countries have stronger laws protecting investor rights and better law enforcement than do civil-law countries. La Porta *et al.* (1999) further show that common-law countries have better quality of business regulation and the top marginal tax rate relative to countries with civil-law origins. Common-law countries have also been found to have courts more efficient at resolving disputes (Djankov *et al.* 2003) and lower costs of establishing a new firm (Djankov *et al.* 2002). Civil-law countries require more procedures to start up a firm and more days to execute those procedures than common-law countries.<sup>31</sup>

Legal origin seems to also explain variation in indicators of judicial independence. La Porta *et al.* (2004) find that in countries with a common-law tradition, judges are stronger and more independent than in countries with a civil-code tradition. Berkowitz and Clay (2005; 2006) find that in U.S. states colonized by countries with civil-law traditions (France or Spain) judges were granted independence later, had access to fewer resources, and have lower-quality courts than those colonized by the English. Others find that a common-law origin gives countries today more flexibility and adaptability in contract enforcement (e.g. Djankov *et al.* 2003). This difference in adaptability appears to explain country variation in financial sector development and firms' reported financial constraints, according to Beck *et al.* (2005).

Musacchio (2010) finds, however, that using alternate measures of financial development for 1900 and 1913 (stock market capitalization to GDP, private credit to GDP, number of companies traded per million people, and bond market capitalization) there is no evidence of significant differences in financial development across common and civil-law countries. Further, Musacchio finds convergence in creditor rights across common-law and civil-law bankruptcy laws circa 1900. Roe and Siegel (2011) also find, after controlling for political instability, no effects of legal origins on measures of financial development.

In sum, legal origin has been linked to various measures of legal institutions,<sup>32</sup> yet the lack of robustness in the empirical relationships suggests that we need to better understand the channels of causality. For instance, Berkowitz *et al.* (2002) argue that the process of transplantation of legal institutions plays an important role in determining the functioning of the legal system. Further, much of the literature seems to assume time-invariant legal traditions. Some studies analyze the time variation in legal institutions and suggest that legal institutions vary with the underlying political conditions (e.g. Pagano and Volpin 2005).

### **Historic institutions and economic development**

Institutions impact development, but economic outcomes also influence the evolution of institutions. This endogeneity between political institutions and economic development is the major challenge of the literature. By studying the historic origins of institutions and emphasizing causal effects, a burgeoning strand of the literature is convincingly demonstrating that history and historic institutions have an impact on current economic outcomes. This literature developed from the previously examined work of Engerman and Sokoloff (1997; 2002), Acemoglu *et al.* (2001), and La Porta *et al.* (1998).<sup>33</sup>

To identify the causal effect of institutions—extractive versus property rights—on current economic development, Acemoglu *et al.* (2001, 2002) employ the mortality of potential European

settlers (discussed previously) as an instrument for contemporary institutions. They use as proxies for current institutions broad indices of the risk of government expropriation and constraints on the executive. The underlying identification assumption is that settler mortality has no effect on current per capita income, other than through institutional development. The argument posits the persistence of colonial institutions as the mechanism linking history to contemporary development.<sup>34</sup> They find a strong positive effect of current institutions on per capita income.<sup>35</sup>

Subsequent studies have focused on more specific historic institutions. Banerjee and Iyer (2005) focus on land revenue collection institutions in colonial India, contrasting the districts where land taxes were collected by British officials (non-landlord system) to those where collection was in the hands of native landlords (landlord system). The authors convincingly show that post-independence levels of education, health, and agricultural investment were higher in landlord than in non-landlord districts.<sup>36</sup> Dell (2010) studies the *mita*, a forced-labor institution inherited from the pre-colonial era and used by Spanish colonists in Peru and Bolivia until 1812. She finds that today former *mita* districts have political institutions that concentrate wealth and power and provide few public goods, while political institutions in non-*mita* districts result in higher public good provision. The average level of contemporary household consumption in former *mita* districts is 32 percent lower than in non-*mita* districts.

Jha (2013) examines the origin of institutions promoting religious tolerance and supporting markets across cities in contemporary India. He argues that towns where overseas trade with the Middle East flourished in early medieval times, created institutions supporting cooperation between Hindus and Muslims, and those institutions have persisted. Jha is able to identify the causal effect of historic medieval trade on current outcomes by using medieval natural harbors as exogenous determinants of cities with high overseas medieval trade. Nunn and Wantchekon (2011) study the effect of the slave trade on mistrust in Africa. They find a negative correlation between the number of slaves taken from an individual's ethnic group during the slave trade and the individual's reported trust in others. To confirm whether the relation is causal, they instrument slave exports with the ethnic group's historic distance from the coast.

A limitation of these studies is that they fail to identify the channel or mechanism through which institutions evolve or persist.<sup>37</sup> Identifying empirical relationships may not be enough. We need to better identify explicit arguments for why institutions do or do not change. If there are underlying conditions leading to different political institutions, those conditions may be the cause of variations in outcomes, and not the institutions themselves.

Some recent work is starting to shed light on precise mechanisms of institutional persistence and change. To explain institutional persistence, Nunn (2007) argues that African governments govern within the same equilibrium that emerged when colonists built extractive institutions. Acemoglu and Robinson (2008) argue that political power allows elites to preserve the economic institutions that serve their narrow interests. Arias and Girod (2014) document that certain forms of pre-colonial institutional elements (high hierarchy) are more self-enforcing, and therefore persistent, than others (low hierarchy).<sup>38</sup> Spolaore and Wacziarg (2013) show that the persistence of institutions appears to be at the level of populations, not locations. If so, inter-generationally transmitted traits may constitute barriers to the diffusion of technology and institutional knowledge across locations.

### **Challenges for the future**

Despite the conflicting evidence and at times contradictory theoretical arguments, the consensus seems to be that political institutions matter. We have identified that institutions guaranteeing private property and contract enforcement are necessary for market development; that government

credibility is important to incentivize investment and innovation, although we need to learn more about the specific institutional arrangements that increase credibility; and that political decision-making has an impact on public good provision. In addition, the historic literature has contributed to our understanding of the determinants of institutions, and has convincingly shown that history and historic institutions have an effect on current development outcomes.

To make further progress, we need a richer understanding of the mechanisms through which specific institutions affect various dimensions of economic outcomes (e.g. investment, innovation, labor-capital conflicts, coordination) and of the channels through which long-term variables affect current institutions and outcomes. This is of foremost importance to be able to derive policy implications and assess the impact of current and future policies.

In this direction, country-level studies focusing on specific institutions at specific times and places can provide institutional richness and context-specificity that allow for a better understanding of the mechanisms of causality.<sup>39</sup> Rodrik (2003) argues that the success of specific institutions depends on context-specific characteristics that cannot be easily replicated across countries. Fafchamps (2004) suggests different policy prescriptions for three different African countries after undertaking an individual game-theoretic analysis for each. De Soto (2004) emphasizes the importance of building on local knowledge to understand how institutions work in different locations.

Further, a theory of institutional change and persistence is necessary if we want to undertake institutional engineering. Some argue that the opportunities for institutional change must be taken advantage of quickly; gradualism prolongs the costs that need to be borne by some in society as a result of reform. Others favor caution; they underscore that drastic reform can increase the risk of political opposition, risking failure. However, Heybey and Murrell (1999) conclude that a country's initial conditions are more important than whether reform is rapid or gradual. Lacking theories and empirical evidence for why institutions do or do not change, we can not know whether what explains variation in development outcomes is the underlying conditions that determine political institutions, the process of institutional reform or, rather, the institutions themselves.

Future work needs to engage with the mechanisms through which specific political institutions impact various dimensions of economic development. Without a detailed specification of particular institutional arrangements and a better understanding of the mechanisms that lead to the creation, persistence, and change of specific institutions our knowledge of the role of institutions in economic development will remain limited.

## Notes

- 1 Credibility is distinct from other effects of institutional arrangements, namely stability or predictability. A stable policy outcome need not be credible. A policy is stable when the set of policies preferred by the median voter (or median veto player) to the status quo is small. Credibility, in contrast, refers to the incentives of politicians to change policy opportunistically tomorrow for a given reliance on government promises today. See Tsebelis (1995, 2002) for a thorough examination of the stability effects of different institutional arrangements. Bardhan, (2005: ch. 4) offers a detailed discussion of the concept of credibility.
- 2 Gandhi and Przeworski (2006) and Gandhi (2008) also emphasize the positive effect of legislatures on improving economic performance. However, their argument is not about the role of legislatures in enhancing credibility. Rather, they suggest legislatures allow for co-optation of the opposition.
- 3 Ertman (1997) and Cox (2011) have also expanded North and Weingast's argument and included qualifications.
- 4 See also Aldrich (1995), Huber (1996) and Diermeier and Feddersen (1998).

- 5 Some argue that while institutional constraints can significantly reduce discretionary behavior, these institutions come at a cost in flexibility. The inability to change the status quo in response to external shocks, or to correct policy mistakes, must be weighted against the benefits of constraining the executive. See, for instance, Walsh (2010) and Alesina (1995). The literature seems to assume that, on average, the benefits outweigh the costs.
- 6 Both Boix (2003) and Acemoglu and Robinson (2006) echo Meltzer and Richard (1981), for whom the key source of political conflict is taxation.
- 7 Alquist and Wibbels (2012) use a novel empirical strategy to identify exogenous shocks to a country's distribution of income across factors of production. Using data covering 130 years and more than 100 countries, and accounting for spatial dependence of regime types, they find no evidence that domestic inequality relates to regime outcomes. Their measure of inequality is the 90/10 income ratio.
- 8 There is a large literature on inequality and regime type. See, for instance, Beramendi and Anderson (2008).
- 9 The literature for the most part measures democracy as a composite index of the extent to which a country has checks and balances, competitive elections, and universal franchise.
- 10 In this sense, the argument is similar to that in Greif (1993) and Greif *et al.* (1994).
- 11 Boix and Slovik (2013) also emphasize the informational role of legislatures.
- 12 Qian (2003) and Rodrik *et al.* (2004) argue, in contrast, that it was the local governments that had incentives to ensure the prosperity of the new enterprises.
- 13 See, for instance, Allen and Qian (2009).
- 14 Greif (2005) distinguishes between contract enforcement institutions and coercion-constraining institutions; the former regulate interactions among private parties while the latter regulate interactions between private parties and the government. This section discusses both.
- 15 There is a large literature on the role of reputation in supporting transactions through informal bilateral and multilateral arrangements. See for instance: Greif (2006) and Dixit (2007).
- 16 Smith (1776) and Hayek (1960) already pointed to the importance of the protection of property rights.
- 17 Chemin (2009b) shows that better judicial training for judges resulted in new firm entry in the real sector in Pakistan, for instance.
- 18 Friedman *et al.* (2000) show that more general measures of property rights protection and contract enforcement explain variation in informality across countries as well.
- 19 See Beck and Levine (2005) for a review.
- 20 Roe (2003) also highlights the importance of labor groups in the political system and in the corporation.
- 21 Besley and Persson (2011) also show a strong positive correlation between fiscal capacity, measured by the ratio of tax revenue to GDP, and their legal measures.
- 22 See Beck (2010) for a thorough description of legal institutions and discussion of the measures used in the literature.
- 23 Brunt (2007) finds a similar result in South Africa: improvements in agricultural productivity and output in the early nineteenth century resulted from changes in the definition of property rights but not from changes in contract enforcement.
- 24 See also Cox and McCubbins (2001) and Diermeier and Feddersen (1998).
- 25 Persson and Tabellini (1999) also find that countries with low district magnitudes provide fewer broad public goods (e.g. education).
- 26 Bruhn and Gallego (2012) provide a related argument emphasizing the effect of "good" and "bad" colonial economic activities on contemporary political representation and ethnic composition.
- 27 Acemoglu *et al.* (2009) also find a relationship counter to the Engerman and Sokoloff argument. They analyze Cundinamarca, Colombia, and show that land inequality in the nineteenth century is positively related to current measures of primary- and secondary-school enrollment rates. In addition, they find that economic inequality and political inequality are negatively correlated (see also Galor *et al.* 2009; Dell 2010).
- 28 There is a large related literature on resource windfalls that also links natural resources to variation in current political institutions. Resource wealth stimulates corruption among politicians (Mauro 1995; Ades and Di Tella 1999; Vicente 2010; Brollo *et al.* 2013), rent seeking (Ross 2001a, b), and conflict (Fearon 2005). By driving resources away from productive activities, a windfall of natural resources erodes property rights and democratic institutions. Hodler (2006) finds that the erosion of property rights is exacerbated in the presence of many rival factions and substantial resource revenues. There are, however, countries that have benefited from natural resources wealth (e.g. Norway). Recent literature

- suggests that the effect of a positive resource shock depends on the institutional quality of the country (Mehlum *et al.* 2006; Collier and Hoeffler 2009; Bhattacharyya and Hodler 2010). For a review of the literature on natural resources and economic development see Van der Ploeg (2011).
- 29 See, for instance, Sachs (2000, 2001).
  - 30 See also Rodrik (2003); Rodrik *et al.* (2004). But see Michalopoulos and Papaioannou (2013) for recent evidence finding little effect of national institutions on economic performance in Africa.
  - 31 See also Rajan and Zingales (2003); Beck *et al.* (2003a, b); Djankov *et al.* (2007).
  - 32 Legal origin has also been linked to broader societal characteristics; for an overview see La Porta *et al.* (2008).
  - 33 For a careful review of these articles and the literature see Nunn (2009).
  - 34 In doing so, the argument implies a reversal of fortunes because prosperous regions received “extractive” institutions, which persisted and eventually hindered investment and capital accumulation, resulting in poor institutions today, and thus poor economic development. The property rights institutions implanted in previously less prosperous regions persisted, allowing for higher levels of investment and economic development today.
  - 35 Albouy (2006) reassesses the empirical strategy in Acemoglu, Johnson and Robinson by providing a critical examination of their settler mortality measure. See Acemoglu *et al.* (2012) for a response.
  - 36 Berger (2009) also exploits differences between regions in the form of taxation institutions to show a persistent effect of colonial institutions in Nigeria. Gennaioli and Rainer (2007) find a positive correlation between a measure of the level of complexity of pre-colonial African states and contemporary public good provision.
  - 37 Banerjee and Iyer (2005: 1208–9) provide a tentative explanation for why colonial revenue collection systems in India had an impact on political institutions after independence. Greater cooperation among residents of districts with landlord systems may have led to responsive local governments that invested more in infrastructure and development. In contrast, non-landlord districts inherited land conflicts that translated in local governments spending more on land reform rather than on development.
  - 38 See also Greif and Laitin (2004) and Mahoney and Thelen (2010).
  - 39 See, for instance, Greif (2006).

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