

# Property Rights, Governance, and Economic Development

Jan U. Auerbach\*      Costas Azariadis†

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## Abstract

In this review article we give an intuitive account of why good institutions in general, and secure property rights in particular, matter for economic growth and development. We also discuss implications for good governance, defined as the efficient provision of property rights and other aspects of governance. Finally, we briefly touch on political institutions that might be conducive to good governance and thus economic development.

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\*University of Exeter.

†Washington University and Federal Reserve Bank of St. Louis.

# 1 Introduction

In this review article, we give an account of why secure property rights, and good governance in general, matter for economic growth and development. We argue that, in order to understand economic development, we have to understand how secure property rights are established and why some societies might choose not to do so. Property rights are rights to physical or intellectual property that determine who can use, alter, sell or capture the payoffs accruing to it. If property rights are well enforced and thus secure, then individuals are safe from the expropriation of their resources by other agents or authorities. We focus on appropriation activities, i.e., activities that solely redistribute resources but are otherwise unproductive. A non-exhaustive list of such activities includes simple property crime and outright theft, extortion, fraud, as well as corruption. From an individual's point of view, expropriation can be thought of in a broader sense as anything that hinders a person from reaping the returns on their investment, including even homicide. We also discuss implications for good governance, that is, of economic institutions that enforce property rights. Finally, we briefly touch on political institutions that might be conducive to good governance and thus economic development.

Economic institutions in general and the security of property rights in particular differ across countries at a point in time and within countries across time. There seems to be a consensus that secure property rights matter for economic outcomes (see, e.g., [Acemoglu et al. \(2005\)](#)). Many scholars have provided investigations into the importance of institutions for economic development and growth. Representative examples are [Knack and Keefer \(1995\)](#) and [Barro \(1996\)](#). They find strong evidence that property right institutions are of major importance in determining economic growth. [Easterly and Levine \(2003\)](#) report evidence that endowments affect long run economic outcomes through institutions only. Similar results are presented in [Acemoglu and Johnson \(2005\)](#) and [Acemoglu et al. \(2005\)](#). [Rodrik et al. \(2004\)](#) argue that institutions are the single most important determinant of development. We provide a brief overview over theoretically important links between political institutions, governance, property rights, and economic development and growth.

## 2 The economic impact of weak property rights

Limited property rights affect a society's economic performance through several channels. First, weak enforcement of property rights attracts people into unproductive, purely redistributive activities which we know as rent-seeking, bribery and corruption or property crime. The pie to be shared among a society's members is smaller than it could potentially be. Second, the lack of secure property rights affects the expected returns to all sorts of investment.

Individual decisions are distorted by the implicit tax that appropriation imposes on production as well as by the explicit taxes that finance enforcement and deterrence. Investment weakens and the future economic pie to be distributed lags behind its potential. Third, in order to counteract the appropriation activities by others, productive agents have an incentive to invest resources that could be used productively otherwise into security measures, like guarding, private and government policing, lawyers and judges, etc. More generally, the availability of appropriation activities absorbs resources diverted away from productive use.

## 2.1 Appropriation, deterrence, and factor misallocation

The availability of appropriation creates a trade off for every member of every society: should I engage in productive activities or try to take away from others? This trade off is particularly relevant for the less productive members of society. They might actually be able to increase the amount of resources available for their consumption by engaging in those activities. Highly productive or skilled agents might be able to engage in appropriation activities that are not available to less productive agents—think of financial fraud, litigation processes, or even lobbying. We focus on activities that do not require an agent to be very skilled to carry them out. We think that these are more relevant for economic development per se.

Imagine an economy in which agents can choose between legitimate activities in the market and appropriation activities that aim at pure redistribution of resources. Appropriators and rent-seekers basically steal from producers. How much—or, how easily—they can steal from others is determined by an exogenous enforcement regime. Further suppose that agents are heterogeneous with respect to their wage earning capacity, i.e., the potential return to (legitimate) activities they could carry out in the market. For simplicity we refer to it as productivity. In the case of the appropriation activities we are concerned with, let's assume that the expected return to appropriation is independent of the agent's wage earning capacity, or productivity. That is, for all agents, the lower bound on the payoffs they can expect is what they can reap from appropriation efforts. As a consequence, all agents that are unskilled enough choose to engage in appropriation—they become appropriators—while more skilled agents become producers.

In this type of economy, better enforcement of property rights implies that more agents choose to be productive and fewer choose to be appropriators. The incidence of appropriation is lower and rights to property are more secure. It follows that output, aggregate consumption, and welfare are higher. The point of this very simple syllogism is that the availability of appropriation activities allows less skilled persons to increase their expected payoff at the expense of their productive fellow citizens. The pie of resources to be shared among the members of society shrinks. Output and consumption would be maximal if all agents produced. In that

sense, any society which does not deter appropriation firmly experiences factor misallocation. The appropriation sector attracts too many resources in the form of labor and capital that could be put to better use in the productive sector. Similar arguments can be found in the literature in, e.g., [Grossman and Kim \(2002\)](#).

Enforcement is paid for with resources produced in the economy. These resources are spent and cannot be consumed otherwise. To the extent that some of these resources are spent on wages for enforcement personnel, one could argue that they are consumed eventually. However, the enforcement personnel could be producing some sort of consumption good instead. In this environment, the social optimum would be that nobody engages in appropriation and no enforcement measures are implemented and paid for at all. If a hypothetically benevolent planner is constrained by agents' individual occupational choices, then taxes will be raised to solely redistribute the resources produced among agents so as to make the efficient outcome incentive compatible. Again, the point is, enforcement is costly. It eats up resources that preferably could be spent on consumption and investment.

There is large literature on private enforcement of claims to property by investment in defensive and offensive weapons. [Grossman and Kim \(1995\)](#), for example, distinguish between offensive weapons for attack and predation and fortifications for defense. They analyze non-aggressive equilibria, i.e., equilibria in which all agents' investments in defense measures are sufficient to deter investments in predation. For such an equilibrium to exist, offensive weapons need to be sufficiently ineffective against defensive measures or predation needs to be sufficiently destructive. With sufficiently destructive predation, the total cost of appropriation activities is smaller in any non-aggressive equilibrium than in any equilibrium with predation. Moreover, relatively rich agents are always better off with more secure property rights while relatively poor agents might be better off with rather insecure property rights.

[Grossman and Kim \(1995\)](#) partly depart from the work of [Skaperdas \(1992\)](#) who analyzes an interaction of two agents that can use their resources either in production or in arms. Both agents' production determines the total pie to be shared by the two agents. The relative levels of investments in appropriation instruments determine each agent's share of the total product. While conflict can easily be an equilibrium if conflict technologies are not too ineffective, it turns out that, with very ineffective technologies, cooperation—no investment in arms whatsoever—is possible, as is partial cooperation—only one agent invests in arms. [Hirshleifer \(1995\)](#) explains conflict in a similar vein.

[Grossman and Kim \(1996\)](#) analyze predation in the context of a growth model. They analyze the potentially non-monotonic relationship between secure property rights and accumulation of productive capital. In their model, there are two dynasties of agents, one potentially being

a predator and the other his prey. At each point in time, these dynasties are endowed with inherited wealth and decide how to allocate it between productive use and instruments of predation or deterrence. In a dynasty, a generation's capital accumulation then depends on the investment in productive capital as well as on redistribution and destruction of wealth by predation. They find that more secure property rights can be associated with slower capital accumulation. Detering predation can be so costly as to decrease the share of wealth allocated to investment in productive capital, which slows down capital accumulation. In societies that accept some predation, the security of property rights is positively associated with capital accumulation. However, societies that establish perfectly secure property rights, experience slower capital accumulation.

To summarize, the availability of appropriation activities induces factor and spending misallocation. First, these activities attract resources that could be used in the productive sector to produce goods that can be consumed or invested. Second, these activities create the need for costly enforcement of rights to property. The resources spent for enforcement could also be consumed or invested.

There is another sense in which weak property rights leads to factor misallocation—or hinders attempts to alleviate it. Property rights also include transfer rights, i.e., the rights to, among other things, sell, rent, bequeath, and mortgage property or factors of production. These rights are important in realizing potential gains from trade (see, e.g., [Besley \(1995\)](#)). First, they allow financially constrained agents to pledge property and factors of production as collateral so as to overcome their constraints in lending relationships. Second, they allow agents to actually sell or rent their factors of production to more productive agents. Both these aspects help improve the allocation of productive factors in society. A lack of well-defined and enforced rights thus promotes factor misallocation.

## 2.2 Property rights and investment

Economic growth needs investment. In growth theory, investment comes in many different varieties, physical capital, human capital, organizational capital, invention and innovation and other forms of research and development. For an individual to undertake an investment, the expected return she expects to reap, adjusted for risk, has to be high enough to outweigh all costs. The extent to which rights to property, i.e., the resources acquired using the returns to the investment, are enforced determines the likelihood of losing some or all of it to expropriation by others. So, how secure rights to property are alters the expected returns to all sorts of investments. Individual decisions will thus be affected and, in particular, insecure rights to property will hold back investment.

[Murphy et al. \(1993\)](#) show that rent-seeking, besides reducing output, depresses investment

and innovation and thus hurts growth. They emphasize the distinction between private and public rent-seeking. The former targets existing stocks of wealth, output, capital and thus primarily affects the productive sector. The latter, however, is bound to impede the innovative sector. It is primarily innovators, not established producers, who require all sorts of public services and permits to start their business, such as, among many others, business and building permits, tax documents, or import licenses. So, corrupt public officials most likely target the innovative sector. What is more, lobbying by established producers who fear competition and often belong to an elite and are tightly connected to the government might make it impossible for the innovator to start their business in the first place. The nature of innovation as a long term investment with slow capital accumulation together with initial credit constraints make it harder for innovators to overcome short term hurdles from rent-seekers. Difficulties are compounded because human capital is poor collateral for raising funds to pay for licenses and the bribes. Finally, innovation tends to be risky, and weak property rights makes it even riskier. In case of success, the returns are vulnerable to expropriation while, in case of failure, the innovator bears all the costs. For all these reasons, weak property rights and the risk of expropriation may act to reduce innovation or even deter it altogether. [Murphy et al. \(1993\)](#) thus conclude that rent-seeking leads to misallocation of resources away from innovation and into established production and rent-seeking itself—with potentially severe consequences for growth.

[Benhabib and Rustichini \(1996\)](#) analyze situations in which organized social groups attempt to appropriate shares of output, and show that these activities harm incentives to accumulate productive factors. They show that these disincentives can be stronger at lower levels of wealth than at higher ones. That is, poorer countries grow more slowly than richer ones or even stagnate. [Besley \(1995\)](#) develops three theoretical arguments for a link between property rights over land and investment: (1) a threat of expropriation reduces incentives to invest; (2) well-defined and vigorously enforced property rights ease the use of land as collateral in funding relationships to help investment; and (3) transfer rights, by making it easier to sell or rent land, improve the allocation of land and the use of opportunities to realize gains from trade. He then uses data from Ghana to test these theories and finds supportive evidence for the importance of property rights for investment. An extensive overview of how weak property rights affect the incentives to invest can be found in [Besley and Ghatak \(2010\)](#).

### **2.3 Property rights and TFP**

Total Factor Productivity (TFP) is known to account for most of the differences between output in developed and less developed countries (see, e.g., [Hall and Jones \(1999\)](#)). It is therefore crucial for our understanding of those differences to develop meaningful theories of what determines TFP. A very prominent example of such a theory in the recent literature

are financial frictions (see, e.g., [Buera et al. \(2011\)](#)). Similarly, the security of property rights can be thought of as mathematically equivalent to TFP—albeit in a conceptually different way. The distortions described above lead to a misallocation of factors. This misallocation of factors is mainly across activities in productive and unproductive (appropriation) sectors, not across production units in productive sectors. The theory would allow for the latter kind of misallocation within the productive sector, too, if, e.g., certain productive activities are more vulnerable to expropriation than others. In any case, measured productivity is adversely affected.

For a brief example, think of an economy with two sectors, one for production and one for appropriation. Every period, a continuum of agents with heterogeneous productivity decides in which sector to be active. The productive sector uses a standard neoclassical production function to convert capital and labor to output. The appropriation sector uses labor to extract a fraction of output from the productive sector. Therefore, appropriation acts as a tax on the productive sector. By the usual arguments (see above), it distorts investment into productive capital. In particular, next period’s capital stock is a function of the expected level of expropriation taking place next period. Well-enforced property rights, i.e., a small fraction of output being expected to be diverted by appropriators, map into a larger stock of productive capital. Moreover, with weaker property rights, societies will see fewer of the available resources being committed to productive use. A larger fraction of the productive factors as well as output is being diverted. That is, the appropriation sector basically determines factor efficiency units and drives a wedge between actual output and potential output given available resources. Therefore, a lack of secure property rights lowers measured productivity.

### 3 Good governance

It is merely a simple corollary from the importance of economic institutions that a society that efficiently provides these will see better outcomes. The World Bank’s Worldwide Governance Indicators (WGI) are strongly correlated with measures of real GDP per capita. Of particular relevance for us are the indicators that aim at measuring the confidence in the rule of law (often referred to as “civic capital”), the extent to which corruption is controlled, the quality of public services, and the quality of governmental regulation. While these indicators measure perceptions, these perceptions are strongly correlated to actual economic performance. Hence, it is quite reasonable to expect governance to play an important role in the development process. Most importantly, agents in an economy need to be sure that authorities respect their own rules and that those rules aren’t changed arbitrarily or frequently. Expropriation by the government (or the imminent threat of it) is an important problem in many developing coun-

tries. Therefore, government accountability and absence of political violence are substantial determinants of property rights security and thus of development. Where citizens' rights to freely express their opinions, associate as well as have access to free media are guaranteed, expropriation by the government becomes less likely. More generally, political stability is an important aspect of good governance. In politically stable societies, it is relatively clear what rules apply today and what rules will apply tomorrow. As long as formal rules can generally be expected to also be effectively implemented, investment decisions will favor growth. Moreover, the security of property rights is greatly advanced by a judicial system which enforces property laws against private claimants as well as against public authorities.

Bureaucracy serves a number of regulatory functions in a society. Those range from organizing tax collection to extending business permits to implementing government regulations. This places bureaucrats in a rather powerful position that potentially allows them extract rents from licensees and applicants. This type of corrupt behavior falls into the group of appropriation activities that hurt production. Societies that manage to implement effective measures to limit red tape and bureaucratic corruption tend to do a lot better. In general, however, what seems to hurt most is uncertainty about rules and bribe taking in a bureaucracy. If everybody knows that there always is a "markup", the same markup, over the official fee when requesting a particular service, independent of the specific bureaucrat one faces, then the rules again are clear and the additional cost can simply be added to the costs of doing business.

The more serious problem is uncertainty about those costs. Here, the literature on corruption is very relevant. For a positive analysis see, e.g., [Rose-Ackerman \(1975\)](#); for an analysis of its consequences see, e.g., [Acemoglu and Verdier \(1998, 2000\)](#); for an analysis of the optimal provision of incentives, see e.g., [Becker and Stigler \(1974\)](#), [Mookherjee and Png \(1992, 1995\)](#). [Aidt \(2003\)](#) provides an overview. It is important to keep in mind that corruption itself is an appropriation activity. It unproductively redistributes resources in an extortion-like fashion and thus violates property rights. [Murphy et al. \(1993\)](#) suggest that the negative effects of public rent-seeking on innovative activities can be mitigated by providing bureaucrats with a stake in innovation. While they submit that such an arrangement is not likely to overcome the adverse effects of public rent-seeking on entrepreneurship, they argue that it could reduce incentives for expropriation and have officials bear some of the innovator's risk. In this way, at least some innovation could be sustained.

Good governance matters in another important dimension. Let us use the label crime to refer to appropriation activities such as all sorts of property crimes (including outright theft, burglary, and robbery), fraud, extortion, and others. When talking about crime, it matters whether or not measures to deter crime are implemented effectively. Corruption plays an im-

portant role here. If enforcers are corrupt, then the consequences of apprehension are unclear, decreasing the expected cost of being caught. Moreover, the apprehension rate is likely lower than it could be. Both these aspects are conducive to more crime. Another example could be that the budget for deterrence measures is subject to fluctuations due to frequent changes in budgetary policies. In effect the incidence of crime is higher and more uncertain which makes the rights to property less secure. Comprehensive surveys of the literature on law enforcement can be found in [Garoupa \(1997\)](#) and [Polinsky and Shavell \(2008\)](#).

[Shleifer and Vishny \(1993\)](#) argue that societies with weak governance see a lot of corruption and that corruption is more costly for economic efficiency than taxation. More generally, [La Porta et al. \(1999\)](#) provide suggestive evidence for the determinants of good governance. [Ades and Tella \(1999\)](#) argue that policies that further competitive markets could be part of a strategy to implement good governance.

## 4 Political institutions

Economists have a good understanding of economic outcomes once the rules of the game, i.e., the economic institutions, are set. We are able to describe the behavior of economic agents and aggregate it to understand the dynamics of economies and their development. The important question for this paper, and for development economics in general, is how societies decide what economic institutions to implement. From our understanding of economic systems given institutions, it is clear which institutions are socially most beneficial. So, the question becomes: Why don't societies implement those institutions that we know are most conducive to economic development and growth? The economics literature has identified many potential sources of incentives for society to choose institutions that are not necessarily efficient. Most of these incentives have their roots in strategic interactions between interest groups within societies. It is at this stage then, that political institutions determine to what extent conflicting preferences and interests of different groups in society are mirrored in a society's choice of economic institutions.

### 4.1 Aggregation of preferences over economic outcomes

A society's decision making can be sensibly modeled as a political process that captures two ingredients to the social choice of economic institutions. For one, it has to generate a set of institutional alternatives available for society to choose from. Besides that, it should define a social welfare function that permits society to compare the outcomes induced by different choices of institutions. From a conceptual point of view, it does not matter whether this social order is dictatorial (a single individual or dictator chooses the institutions to be implemented) or generated by a stylized democracy (every member of society has some and potentially equal

weight in determining society's choice). At the end of the day, political institutions determine how the preferences over economic outcomes of the members of a society are aggregated into a social preference over those outcomes. For the outcome it matters which groups in society have how much weight in that process. As a consequence, property rights and other economic institutions are shaped by the interaction of economic rents and political power. As examples, see [Acemoglu \(2003\)](#) on the role of limited commitment, [Acemoglu \(2008\)](#) on distortions from redistribution and entry barriers, [Acemoglu \(2006\)](#) on direct and indirect extraction of rents, and [Acemoglu and Robinson \(2001a\)](#) on inefficient redistribution as a result of the interplay of socio-economic groups. In this literature, the focus is on the analysis of induced preferences of a decisive group—the politically powerful—over possible regimes. They choose an optimal policy or regime from a given menu of choices. In general, and as economists would expect, most research seems to hint at one clear point: political systems that allow for more competition of interests and preferences over economic outcomes by as many (and as diverse) groups within society as possible tend to favor better outcomes—more economic activity and higher welfare.

## 4.2 Institutions as sources of political shocks

Since political institutions are fundamental to a society's decision making process, they directly influence social choices of property rights enforcement. Whatever property rights regime is chosen in turn determines society's economic outcomes. In particular, we have models in which the quality of economic institutions can be shown to be mathematically equivalent to TFP, and the property rights regime determines the productivity of capital and labor. Changes in the property rights regime follow changes in the political process which we can think of as an exogenous shock to the economy. Political institutions that govern the political process determine the nature of that shock. On the one hand, if the political system is very competitive, then economic institutions tend to be favorable and economic outcomes better. Political outcomes are likely to be rather stable. Therefore, property rights are likely to be secure today and remain secure in the future. Economic activity will flourish and investment of various types becomes the engine that drives development and growth. This effect might even be reinforced by growing wealth over time. On the other hand, societies with a rather authoritarian political system will tend to see less favorable economic outcomes. Moreover, political outcomes will tend to be less stable with the consequence that economic institutions will not be very stable. The prevalence of relatively secure rights to property today does not have much of a bearing on the security of property rights tomorrow. Both economic activity and investment will be limited by poor institutions.

### 4.3 The political system, investment, growth and development

By determining the nature of shocks to the political system and thus effectively to the security of rights to property, political fundamentals induce divergent paths of economic development. Societies with rather stable and competitive political systems tend to see relatively stable and secure rights to property. For investment decisions, it is important that property rights are well-defined and secure today. Agents need to be aware of what rights they possess and what they can and cannot do with the resources they have available. However, it is even more important that agents can reasonably expect the same rights to be well-defined and enforced tomorrow—or, at least, what rights are predictable. As a consequence, these societies will also see relatively high levels of investment in all sorts of productive capital, be it machines, human capital, or ideas. Production surges and since property rights are stable and secure, human capital accumulation, as well as experimentation with and implementation of ideas, improve production processes. The economy becomes richer and welfare increases. Support for the political system increases and reinforces its stability and thus the property rights regime perpetuating the logical chain that connects rights with progress.

If the political system is rather unstable and not very competitive, then the relevant economic institutions tend to be not very stable and are likely to feature weak property rights. Such an environment is prone to corruption and elites that enrich themselves. So, even if property rights are quite secure today, the unstable political system makes changes in the property rights regime somewhat likely. Expecting weak property rights tomorrow, when the returns to investments made today accrue, hurts the incentives to invest today. People are reluctant to accumulate human capital and invest in technology. Producers are not very inclined to experiment and follow up on ideas that could improve the production process. New technologies are neither developed nor adopted. Output is low, the economy is rather poor and welfare is not very high. Low welfare reinforces the instability of the political system in two ways. First, in general, agents are impatient and are interested in improving their economic situation. Second, when property rights are weak and the economy is poor, rent-seeking and appropriation may be among the most lucrative activities. So, interactions between groups with conflicting interests may lead to frequent changes in the faction dominating the political arena—coups or revolutions might become likely to occur frequently. This point is made by a small literature that describes threats of coups or revolutions, see, e.g., [Grossman \(1991, 1994\)](#) or [Acemoglu and Robinson \(2001b\)](#). Thus, the property rights regime in place tomorrow is uncertain which perpetuates the chain connecting lack of rights with lack of progress.

Suppose now, one were to implement a stable and competitive political system in a country that had previously experienced a lack of stability and a generally weak property rights regime. If and when agents in this society realize that the regime has changed and is stable,

investment and production will pick up and the economy takes off to a different development path. History and casual empiricism (see, e.g., [North et al. \(2006\)](#)) as well as economic theory (see, e.g., [Acemoglu and Robinson \(2008\)](#)) tell us, however, that changes in political institutions and their workings in the face of varying economic conditions is not easy to grasp. It is a complex and lengthy process driven by complicated strategic interactions of self-interested agents with conflicting goals. An additional complication for our understanding of the workings of institutions is that the prevailing property rights regime may optimally change in a non-monotonic fashion over the process of development ([Tornell \(1997\)](#)). Related to that and with a similar flavor, [Barro \(1996\)](#) suggests a nonlinear relationship between growth and measures of democracy. [Przeworski and Limongi \(1993\)](#) provide a somewhat more critical account of our understanding of the effects of democracy on growth. We can expect much more work to follow.

## 5 Final remarks

In the *The Wealth of Nations*, Adam Smith lists a “tolerable administration of justice” as a prerequisite for economic development. This review looks at the interactions between economic development and the political institutions that define property rights as a conceptually simple but analytically complex three sector growth structure. The sectors involved are “production”, “redistribution”, and “deterrence”. All income comes from the production sector which uses factor inputs and technology in the way normally described by the theory of economic growth.

“Redistribution” is a catchall name for a range of activities like property crime, extortion, corruption, and rent-seeking. This sector employs some of society’s resources of capital and labor to take away income from producers; it imposes an indirect, but very real, tax on legitimate economic activity. The size of this tax depends partly on how many people and how much capital is involved in redistribution, and partly on “deterrence”.

Deterrence itself musters resources (police, prosecutors, judges, private security activities) to combat redistributive activities. Deterrence is successful when it reduces the total factor productivity in the redistribution sector, then encouraging most members of society to seek employment in the productive sector.

Economic outcomes in this framework depend heavily on occupational choices by households: working in production versus working in redistribution. Those choices are dictated by economic institutions, that is, by how strongly societies encourage production or, equivalently, by how much they tolerate redistribution. Politics is the key player here because it defines how individual preferences over property rights feed into a voting process or a social game

which determines the institutions of society, and its economic progress.

Changes in institutions seem to be as important a determinant of growth as are technology, capital, and labor. Studying the mechanisms of institutional change deserves a high position in the “to-do list” of development economics.

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