Property Rights

Introduction
Throughout history the road out of poverty has been built by economic growth and the process continues today. The developed economies of the world promote economic growth by incorporating incentives that encourage production, exchange, and creativity. These economies operate through institutions that ensure the rule of law, secure property rights, open markets to competition.

The economic growth that raises standards of living results from investment, the foregoing of current consumption in anticipation of future benefit. Investment is risky, and the importance of clearly defined property rights, secured by the rule of law, in reducing risk and encouraging investment cannot be overstated. Of the capitalist institutions that offer opportunities for the poor to ascend the economic ladder, secure property rights is one of the most fundamental. Indeed, Hernando de Soto, Peruvian writer and statesman, contends that in developing countries, the lack of secure property rights condemns the world’s poor to a nightmare existence in which hard work brings only more of the same. He reminds us that commonplace features of ownership that we may even regard as trivial, are, in their absence, matters of overwhelming significance to the poor.

Imagine a country where nobody can identify who owns what, addresses cannot be easily verified, people cannot be made to pay their debts, resources cannot conveniently be turned into money, ownership cannot be divided into shares, descriptions of assets are not standardized and cannot be easily compared, and the rules that govern property vary from neighborhood to neighborhood or even from street to street. You have just put yourself into the life of a developing country. . . . (De Soto 15)

In such an atmosphere, investment shrivels, and the probability of increasing output dwindles. This lesson focuses on how property rights affect the ability of the poor to allocate their labor and illustrates how policies that target institutions may be more successful in reducing poverty than policies that target people.

Key Points

1. Key Terms and Concepts:
   - **Institutions** are the codes of conduct and established behaviors upon which the life of a community is built. They are the formal and informal “rules of the game” that shape incentives and outline expected and acceptable forms of behavior in social interactions.
   - **Incentives** are the rewards or punishments that shape people’s choices about their behavior.
   - Incentives are shaped by institutions.
• **Property rights** are the formal and informal arrangements that govern the ownership, use, and transfer of assets.
  • Formal property rights are encoded into law, statute, ordinance, or contract.
    • In most developed nations, this function is performed by legislative bodies. The executive branch may also participate in the definition of property rights when, for example, the legislature delegates regulatory functions.
    • **Title** is the legal evidence of the right of possession or control over property.
  • Informal property rights may be based on custom, tradition or precedent.
  • Property rights have 3 critical features in law:
    i) The conditions of use of an asset are specified. These may include:
      a. any restrictions or regulations, both formal and/or informal, imposed from outside the specification agreement;
        • For example, formal licensing requirements, hunting seasons, and hunting areas limit use by the owners of rifles.
        • Or, informal norms may tighten or loosen the constraints imposed by formal rules.
        • For example, neighbors, who have the legal right to exclude others from their property, may allow children to “trespass” during play.
      b. the conditions of receiving income from the asset;
      c. the characteristics of the property-holding arrangement – private, collective, or common; and
      d. the conditions under which an owner may exclude others from the use of the asset.
        • (This characteristic of property rights is commonly referred to as *exclusivity*.)
    ii) The conditions of transferability are specified, describing how property (assets) may be sold, given away, bequeathed or otherwise transferred by the property owner to someone else.
      • There may be both formal and informal limitations on the ability to transfer assets. For example:
        • Formal: The sale and resale of firearms, fireworks, cigarettes, alcohol and other goods and services may face legal restrictions of time, place, and licensing.
        • Informal: In the U.S. it is customary, but not legally required, that parents leave their property to their children.
    iii) The security of possession is established, telling how the property rights will be enforced.
      • Property rights are meaningful only if they can be enforced.
      • Enforcement of property rights is both a private and a public function:
        • Governments typically provide title, or evidence of property rights to assets, and create and maintain the enforcement mechanisms for titles.
        • Judicial institutions adjudicate disputes over property rights and the executive branch exercises the police power of the state to carry out decisions of the judiciary.
Private enforcement includes measures taken by owners – such as installing locks or occupying their property – to defend their rights. Private enforcement may also include third-party mechanisms such as social ostracism, a method that tends to be effective only in societies with strong, widely-accepted beliefs and practices.

Investment is the process of increasing the stock of capital, which increases productivity and future production. Investment means foregoing current consumption in anticipation of future benefits. Capital includes those man-made resources – buildings, machines, tools, technology, etc. – used to produce goods and services.

2. Property rights are human rights.
   - It is, of course, nonsense to suppose that “property” has rights. The term “property right” is shorthand for
     
     **the right of humans to freely use and transfer their possessions, including themselves.**

   - In suggesting that property rights and human rights are separable, the rhetorical bombast, “People, not property!” ignores the importance of recognizing individuals’ rights of ownership to themselves and to their labor – a right that was not recognized throughout most of human history.
   - Until the mid-18th century and the incorporation of the Enlightenment ideals of individual liberty, natural rights, and the rule of law into the western societies undergoing the Industrial Revolution, ownership of property was the exception rather than the rule. It was a right of the wealthy who could privately afford the coercive power necessary to assert and enforce ownership.
   - The granting of the property right to self is the fundamental right of human liberty from which all other property rights are derived.
   - When humans gained the right to claim the fruits of their labor, they gained the ability to change their own standard of living. In that sense, property rights must be regarded as the essential human right.
   - An equally important 18th century development was that property rights were not only recognized, but were secured. As western European governments gained a monopoly on coercion and institutionalized the rule of law, the competitive violence that undermined secure property rights was dramatically reduced.
   - Because the cost to individuals of enforcing their own property rights is high, this development conferred its greatest benefits on the poor.
     - Enforcement of property rights is characterized by huge economies of scale – which the rich can achieve and the poor cannot.
     - For example, some wealthy people choose to live in gated, security-patrolled communities, paying privately for enforcement of their property rights. The poor, unable to afford private protection services, depend on public enforcement.
     - Where government cannot effectively maintain a monopoly on coercion, competitive violence makes property rights insecure. For example, the
violence of the American drug trade, with its high murder and property crime rates, burdens the inner-city poor, not the wealthy.

**Case 1: Without Enforcement, Property Rights for the Poor Are Meaningless**

In Lesson 1, we identified India as one of the nations responsible for the significant decline in absolute poverty that began in the last decades of the 20th century. However, even the World Bank, the source of the data on declining world poverty, notes that India still has a long way to go, and that anti-poverty programs there have not continued to demonstrate the stunning successes they had in the 1980s and early ‘90s.

The sad fact is that over one-quarter of the Indian population is still severely impoverished. Improvements in standard of living in many of India’s urban centers stand in stark contrast to persistent deprivation in some of the largest and most rural states. This uneven pattern of success in reducing poverty provides the opportunity to examine the larger context in which capitalist institutions operate, and helps us resist the temptation to oversimplify or to suggest that solutions are obvious or easy to implement.

India, for example, has long been a democracy with a firmly entrenched rule of law and boasts an extended history of formal recognition of property rights. However, it also has a 1500 year-old cultural institution – the caste system – that frequently undermines property rights institutions by subverting the rule of law that would enforce them.

160 million Indians, 15% of the population, are Untouchables, the lowly and intensely reviled outsiders of the Hindu caste system. There are middle class and educated Untouchables and from 1997-2002 an Untouchable, K.R. Narayanan, was India’s president, but these are noted exceptions. They call themselves “Dalits,” the oppressed, and they make up 90% of India’s impoverished and 95% of her illiterate population.


Informally, however, the Dalits – particularly those in rural areas – know that the lack of enforcement renders their property rights tenuous at best and frustratingly meaningless at worst. The all-too-common stories of people like Girdharilal Maurya are a poignant reminder that property rights are human rights.

“. . . [H]e is a leatherworker, and Hindu law says that working with animal skins makes him unclean. . . . And his unseemly prosperity is a sin. Who does this Untouchable think he is, buying a small plot of land outside the village . . . [and] demanding to use the new village well[?] . . . He got what Untouchables deserve.
“One night while Maurya was away in a nearby city, eight men from the higher Rajput caste . . . broke his fences, stole his tractor, beat his wife and daughter, and burned down his house. . . .

“Girdharilal Maurya took his family and fled . . . . It took two years for him to feel safe enough to return – and then only because human rights lawyers took up his case, affording him a thin shield of protection.

‘I see them almost every day,’ Maurya now says of his attackers. ‘They roam around freely.’ . . . The court case against his attackers drags on . . . [and] Maurya confesses that he is still scared . . . . ‘The government refuses to address problems like this . . . because they say the caste system legally does not exist. Well, look around you. People treat animals better than us. This is not natural. We’re only asking for human rights.’"


- Defending and enforcing property rights is crucial. If the rule of law is effective, property ownership acts as an incentive for investment and a catalyst for the creation of capital and wealth.
- Property rights can be established and secured in three ways:
  
  i) Rule of physical force (also called anarchy)
  
  - Anarchy, the condition of competitive violence, has, to a greater or lesser extent, been the norm through most of human history, rendering it virtually impossible for the poor to own property.
  - In anarchy, the source of property rights is coercion by physical force. Access to property is restricted to those with the physical ability to take and defend it, or with the wealth to pay others to do so.
  - In conditions of anarchy, property rights are enforced only by vigilance or personal policing. There is no effective enforcement by the state.
  - Peaceful transfer of property rights is difficult and uncommon. It is limited by disorder, by lack of a consistent enforcement, and by the absence of formal and recognized proof of ownership.
  
  ii) Rule of men
  
  - Under the rule of men, formal law may exist, but the hierarchy of power determines if, when, and how it is applied.
  - The National Content Standards in Civics and Government identifies the rule of men – “the ability of government officials and others to govern by their personal whim or desire” – to be in direct opposition to the rule of law (156).
  - Those who rule may gain positions of power through a variety of means – inheritance, usurpation, conquest, or even election – but they maintain power through political connections and military might.
  - Property rights are tenuous, subject to the good will of those who govern.
  - Settlement of disputes over property is frequently arbitrary and is often tinged with political favoritism.
- Enforcement is arbitrary and lacks consistency.
- Transfer of assets and/or property rights is restricted by the need to obtain permission from those “in charge.”
- The wealthy may be able to bear the costs of influencing the hierarchy of power, but the poor are not.

iii) Rule of Law

- The National Standards for Civics and Government define the rule of law as an essential component of limited government, whereby a society “…is governed according to widely known and accepted rules followed not only by the governed but also by those in authority” (47).
- The standards identify the benefits of the rule of law:
  - It “establishes limits on both those who govern and the governed”; 
  - It “makes possible a system of ordered liberty that protects the basic rights of citizens”; and 
  - It “promotes the common good” (116).
- The rule of law means that even the poor have secure property rights and can therefore use their property to improve their well-being.

3. Secure property rights in market economies create incentives that promote growth and the accompanying improvements in material well-being.

- Property rights-holders face strong incentives to preserve the value of their assets.
  - Simply stated, people take better care of things they own because they bear the opportunity cost if they do not.
  - Owners consider the future value of their assets as well as the present value because they know that the future value is theirs. Ownership encourages them to protect the asset so they can secure the continuing return.
  - This phenomenon can be seen by comparing the care and maintenance of similar houses by an owner-occupant and by a renter. Even if the renter is not deliberately abusive, he is much less likely to be as conscientious as the owner.
  - In a similar vein, while automobile owners check the oil and rotate the tires on their cars, it hard to imagine rental customers doing so.
- Owners with full property rights also face strong incentives to improve their assets through investment.
  - Secure property rights create incentives for owners to invest in capital and capital improvements, and this process results in the creation of more wealth.
  - Secure property rights encourage investment because owners are confident that any future value created will be theirs. Unclear ownership rights – such as commonly exist under anarchy or the rule of men – reduce the benefits of making investments and improvements.
  - This phenomenon can be seen in comparing the incentives facing an owner and a non-owner regarding improvements to an asset.
    - A renter has little incentive to bear the expense of adding a deck to the house he lives in. He would enjoy having the deck, but knows that when his lease expires, he has no claim on the value he created. A homeowner, on the other hand, considers the increased future resale
value of the house as well as the present enjoyment of the deck, and therefore faces a greater incentive to bear the current costs of building it.

4. Secure property rights can also increase the likelihood of investment by providing collateral for debt.

- Debt need not be, as is often assumed, a drag on the economy and a trap for the poor. Instead, it can be an instrument of economic growth.
- Debt allows people to use both their past income (savings) and their future income to acquire human and physical capital. When people take on debt to make current expenditures, they contract to repay the debt with future income. Debt allows them to acquire more capital than they could purchase using only their past income.
- As people acquire more capital, their productivity and their income increase.

- Collateral, commonly in the form of assets (property) to which the borrower has secure property rights, is offered as a surety that reduces the risk taken by banks and other lenders. Because collateral is necessary for the assumption of debt, securing rights to property can boost economic growth.
- By depriving people of collateral, insecure property rights reduce investment in capital, businesses, or other wealth-creating assets.
- The poor are, arguably, the least able to bear the costs of securing their property rights in order to gain access to capital. Unable to invest, their standard of living is therefore constrained by their current income and their ability to save.
- People with low incomes are often the biggest beneficiaries of collateral-secured debt. The rich are much more able than the poor to pay cash for assets, while the poor depend on the ability to borrow.
- Consider how home mortgages extend the opportunity for home ownership to those with low incomes. Mortgages are debts allowing a current expenditure to be repaid with future income. Because property rights are secured by rule of law, a lender is willing to accept the home itself as collateral. Without this arrangement, home ownership would be much reduced, restricted to the wealthy.
- Consider how small business loans extend opportunities for mom-and-pop businesses. Without borrowing, those with low incomes are unlikely to accumulate the savings necessary to lease or purchase start-up capital goods and supplies.
- The results of economic field research in the Brazilian Amazon have been supported by similar findings in Ghana: that the level of investment activity is linked to the security of property rights among poor landholders.
- Similar investigations in Ghana in the 1990s by London School of Economics professor Tim Besley and more recently by Christopher Udry and Marcus Goldstein for the Yale University Economic Growth Center also found a relationship between investment and property rights:
• "We examine the impact of ambiguous and contested land rights on investment and productivity in agricultural (sic) in Akwapim, Ghana. We show that individuals who hold powerful positions in a local political hierarchy have more secure tenure rights, and that as a consequence they invest more in land fertility and have substantially higher output. The intensity of investments on different plots cultivated by a given individual correspond to that individual's security of tenure over those specific plots. . ." (Udry and Goldstein).

• In both Ghana and Brazil, landholders told researchers that the reason they wanted title was to gain access to credit markets. (However, it is important to note that while these studies confirm the link between title and increased investment, they do not establish that title, in and of itself, always improves access to debt.)

**Case 2: What If You Couldn’t Go into Debt?**

"Wander into Mtandire, a shanty town near Lilongwe, the capital of Malawi. The roads are unpaved, bumpy and wet. Maize sprouts in every backyard. Cars are so rare that children wave excitedly as you drive by, and chickens fearlessly block your path. A slum in one of the poorest countries in the world's poorest continent: you would expect the people who live there to be very poor indeed. You certainly would not expect to find a large store of **potential** [emphasis added] wealth in Mtandire. Look harder.

Grace and John Tarera slaughter goats for a living. Demand is brisk: Malawians adore goat stew. The Tareras want to expand their business to meet this demand, but they lack capital. Mrs. Tarera thinks they need about 20,000 kwacha ($250). This may not sound much, but in Malawi, where the average annual income is only about $200, it can take years to raise such a sum.

But wait: the house where the Tareras live is worth at least 25,000 kwacha. They bought the land five years ago and threw up a brick bungalow, fussily furnished and painted a satisfying shade of light blue. Surely they could borrow using the house as security? No, because they cannot prove they own it.

The Tareras' house, like all the others in Mtandire, is built on ‘customary’ land. That is, the plot's previous owners had no formal title to it. The land was simply part of a field that their family had cultivated for generations."

5. Secure property rights contribute to economic growth by releasing resources from protective activities to productive activities.

• If government does not define and protect private property, property owners must do so themselves.

• Using time and resources for protection imposes a heavy opportunity cost, a cost more easily borne by the wealthy than by the poor.

• Comparisons of murder, theft, and burglary rates per capita in poor neighborhoods and wealthier ones, even in developed countries, provides
empirical evidence that property rights are much less secure and less well-enforced for the poor.
- In developing countries the disproportionate burden of protection means that the poor give up time and energy they would otherwise dedicate to providing basic necessities.
- Where governments define and secure formal property rights, the poor can spend less of their time enforcing their claims. The result is that they spend more time in activities that contribute to rising standards of living.
- Erica Field’s 2002 analysis of the results of a titling project on the well-being of 2,750 Peruvian households in 8 cities found that with title, hours of work for poor households increased and the probability of child labor fell significantly.
  - Field explained the effect by positing that without title, householders were more likely to secure ownership with the presence of an adult and, therefore, to send children to work to replace the income of that adult.
  - She posited that having title gave families the assurance that they could both prove their ownership and expect the police to uphold their property rights and evict squatters, so that the adult who had stayed home could enter the work force, and children might be sent to school instead of to work. (Field, 2002)
- This area of economic inquiry is relatively new, and the research continues – into such questions as what other conditions must be present before titling improves access to credit for the poor, and what other conditions contribute to household decisions about whether to send children to school or to work. There is, however, a growing body of support for the contention that securing property rights does foster increased investment activity, of many types, among poor property rights holders.

6. Summary:
- Successful anti-poverty efforts in developing countries like Peru and India validate predictions that human rights to property foster economic growth.
  - To be effective stimulants of economic growth, property rights must exist within a rule of law that offers reasonable expectations of stability and enforcement.
  - Secure property rights to self and possessions release resources from protective to productive endeavors.
  - Rights to private property promote economic growth by providing incentives to invest in future production, and facilitate such investment by acting as collateral for the assumption of debt.
  - The poor are burdened more heavily than the rich by the costs associated with ill-defined or insecure property rights, and stand to gain greatly from property rights reforms.

**Conclusion:** Throughout developing countries, lack of secure property rights founded on the rule of law denies the poor access to wealth-generating capital, robbing them of initiative and hope. The life-giving importance of this institution is summed up in
Hernando de Soto’s description of Cairo, a description that researchers are finding applies to much of the impoverished world:

When you step out the door of the Nile Hilton, what you are leaving behind . . . is the world of legally enforceable transactions on property rights. Mortgages and accountable addresses to generate additional wealth are unavailable even to those people in Cairo who would probably strike you as quite rich. Outside Cairo, some of the poorest of the poor live in a district of old tombs called “the city of the dead.” But almost all of Cairo is a city of the dead – of dead capital, of assets that cannot be used to their fullest. The institutions that give life to capital . . . do not exist here. (De Soto 16)
Appendix 1

Investigating the Relationship between Property Rights and Economic Growth: Economists Study the Amazonian Frontier of Brazil

Introduction
Though categorized as “middle income” (see World Bank map, Lesson 1 Outline, p. 3), most of the nations of Latin America have millions who live in abject poverty, and millions more for whom the middle income standard of $2/person/day provides simply a less-oppressive degree of poverty.

Burdened by a heritage of enormous land tracts (latifundios) worked by laborers in virtual serfdom, many Latin American countries have focused on land redistribution in their efforts to alleviate poverty. Indeed, it is not inaccurate to characterize 20th century Latin American history as a series of failed experiments in land reallocation.

Because they have not been accompanied by the formally recognized and reliably enforced property rights necessary to encourage capital formation and economic growth, Latin American efforts to reduce rural poverty through land redistribution have failed again and again:

Peru
- Peruvian reallocation programs gave land to highland peasants but did not allow them to sell the land they then owned.
  - The predictable result of removing landholders’ right to transfer property has been that markets, the mechanism by which economies grow their wealth, have not been allowed to work.
  - Because peasants could not transfer their land, banks would not accept it as collateral. This discouraged the development of formal capital markets, and the poor had nowhere to go for loans that would allow them to invest in improvements.
  - Because they had no collateral and could not go to banks, poor people could get credit only from producers and sellers of the supplies and equipment they needed. As a result, they faced extremely high credit costs for seeds, fertilizer, and hauling their produce to market (Glave, 1992).
- The land reallocations proved to be half measures that not only stifled the progress of the poor, but left some worse off.
- Additionally, Peruvian Amazon forest land was prematurely harvested and denuded by landholders hoping to capture the immediate value of their tenuous property rights.
- Uncertainty about whether or not their claim to the land would be recognized and upheld in the future encouraged them to cut the forests quickly in order to reap immediate benefits. Short-term profiteering dominated long-term investment strategies.
Bolivia
- In 1953, the Agrarian Reform Law imposed changes in Bolivia similar to those tried in Peru.
  - Researchers found that because landholders were uncertain that their property rights would be upheld in the future, the number of improvements they made to their landholdings fell. In the regions where the land “reforms” took place, poverty increased (Keating, 1998).

Brazil
- In the 1980s and 90s, the Brazilian government expropriated land (took it away from wealthy landowners) for redistribution to the poor.
  - Nevertheless, violence increased between landowners and landless farmers because farmers wanted more and faster redistribution.
  - Deforestation increased. Landowners quickly logged the forests so that they could argue to the government that they were using the land and should not be subject to expropriation.
Case Study – Property Rights in the Brazilian Amazon Frontier

(*Background to Classroom Activity, “You’re the Economist”*)

- Historically, people have been lured to frontiers by the opportunity to better themselves. Frontiers were places to get a start or to start over, and the attraction of those possibilities remains strong today.
- Intrigued by the phenomenon of the American West in which the wealth of early frontier populations grew more rapidly than the wealth of those who remained behind the frontier, some economists have asked whether land frontiers perform the same role in alleviating poverty today.
- In Brazil, movement to the Amazon frontier accelerated during the last quarter of the 20th century as the poor were drawn by the availability of land.
- Professors Lee Alston (U. Colorado) and Gary Libecap (U. Arizona), Research Associates for the National Bureau of Economic Research, and Professor Bernardo Mueller (U. Brasilia), were intrigued by the migration of poor Brazilians to the Amazon basin in the last quarter of the 20th century. They noted that movement to frontiers was not just a phenomenon of the past or of the United States:

  Frontiers of one sort or another exist in many areas of the world where land-to-labor ratios are low. Although we focus on the Brazilian Amazon, other frontiers are found in many parts of rural Africa and Asia, as well as in Latin America and sections of North America . . . . Populations are migrating to the Amazon lowlands in Bolivia, Ecuador, Columbia, and Venezuela. Settlers are moving into previously sparsely populated parts of Nepal, Thailand’s northeast, the Philippines’ uplands, across islands in Indonesia, the Northwest Frontier Territory of Pakistan, Myanmar, Laos, and elsewhere. Further, there are migrating populations in Africa, some to more remote areas and others to regions previously abandoned due to past military conflicts. Access to low-cost land and new agricultural opportunities prompt much of this migration. . . . (“Comparison” 2)

- Institutional economics emphasizes that the institutional environment is even more important than the natural environment in determining whether frontier migration will, indeed, produce economic growth and upward economic mobility.
- Alston, Libecap, and Mueller began their study well aware of the importance of institutions to frontier economic growth:

  To generate the potential wealth associated with the frontier and to avoid costly and environmentally damaging resource-use practices, property rights must be assigned routinely as settlement occurs. Otherwise, the wealth of the frontier will be dissipated through competition for control of frontier land. The tragedy of the
commons will emerge with wasteful, short-term exploitation of natural resources and violence among competing claims.

... [F]ormal property institutions provided by government will become necessary. . . .

With secure tenure, wider markets can develop to channel land to its highest-valued use and allow early settlers to capture higher capital gains from land sales. While speculation has been viewed negatively by many historians of the frontier, speculative land sales have been a critical source of wealth for poor migrants. Further, with well-defined property rights, investment is promoted because individuals have security of control and can use their land as collateral to access capital markets. (“Comparison” 3)

- Part of the research included a survey of frontier landholders in Amazonian Brazil. They looked for evidence to answer the question of whether secure property rights in the form of formal title increased the value of land and/or acted as an incentive for landholders to make capital investments.
- The Pará investigation provided empirical evidence that:
  1. people perceive the value of titled land to be higher than that of untitled land; and
  2. titled landholders were more willing to invest in capital improvements than were landholders without title.
- The clear implication of their study is that programs designed to reduce the cost of gaining secure title will encourage the investment that leads to economic growth and higher standards of living for the poor.

- The case study that follows, “Investigating the Impact of Secure Property Rights in an Impoverished Population,” summarizes the experimental procedures, survey findings, and conclusions of the Brazilian research project. It provides teacher background for the Lesson 2 Classroom Activity, “You’re the Economist,” which engages students in analyzing the actual data from Altamira, one of the project sites.
Case Study:
Investigating the Impact of Secure Property Rights in an Impoverished Population

Economists Lee Alston, Gary Libecap, and Robert Schneider studied the relationship between property rights and capital investment by surveying small landholders living in frontier areas of the Amazon basin in Brazil in the 1990s.

Description of the Research Area
- The 1992 survey of 249 frontier households in the state of Pará found that the property rights ran the gamut from legally secure, enforceable title to informal “squatting,” in which the landholder’s presence on the land was the basis of his claim.
  - 56% of the land holders had title.
  - 12% had a sales receipt showing that they had paid cash to another squatter.
  - 32% had no documentation of ownership.
- The survey also confirmed that most of the landholders were very poor and had little education. They had been squatters before, making minor improvements (such as clearing trees and brush or building a dwelling) and then selling to incoming settlers before moving farther into the frontier.
  - The average age of landholders was 43.
  - The landholders’ average education was 2 years.
  - The average time on the currently held plot of land was 8 years.
  - The average number of migrations was 3 (meaning that most had been squatters in other locations before moving to this particular frontier area).

Land Title as a Source of Wealth on the Frontier
- Despite their lack of formal education, the landholders clearly understood the market for frontier land and the value of having secure property rights.
  - The surveyor, Brazilian Ricardo Tarifa, asked members of one frontier community, “How much is your land worth now?” and “How much would it be worth if you had a definitive title?” On average, the settlers surveyed perceived that having a definitive title (rather than, for example, a provisional military title, a sales receipt, or nothing) would increase the value of their land by 36%. *(Titles, Conflict, and Land Use 111-12)*
  - Settlers were aware that investors in Sao Paulo and Rio de Janeiro would only buy titled land. Those squatters who speculated that the value of land would increase as settlement increased invested in their land largely by pursuing clear title.
  - Not all frontiersmen pursued title, however, and the varying level of landholder efforts to gain title reflected their comparison of the costs and benefits of doing so:
    - The closer the land was to a town or market center, the more its value was increased by possession of formal title, and the more willing the landholder to bear the cost (in lost production time on the farm) of pursuing title.
      - Title increased land values at the population centers by ~189%.
      - Title increased market value for land 40 km from market centers by 72%.
      - Title increased market value for land 140 km from market by 45%.
• The assertion that the landholders understood the value of title is reinforced by looking at the time and energy they spent in activities they believed would strengthen their property rights and/or set them up to make a future title claim.

• Tarifa asked settlers what efforts they undertook regularly to protect and maintain possession of their property. Settlers reported the following:
  a. Keeping the boundaries clear. This was the most frequent response; 71 reported that they did so and spent approximately 6 days a year in this activity.
  b. 8 settlers with sales receipts got them notarized.
  c. 1 settler paid land taxes so that he would have a government record of his claim to the land. (Paying land taxes is required but very rare, even for people with definitive title.)
  d. Some settlers hired a topographer to provide a map of their borders.
  e. Some settlers built markers on their boundaries.
  f. Many settlers went to offices of INCRA, the government agency responsible for titling, to petition for title. These trips cost at least a day from work.
  g. In the colony of Nova Allianca the settlers paid for an emissary to travel to Belem, the capital of the state of Pará, and to Brasilia, the federal capital, to petition the government to hasten the titling process.

• Prof. Alston explains: “The settlers’ efforts represent investments. Valuing their time at U.S. $2/day, we estimated the dollar value . . . of the efforts to secure titles of seven settlers in Tucuma. Collectively they expended U.S. $188 to make their property rights more secure. If they had succeeded in getting title, the perceived collective increase in land value was U.S. $10,800. Even if it takes years to get a title, which it often does, the payoff is large” (Titles 5).

Title and Investment in Capital Improvements
The second part of the Pará study also has implications for the role of property rights in reducing poverty. Knowing that economic growth leads to reductions in poverty, and that capital investment is key to economic growth, the researchers wanted to know whether settlers’ willingness to make capital investments was affected by the degree to which property rights are secure.

• Hypothesis: The researchers hypothesized that in the Pará survey area, there would be a greater level of investment in capital improvements by those landholders with title than by those without.

• Background conditions:
  • The landholders in the 5 survey areas of Pará were subsistence farmers, raising crops and small numbers of farm animals.
  • At the time of the study, the comparative advantage of the Brazilian Amazon frontier, and thus the avenue out of subsistence poverty, was in 3 activities: mahogany, tree crops like bananas, coffee, and cacao beans (chocolate); and raising cattle.
  • Land with mahogany trees could be cleared and the timber sold – once.
After clearing, the land could be profitably used for tree crops, or — of particular importance in the Pará study — converted to pasture for grazing cattle.

Measurement:
- The researchers identified as “investment in capital improvements” any landholder activities that made the land more productive for growing tree crops or grazing cattle.
- For the poor farmers in the area, capital investment meant spending time, effort, and money now to improve the productivity of their land in the future.
- For poor people without savings, using their resources in this way meant reducing current consumption. (For example, a landholder who planted tree crops could not expect to harvest a crop for several years, and at the same time was giving up the annual crops he could have planted in that area and harvested each fall.)
- To measure investment in capital improvements, Tarifa collected the following data from each landholder:
  - the amount of land the landholder had cleared – a necessary first step for both crops and pasture;
  - the amount of land the landholder had planted in perennial crops; and
  - the meters of fencing the landholder had installed.

Results:
- Using statistical analysis that controlled for a host of individual characteristics, Alston et al. were able to show that farmers with title made considerably greater investment in their land than did the farmers without title.
- In Altamira (see table below), investment by farmers with title resulted in 55% of their land being pasture or permanent crops. Farmers without title did not invest as much, and only 26% of their land was devoted to pasture or permanent crops.

<table>
<thead>
<tr>
<th>% Acreage devoted to pasture or permanent crops</th>
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<tbody>
<tr>
<td>Without Title</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Altamira</td>
</tr>
<tr>
<td>Sao Felix</td>
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<tr>
<td>Tailandia</td>
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<tr>
<td>Tucuma</td>
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</tbody>
</table>

- The differing level of investment by titled and untitled landholders reflects in part the inability of those without title to obtain credit – a necessary instrument for poor farmers wishing to invest in capital (tree stock and fencing) improvements.
- Among those farmers who did invest in fencing, the average amount was 1,181
meters, representing an investment of about $550 U.S. (The average farmer’s labor was valued at $2/day.)

- The difference also reflects that settlers with title had to spend less time and effort enforcing their claims to land. This freed them for more productive activities and gave them an incentive to invest in future production because they felt relatively certain that they would reap the future rewards.

- The classroom activity, “You’re the Economist,” provides students a portion of the survey data from Altamira, and guides them through a simple analysis to discover the relationship between the level of investment and the presence or absence of title.

- Appendix 2, following, excerpts articles written by Hernando de Soto about the role of property rights institutions in the formation of productive capital and the reduction of poverty. The excerpts are appropriate for student readings guided by discussion questions or for more formal document interpretation exercises.
Appendix 2: Selected Student Readings on Property Rights and Poverty

The following article originally appeared in the Sept. 13, 2001, issue of *The Economist*

**Now, Think Small**

[The World Bank’s] . . . annual World Development Report, which this year looks at the way governments can encourage successful markets, suggests that when poor people are allowed access to the institutions richer people enjoy, they can thrive and help themselves. A great deal of poverty, in other words, may be easily avoidable.

The study, which gathered existing research and added a survey of around 100 countries, found that economies that allowed open flows of information to as many people as possible (with free, competitive media), good protection for the property rights of the poor (especially over land and the efficient collection of loans) and broad access to judicial systems (even for illiterate peasants or people who cannot pay high legal fees) were most likely to be competitive, and to develop.

Efficient formal and informal institutions, in other words, are crucial for turning subsistence farmers, petty traders and other would-be money-makers into a boon for the general economy. If it is too expensive and time-consuming, for example, to open a bank account, the poor will stuff their savings under the mattress. When it takes 19 steps, five months and more than the average person's annual income to register a new business in Mozambique, it is no wonder that aspiring, cash-strapped entrepreneurs do not bother. In general, poorer countries charge far more, relative to income, than rich ones to register new businesses. They also demand that applicants jump through more bureaucratic hoops, and so increase the opportunities for corruption. All this stifles growth.
Want to Make the Poor Less Poor? Give Them Proper Title to What They Own

. . . [P]eople in poor countries have assets - lots of them. But because they rarely have formal title, they cannot use these assets as collateral to raise cash. Economists tend to think of the informal economy as a marginal phenomenon, of interest only to missionaries, aid workers and the police. But in many, perhaps most, developing countries, the informal economy is bigger than the formal one. In a typical African country, barely one person in ten lives in a formal house, and only one worker in ten holds a formal job.

Take Nashon Zimba, a 25-year-old peasant who grows maize, beans and tobacco on 1.8 hectares (4.5 acres) in Chiponde, a small village in Kasungu district, north-west of Lilongwe. Mr. Zimba is poor even by Malawian standards. His cash income last year was $40. He lives with his wife and baby daughter in a mud shack so small that, if he were not so short, his feet would stick out of the door when he lay down to sleep.

Mr. Zimba frets that he cannot afford enough seeds or fertilizer to make full use of his land. Borrowing is out of the question. Loan sharks - "caterpillars", as they are known in Malawi - charge impossible rates of interest. . . .

Almost 90% of Malawi's 11 m[illion] people live off the land. Their average plot size is tiny: less than a hectare. Productivity is woeful. The population is expected to double by 2020. Unless a lot of people move to the cities, plots will be sliced even smaller than they are today. Smaller plots mean lower productivity; many families could go hungry. Mr. Zimba senses that there is little future in farming. His ambition is to be a hawker. He envisages buying soap and paraffin in the nearest town and selling it in the village. But he does not have the start-up capital.

Some people in Mr. Zimba's position move to the city, find jobs, and save to start a small business. But this is hard. A Malawian peasant cannot usually sell his land without agreement from his family and the village chief. If he leaves his property unattended, there is a danger that the chief will give his land to someone else, or that a sibling will grab it.

The advantages of sound property rights are so taken for granted in the West that it is worth spelling them out. First, secure title makes assets fungible. In a country with good property laws, almost anyone can use a house or a piece of land as collateral to raise a loan. It is also easy to divide assets between multiple owners. Ownership of a factory can be shared out among hundreds of people, any of whom can easily sell all or part of his share without the need to take the factory physically apart. If a French farmer dies, his children can sell the farm, or retain equal shares in it, or the more agriculturally-inclined sibling can buy the others out. . . .

Western property laws protect not merely ownership, but transactions too. People in poor countries can usually prevent their assets from being stolen by forming self-defense
groups or hiring the muscle of local mobsters. But they cannot confidently buy anything they cannot see. Poor people carry their pigs and tobacco bales physically to market. The prohibitive cost of carrying them back means that they have to sell them straight away, whether prices are good or not. American farmers sell paper representations of their crops, which is easier. To smooth their cash-flow, they can sell the rights to purchase crops which have not yet been sown. If a Malawian farmer wants cash in advance, he must grow marijuana.

. . . The reason that extra-legal businesses and landowners in poor countries do not become legal is that their path is usually blocked by officialdom. To illustrate . . . researchers set up a one-man clothing workshop on the outskirts of Lima, and tried to register it. The team worked for six hours a day, filling in forms, traveling by bus into central Lima and queuing before the relevant official desks. It took them 289 days to make their micro-enterprise legal, and cost $1,231 – 31 times the monthly minimum wage in Peru.

The story is the same elsewhere. In the Philippines, to formalize a squatter’s house built on state-owned land can require 168 steps involving 53 public and private agencies and taking 13 to 25 years. In Egypt, to obtain permission to build a house on land zoned for agriculture takes six to 11 years. If you build first and then try to become legal, you risk having your home demolished and spending time in jail. . . .

All rich industrialized countries have secure property rights, accessible to more or less all citizens. No poor country has. Better property laws are not the only reason that some countries are richer than others, but they clearly make a difference.
Source List


