

## CHAPTER THREE

# The Mystery of Capital

*The sense of the world must lie outside the world. In the world everything is as it is and happens as it does happen. In it there is no value—and if there were, it would be of no value.*

*If there is a value which is of value, it must lie outside all happening and being-so. For all happening and being-so is accidental.*

*What makes it non-accidental cannot lie in the world, for otherwise this would again be accidental.*

*It must lie outside the world.*

—Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*

WALK DOWN most roads in the Middle East, the former Soviet Union, or Latin America, and you will see many things: houses used for shelter, parcels of land being tilled, sowed, and harvested, merchandise being bought and sold. Assets in developing and former communist countries primarily serve these immediate physical purposes. In the West, however, the same assets also lead a parallel life as capital outside the physical world. They can be used to put in motion more production by securing the interests of other parties as “collateral” for a mortgage, for example, or by assuring the supply of other forms of credit and public utilities.

Why can't buildings and land elsewhere in the world also lead this parallel life? Why can't the enormous resources we discussed in Chapter 2—\$9.3 trillion of dead capital—produce value beyond

their “natural” state? My reply is, Dead capital exists because we have forgotten (or perhaps never realized) that converting a physical asset to generate capital—using your house to borrow money to finance an enterprise, for example—requires a very complex process. It is not unlike the process that Einstein taught us whereby a single brick can be made to release a huge amount of energy in the form of an atomic explosion. By analogy, capital is the result of discovering and unleashing potential energy from the trillions of bricks that the poor have accumulated in their buildings.

There is, however, one crucial difference between unleashing energy from a brick and unleashing capital from brick buildings: Although humanity (or at least a large group of scientists) has mastered the process of obtaining energy from matter, we seem to have forgotten the process that allows us to obtain capital from assets. The result is that 80 percent of the world is undercapitalized; people cannot draw economic life from their buildings (or any other asset) to generate capital. Worse, the advanced nations seem unable to teach them. Why assets can be made to produce abundant capital in the West but very little in the rest of the world is a mystery.

#### Clues from the Past (from Smith to Marx)

To unravel the mystery of capital, we have to go back to the seminal meaning of the word. In medieval Latin, “capital” appears to have denoted head of cattle or other livestock, which have always been important sources of wealth beyond the basic meat they provide. Livestock are low-maintenance possessions; they are mobile and can be moved away from danger; they are also easy to count and measure. But most important, from livestock you can obtain additional wealth, or surplus value, by setting in motion other

industries, including milk, hides, wool, meat, and fuel. Livestock also have the useful attribute of being able to reproduce themselves. Thus the term “capital” begins to do two jobs simultaneously, capturing the physical dimension of assets (livestock) as well as their potential to generate surplus value. From the barnyard, it was only a short step to the desks of the inventors of economics, who generally defined “capital” as that part of a country’s assets that initiates surplus production and increases productivity.

Great classical economists such as Adam Smith and Karl Marx believed that capital was the engine that powered the market economy. Capital was considered to be the principal part of the economic whole—the preeminent factor (as the capital issues in such phrases as *capital* importance, *capital* punishment, the *capital* city of a country). What they wanted to understand was what capital is and how it is produced and accumulated. Whether you agree with the classical economists or not, or perhaps view them as irrelevant (maybe Smith never understood that the Industrial Revolution was under way; maybe Marx’s labor theory of value has no practical application), there is no doubt that these thinkers built the towering edifices of thought on which we can now stand and try to find out what capital is, what produces it, and why non-Western nations generate so little of it.

For Smith, economic specialization—the division of labor and the subsequent exchange of products in the market—was the source of increasing productivity and therefore “the wealth of nations.” What made this specialization and exchange possible was capital, which Smith defined as the stock of assets accumulated for productive purposes. Entrepreneurs could use their accumulated resources to support specialized enterprises until they could exchange their products for the other things they needed. The more capital was accumulated, the more specialization became possible, and the higher society’s productivity would be. Marx

agreed; for him, the wealth that capitalism produces presents itself as an immense pile of commodities.

Smith believed that the phenomenon of capital was a consequence of man's natural progression from a hunting, pastoral, and agricultural society to a commercial one where, through mutual interdependence, specialization, and trade, he could increase his productive powers immensely. Capital was to be the magic that would enhance productivity and create surplus value. "The quantity of industry," wrote Smith, "not only increases in every country with the increase of the stock [capital] which employs it, but, in consequence of that increase, the same quantity of industry produces a much greater quantity of work."<sup>1</sup>

Smith emphasized one point that is at the very heart of the mystery we are trying to solve: For accumulated assets to become active capital and put additional production in motion, they must be *fixed and realized in some particular subject* "which lasts for some time at least after that labour is past. It is, as it were, a certain quantity of labour stocked and stored up to be employed, if necessary, upon some other occasion."<sup>2</sup> Smith warned that labor invested in the production of assets would not leave any trace or value if not properly *fixed*.

What Smith really meant may be the subject of legitimate debate. What I take from him, however, is that capital is not the accumulated stock of assets but the *potential* it holds to deploy new production. This potential is, of course, abstract. It must be processed and fixed into a tangible form before we can release it—just like the potential nuclear energy in Einstein's brick. Without a conversion process—one that draws out and fixes the potential energy contained in the brick—there is no explosion; a brick is just a brick. Creating capital also requires a conversion process.

This notion—that capital is first an abstract concept and must be

given a fixed, tangible form to be useful—was familiar to other classical economists. Simonde de Sismondi, the nineteenth-century Swiss economist, wrote that capital was "a permanent value, that multiplies and does not perish.... Now this value detaches itself from the product that creates it, it becomes a metaphysical and insubstantial quantity always in the possession of whoever produced it, for whom this value could [be fixed in] different forms."<sup>3</sup> The great French economist Jean Baptiste Say believed that "capital is always immaterial by nature since it is not matter which makes capital but the value of that matter, value has nothing corporeal about it."<sup>4</sup> Marx agreed; for him, a table could be made of something material, like wood "but so soon as it steps forth as a commodity, it is changed into something transcendent. It not only stands with its feet on the ground, but, in relation to all other commodities, it stands on its head, and evolves out of its wooden brain grotesque ideas, far more wonderful than table-turning ever was."<sup>5</sup>

This essential meaning of capital has been lost to history. Capital is now confused with money, which is only one of the many forms in which it travels. It is always easier to remember a difficult concept in one of its tangible manifestations than in its essence. The mind wraps itself around "money" more easily than "capital." But it is a mistake to assume that money is what finally fixes capital. As Adam Smith pointed out, money is the "great wheel of circulation," but it is *not* capital because value "cannot consist in those metal pieces."<sup>6</sup> In other words, money facilitates transactions, allowing us to buy and sell things, but it is not itself the progenitor of additional production. As Smith insisted, "the gold and silver money, which circulates in any country, may very properly be compared to a highway, which, while it circulates and carries to market all the grass and corn of the country, produces itself not a single pile of either."<sup>7</sup>

Much of the mystery of capital dissipates as soon as you stop thinking of “capital” as a synonym for “money saved and invested.” The misapprehension that it is money that fixes capital comes about, I suspect, because modern business expresses the value of capital in terms of money. In fact, it is hard to estimate the total value of a collection of assets of very different types, such as machinery, buildings, and land, without resorting to money. After all, that is why money was invented; it provides a standard index to measure the value of things so that we can exchange dissimilar assets. But as useful as it is, money cannot fix in any way the abstract potential of a particular asset in order to convert it into capital. Third World and former communist nations are infamous for inflating their economies with money—while not being able to generate much capital.

### The Potential Energy in Assets

What is it that fixes the potential of an asset so that it can put additional production into motion? What detaches value from a simple house and fixes it in a way that allows us to realize it as capital?

We can begin to find an answer by using our energy analogy. Consider a mountain lake. We can think about this lake in its immediate physical context and see some primary uses for it, such as canoeing and fishing. But when we think about this same lake as an engineer would by focusing on its capacity to generate energy as an additional value beyond the lake’s natural state as a body of water, we suddenly see the potential created by the lake’s elevated position. The challenge for the engineer is finding out how he can create a *process* that allows him to convert and fix this potential into a form that can be used to do additional work. In the case of the elevated lake, that process is contained in a hydroelec-

tric plant that allows the lake water to move rapidly downward with the force of gravity, thereby transforming the placid lake’s energy potential into the kinetic energy of tumbling water. This new kinetic energy can then rotate turbines, creating mechanical energy that can be used to turn electromagnets that further convert it into electrical energy. As electricity, the potential energy of the placid lake is now fixed in the form necessary to produce controllable current that can be further transmitted through wire conductors to faraway places to deploy new production.

Thus an apparently placid lake can be used to light your room and power the machinery in a factory. What was required was an external man-made process that allowed us, first, to identify the potential of the weight of the water to do additional work and, second, to convert this potential energy into electricity, which can then be used to create surplus value. The additional value we obtain from the lake is not a value of the lake itself (like a precious ore intrinsic to the earth) but rather a value of the man-made process *extrinsic* to the lake. It is this process that allows us to transform the lake from a fishing and canoeing kind of place into an energy-producing kind of place.

Capital, like energy, is also a dormant value. Bringing it to life requires us to go beyond *looking* at our assets as they are to actively *thinking* about them as they could be. It requires a process for fixing an asset’s economic potential into a form that can be used to initiate additional production.

Although the process that converts the potential energy in the water into electricity is well known, the one that gives assets the form required to put in motion more production is not known. In other words, while we know that it is the penstock, turbines, generators, transformers, and wires of the hydroelectric energy system that convert the potential energy of the lake until it is fixed in an accessible form, we do not know where to find the

key process that converts the economic potential of a house into capital.

This is because that key process was not deliberately set up to create capital but for the more mundane purpose of protecting property ownership. As the property systems of Western nations grew, they developed, imperceptibly, a variety of mechanisms that gradually combined into a process that churned out capital as never before. Although we use these mechanisms all the time, we do not realize that they have capital-generating functions because they do not wear that label. We view them as parts of the system that protects property, not as interlocking mechanisms for fixing the economic potential of an asset in such a way that it can be converted into capital. What creates capital in the West, in other words, is an implicit process buried in the intricacies of its formal property systems.

### **The Hidden Conversion Process of the West**

This may sound too simple or too complex. But consider whether it is possible for assets to be used productively if they do not belong to something or someone. Where do we confirm the existence of these assets and the transactions that transform them and raise their productivity, if not in the context of a formal property system? Where do we record the relevant economic features of assets, if not in the records and titles that formal property systems provide? Where are the codes of conduct that govern the use and transfer of assets, if not in the framework of formal property systems? It is formal property that provides the process, the forms, and the rules that fix assets in a condition that allows us to realize them as active capital.

In the West, this formal property system begins to process assets into capital by describing and organizing the most economically

and socially useful aspects about assets, preserving this information in a recording system—as insertions in a written ledger or a blip on a computer disk—and then embodying them in a title. A set of detailed and precise legal rules governs this entire process. Formal property records and titles thus represent our shared concept of what is economically meaningful about any asset. They capture and organize all the relevant information required to conceptualize the potential value of an asset and so allow us to control it. Property is the realm where we identify and explore assets, combine them, and link them to other assets. The formal property system is capital's hydroelectric plant. This is the place where capital is born.

Any asset whose economic and social aspects are not fixed in a formal property system is extremely hard to move in the market. How can the huge amounts of assets changing hands in a modern market economy be controlled, if not through a formal property process? Without such a system, any trade of an asset, say a piece of real estate, requires an enormous effort just to determine the basics of the transaction: Does the seller own the real estate and have the right to transfer it? Can he pledge it? Will the new owner be accepted as such by those who enforce property rights? What are the effective means to exclude other claimants? In developing and former communist nations, such questions are difficult to answer. For most goods, there is no place where the answers are reliably fixed. That is why the sale or lease of a house may involve lengthy and cumbersome procedures of approval involving all the neighbors. This is often the only way to verify that the owner actually owns the house and there are no other claims on it. It is also why the exchange of most assets outside the West is restricted to local circles of trading partners.

As we saw in the previous chapter, these countries' principal problem is not the lack of entrepreneurship: The poor have accumulated

trillions of dollars of real estate during the past forty years. What the poor lack is easy access to the property mechanisms that could legally fix the economic potential of their assets so that they could be used to produce, secure, or guarantee greater value in the expanded market. In the West, every asset—every piece of land, every house, every chattel—is formally fixed in updated records governed by rules contained in the property system. Every increment in production, every new building, product, or commercially valuable thing is someone's formal property. Even if assets belong to a corporation, real people still own them indirectly, through titles certifying that they own the corporation as "shareholders."

Like electrical energy, capital will not be generated if the single key facility that produces and fixes it is not in place. Just as a lake needs a hydroelectric plant to produce usable energy, assets need a formal property system to produce significant surplus value. Without formal property to extract their economic potential and convert it into a form that can be easily transported and controlled, the assets of developing and former communist countries are like water in a lake high in the Andes—an untapped stock of potential energy.

Why has the genesis of capital become such a mystery? Why have the rich nations of the world, so quick with their economic advice, not explained how indispensable formal property is to capital formation? The answer is that the process within the formal property system that breaks down assets into capital is extremely difficult to visualize. It is hidden in thousands of pieces of legislation, statutes, regulations, and institutions that govern the system. Anyone trapped in such a legal morass would be hard-pressed to figure out how the process actually works. The only way to see it is from outside the system—from the extralegal sector—which is where my colleagues and I do most of our work.

For some time now I have been looking at the law from an

extralegal point of view, to better understand how it functions and what effects it produces. This is not as crazy as it seems. As the French philosopher Michel Foucault has argued, it may be easier to discover what something means by looking at it from the opposite side of the bridge. "To find out what our society means by sanity," Foucault has written, "perhaps we should investigate what is happening in the field of insanity. And what we mean by legality in the field of illegality."<sup>8</sup> Moreover, property, like energy, is a concept; it cannot be experienced directly. Pure energy has never been seen or touched. And no one can see property. One can only experience energy and property by their effects.

From my viewpoint in the extralegal sector, I have seen that the formal property systems of the West produce six effects that allow their citizens to generate capital. The incapacity elsewhere in the world to deploy capital stems from the fact that most of the people in the Third World and in former communist countries are cut off from these essential effects.

#### Property Effect No. 1: Fixing the Economic Potential of Assets

The potential value locked up in a house can be revealed and transformed into active capital in the same way that potential energy is identified in a mountain lake and then transformed into actual energy. In both cases, the transition from one state to another requires a process that transposes the physical object into a man-made representative universe where we can disengage the resource from its burdensome material constraints and concentrate on its potential.

Capital is born by representing in writing—in a title, a security, a contract, and in other such records—the most economically and socially useful qualities *about* the asset as opposed to the

visually more striking aspects *of* the asset. This is where potential value is first described and registered. The moment you focus your attention on the title of a house, for example, and not on the house itself, you have automatically stepped from the material world into the conceptual universe where capital lives. You are reading a representation that focuses your attention on the economic potential of the house by filtering out all the confusing lights and shadows of its physical aspects and its local surroundings. Formal property forces you to think about the house as an economic and social concept. It invites you to go beyond viewing the house as mere shelter—and thus a dead asset—and to see it as live capital.

The proof that property is pure concept comes when a house changes hands; nothing physically changes. Looking at a house will not tell you who owns it. A house that is yours today looks exactly as it did yesterday when it was mine. It looks the same whether I own it, rent it, or sell it to you. Property is not the house itself but an economic concept *about* the house, embodied in a legal representation. This means that a formal property representation is something separate from the asset it represents.

What do formal property representations have that allows them to do additional work? Are they not just simple stand-ins for the assets? No. I repeat: A formal property representation such as a title is not a reproduction *of* the house, like a photograph, but a representation of our concepts *about* the house. Specifically, it represents the nonvisible qualities that have potential for producing value. These are not physical qualities of the house itself but rather economically and socially meaningful qualities we humans have attributed to the house (such as the ability to use it for a variety of purposes that can be secured by liens, mortgages, easements, and other covenants).

In advanced nations, this formal property representation func-

tions as the means to secure the interests of other parties and to create accountability by providing all the information, references, rules, and enforcement mechanisms required to do so. In the West, for example, most formal property can be easily used as collateral for a loan; as equity exchanged for investment; as an address for collecting debts, rates, and taxes; as a locus point for the identification of individuals for commercial, judicial, or civic purposes; and as a liable terminal for receiving public utility services, such as energy, water, sewage, telephone, or cable services. While houses in advanced nations are acting as shelters or workplaces, their representations are leading a parallel life, carrying out a variety of additional functions to secure the interests of other parties.

Legal property thus gave the West the tools to produce surplus value over and above its physical assets. Property representations enabled people to think about assets not only through physical acquaintance but also through the description of their latent economic and social qualities. Whether anyone intended it or not, the legal property system became the staircase that took these nations from the universe of assets in their natural state to the conceptual universe of capital where assets can be viewed in their full productive potential.

With legal property, the advanced nations of the West had the key to modern development; their citizens now had the means to discover, with great facility and on an ongoing basis, the most potentially productive qualities of their resources. As Aristotle discovered 2,300 years ago, what you can do with things increases infinitely when you focus your thinking on their potential. By learning to fix the economic potential of their assets through property records, Westerners created a fast track to explore the most productive aspects of their possessions. Formal property became the staircase to the conceptual realm where the economic meaning of things can be discovered and where capital is born.

### Property Effect No. 2: Integrating Dispersed Information into One System

As we saw in the previous chapter, most people in developing and former communist nations cannot get into the legal property system, such as it is, no matter how hard they try. Because they cannot insert their assets into the legal property system, they end up holding them extralegally. The reason capitalism has triumphed in the West and sputtered in the rest of the world is because most of the assets in Western nations have been integrated into one formal representational system.

This integration did not happen casually. Over decades in the nineteenth century, politicians, legislators, and judges pulled together the scattered facts and rules that had governed property throughout cities, villages, buildings, and farms and integrated them into one system. This “pulling together” of property representations, a revolutionary moment in the history of developed nations, deposited all the information and rules governing the accumulated wealth of their citizens into one knowledge base. Before that moment, information about assets was far less accessible. Every farm or settlement recorded its assets and the rules governing them in rudimentary ledgers, symbols, or oral testimony. But the information was atomized, dispersed, and not available to any one agent at any given moment. As we know too well today, an abundance of facts is not necessarily an abundance of knowledge. For knowledge to be functional, advanced nations had to integrate into one comprehensive system all their loose and isolated data about property.

Developing and former communist nations have not done this. In all the countries I have studied, I have never found just one legal system but dozens or even hundreds, managed by all sorts of organizations, some legal, others extralegal, ranging from small entrepreneurial groups to housing organizations. Consequently, what

people in those countries can do with their property is limited to the imagination of the owners and their acquaintances. In Western countries, where property information is standardized and universally available, what owners can do with their assets benefits from the collective imagination of a larger network of people.

It may surprise the Western reader that most of the world's nations have yet to integrate extralegal property agreements into one formal legal system. For Westerners, there supposedly is only one law—the official one. Yet the West's reliance on integrated property systems is a phenomenon of at most the last two hundred years. In most Western countries, integrated property systems appeared only about a hundred years ago; Japan's integration happened little more than fifty years ago. As we shall see in detail later, diverse informal property arrangements were once the norm in every nation. Legal pluralism was the standard in continental Europe until Roman law was rediscovered in the fourteenth century and governments assembled all currents of law into one coordinated system.

In California just after the gold rush of 1849, there were some eight hundred separate property jurisdictions, each with its own records and individual regulations established by local consensus. Throughout the United States, from California to Florida, claim associations agreed on their own rules and elected their own officers. It took more than one hundred years, well into the late nineteenth century, for the U.S. government to pass special statutes that integrated and formalized U.S. assets. By enacting more than thirty-five preemption and mining statutes, Congress gradually managed to integrate into one system the informal property rules created by millions of immigrants and squatters. The result was an integrated property market that fueled the United States' explosive economic growth thereafter.

The reason it is so hard to follow this history of the integration



of widespread property systems is that the process took place over a very long time. Formal property registries began to appear in Germany, for example, in the twelfth century but were not fully integrated until 1896, when the *Grundbuch* system for recording land transactions began operating on a national scale. In Japan, the national campaign to formalize the property of farmers began in the late nineteenth century and ended only in the late 1940s. Switzerland's extraordinary efforts to bring together the disparate systems that protected property and transactions at the turn of the twentieth century are still not well known, even to many Swiss.

As a result of integration, citizens in advanced nations can obtain descriptions of the economic and social qualities of any available asset without having to see the asset itself. They no longer need to travel around the country to visit each and every owner and their neighbors; the formal property system lets them know what assets are available and what opportunities exist to create surplus value. Consequently, an asset's potential has become easier to evaluate and exchange, enhancing the production of capital.

### Property Effect No. 3: Making People Accountable

The integration of all property systems under one formal property law shifted the legitimacy of the rights of owners from the politicized context of local communities to the impersonal context of law. Releasing owners from restrictive local arrangements and bringing them into a more integrated legal system facilitated their accountability.

By transforming people with property interests into accountable individuals, formal property created individuals from masses. People no longer needed to rely on neighborhood relationships or make local arrangements to protect their rights to assets. Freed

from primitive economic activities and burdensome parochial constraints, they could explore how to generate surplus value from their own assets. But there was a price to pay: Once inside a formal property system, owners lost their anonymity. By becoming inextricably linked to real estate and businesses that could be easily identified and located, people forfeited the ability to lose themselves in the masses. This anonymity has practically disappeared in the West, while individual accountability has been reinforced. People who do not pay for goods or services they have consumed can be identified, charged interest penalties, fined, embargoed, and have their credit ratings downgraded. Authorities are able to learn about legal infractions and dishonored contracts; they can suspend services, place liens against property, and withdraw some or all of the privileges of legal property.

Respect in Western nations for property and transactions is hardly encoded in their citizens' DNA; it is rather the result of having enforceable formal property systems. Formal property's role in protecting not only ownership but the security of transactions encourages citizens in advanced countries to respect titles, honor contracts, and obey the law. When any citizen fails to act honorably, his breach is recorded in the system, jeopardizing his reputation as a trustworthy party to his neighbors, utilities, banks, telephone companies, insurance firms, and the rest of the network that property ties him to.

Thus the formal property systems of the West have bestowed mixed blessings. Although they provided hundreds of millions of citizens with a stake in the capitalist game, what made this stake meaningful was that it could be lost. A great part of the potential value of legal property is derived from the possibility of forfeiture. Consequently, a great deal of its power comes from the accountability it creates, from the constraints it imposes, the rules it spawns, and the sanctions it can apply. In allowing people to see

the economic and social potential of assets, formal property changed the perception in advanced societies of not only the potential rewards of using assets but also the dangers. Legal property invited commitment.

The lack of legal property thus explains why citizens in developing and former communist nations cannot make profitable contracts with strangers, cannot get credit, insurance, or utilities services: They have no property to lose. Because they have no property to lose, they are taken seriously as contracting parties only by their immediate family and neighbors. People with nothing to lose are trapped in the grubby basement of the precapitalist world.

Meanwhile, citizens of advanced nations can contract for practically anything that is reasonable, but the entry price is commitment. And commitment is better understood when backed up by a pledge of property, whether it be a mortgage, a lien, or any other form of security that protects the other contracting party.

#### Property Effect No. 4: Making Assets Fungible

One of the most important things a formal property system does is transform assets from a less accessible condition to a more accessible condition, so that they can do additional work. Unlike physical assets, representations are easily combined, divided, mobilized, and used to stimulate business deals. By uncoupling the economic features of an asset from their rigid, physical state, a representation makes the asset "fungible"—able to be fashioned to suit practically any transaction.

By describing all assets in standard categories, an integrated formal property system enables the comparison of two architecturally different buildings constructed for the same purpose. This allows one to discriminate quickly and inexpensively between sim-

ilarities and differences in assets without having to deal with each asset as if it were unique.

Standard property descriptions in the West are also written to facilitate the combination of assets. Formal property rules require assets to be described and characterized in a way that not only outlines their singularity but also points out their similarity to other assets, thus making potential combinations more obvious. Through the use of standardized records, one can determine (on the basis of zoning restrictions, who the neighbors are and what they are doing, the square footage of the buildings, whether they can be joined, etc.) how to exploit a particular piece of real estate most profitably, whether as office space, hotel rooms, a bookshop, or racquetball courts and a sauna.

Representations also enable the division of assets without touching them. Whereas an asset such as a factory may be an indivisible unit in the real world, in the conceptual universe of formal property representation it can be subdivided into any number of portions. Citizens of advanced nations are thus able to split most of their assets into shares, each of which can be owned by different persons, with different rights, to carry out different functions. Thanks to formal property, a single factory can be held by countless investors, who can divest themselves of their property without affecting the integrity of the physical asset.

Similarly, in a developed country, the farmer's son who wishes to follow in his father's footsteps can keep the farm by buying out his more commercially minded siblings. Farmers in many developing countries have no such option and must continually subdivide their farms for each generation until the parcels are too small to farm profitably, leaving the descendants with two alternatives: starving or stealing.

Formal property representations can also serve as movable stand-ins for physical assets, enabling owners and entrepreneurs to

simulate hypothetical situations in order to explore other profitable uses of their assets—much as military officers plan their strategy for a battle by moving symbols of their troops and weapons around a map. If you think about it, it is property representations that allow entrepreneurs to simulate business strategies to grow their companies and build capital.

In addition, all standard formal property documents are crafted in such a way as to facilitate the easy measurement of an asset's attributes. If standard descriptions of assets were not readily available, anyone who wanted to buy, rent, or give credit against an asset would have to expend enormous resources comparing and evaluating it against other assets—which also would lack standard descriptions. By providing standards, Western formal property systems have significantly reduced the transaction costs of mobilizing and using assets.

Once assets are in a formal property system, they endow their owners with an enormous advantage in that they can be split up and combined in more ways than an Erector set. Westerners can adapt their assets to any economic circumstance to produce continually higher valued mixtures, whereas their Third World counterparts remain trapped in the physical world of rigid, non-fungible forms.

#### Property Effect No. 5: Networking People

By making assets fungible, by attaching owners to assets, assets to addresses, and ownership to enforcement, and by making information on the history of assets and owners easily accessible, formal property systems converted the citizens of the West into a network of individually identifiable and accountable business agents. The formal property process created a whole infrastructure of connect-

ing devices that, like a railway switchyard, allowed the assets (trains) to run safely between people (stations). Formal property's contribution to mankind is not the protection of ownership; squatters, housing organizations, mafias, and even primitive tribes manage to protect their assets quite efficiently. Property's real breakthrough is that it radically improved the flow of communications about assets and their potential. It also enhanced the status of their owners, who became economic agents able to transform assets within a broader network.

This explains how legal property encourages the suppliers of such utilities as electricity and water to invest in production and distribution facilities to service buildings. By legally attaching the buildings where the services will be delivered to their owners, who will be using and paying for the services, a formal property system reduces the risk of theft of services. It also reduces the financial losses from bill collecting among people hard to locate, as well as technical losses from incorrectly estimating the electricity needs of areas where businesses and residents are clandestine and not recorded. Without knowing who has the rights to what, and without an integrated legal system where the ability to enforce obligations has been transferred from extralegal groups to government, utilities would be hard-pressed to deliver services profitably. On what other basis could they identify subscribers, create utility subscription contracts, establish service connections, and ensure access to parcels and buildings? How would they implement billing systems, meter reading, collection mechanisms, loss control, fraud control, delinquent charging procedures, and enforcement services such as meter shutoffs?

Buildings are always the terminals of public utilities. What transforms them into *accountable* and *responsible* terminals is legal property. Anyone who doubts this need only look at the utility situation outside the West, where technical and financial losses

plus theft of services account for 30 to 50 percent of all available utilities.

Western legal property also provides businesses with information about assets and their owners, verifiable addresses, and objective records of property value, all of which lead to credit records. This information and the existence of integrated law make risk more manageable by spreading it through insurance-type devices as well as by pooling property to secure debts.

Few seem to have noticed that the legal property system of an advanced nation is the center of a complex web of connections that equips ordinary citizens to form ties with both the government and the private sector, and so to obtain additional goods and services. Without the tools of formal property, it is hard to see how assets could be used for everything they accomplish in the West. How else could financial organizations identify trustworthy potential borrowers on a massive scale? How could physical objects, like timber in Oregon, secure an industrial investment in Chicago? How could insurance companies find and contract customers who will pay their bills? How could information brokerage or inspection and verification services be provided efficiently and cheaply? How could tax collection work?

It is the property system that draws out the abstract potential from buildings and fixes it in representations that allow us to go beyond passively using the buildings only as shelters. Many title systems in developing nations fail to produce capital because they do not acknowledge that property can go way beyond ownership. These systems function purely as an ownership inventory of deeds and maps standing in for assets, without allowing for the additional mechanisms required to create a network where assets can lead a parallel life as capital. Formal property should not be confused with such massive inventory systems as the English Domesday Book of nine hundred years ago or a luggage check

operation in an international airport. Properly understood and designed, a property system creates a network through which people can assemble their assets into more valuable combinations.

#### Property Effect No. 6: Protecting Transactions

One important reason why the Western formal property system works like a network is that all the property records (titles, deeds, securities, and contracts that describe the economically significant aspects of assets) are continually tracked and protected as they travel through time and space. Their first stop is the public agencies that are the stewards of an advanced nation's representations. Public record keepers administer the files that contain all the economically useful descriptions of assets, whether land, buildings, chattels, ships, industries, mines, or airplanes. These files will alert anyone eager to use an asset about things that may restrict or enhance its realization, such as encumbrances, easements, leases, arrears, bankruptcies, and mortgages. The agencies also ensure that assets are adequately and accurately represented in appropriate formats that can be updated and easily accessed.

In addition to public record-keeping systems, many other private services have evolved to assist parties in fixing, moving, and tracking representations so that they can easily and securely produce surplus value. These include private entities that record transactions, escrow and closings organizations, abstractors, appraisers, title and fidelity insurance firms, mortgage brokers, trust services, and private custodians of documents. In the United States, title insurance companies further help the mobilization of representations by issuing policies to cover parties for specified risks, ranging from defects on titles to unenforceability on mortgages and unmarketability of title. By law, all these entities have

to follow strict operating standards that govern their document-tracking capabilities, physical storage facilities, and staffing.

Although they are established to protect both the security of ownership and that of transactions, it is obvious that Western systems emphasize the latter. Security is principally focused on producing trust in transactions so that people can more easily make their assets lead a parallel life as capital.

In most developing countries, by contrast, the law and official agencies are trapped by early colonial and Roman law, which tilt toward protecting ownership. They have become custodians of the wishes of the dead. This may explain why the creation of capital in Western property happens so easily, and why most of the assets in developing and former communist countries have slipped out of the formal legal system in search of mobility.

The Western emphasis on the security of transactions allows citizens to move large amounts of assets with very few transactions. How else can we explain that in developing and former communist nations people are still taking their pigs to market and trading them one at a time, as they have done for thousands of years, whereas in the West, traders take representations of their rights over pigs to the market? Traders at the Chicago commodities exchange, for example, deal through representations, which give them more information about the pigs they are trading than if they could physically examine each pig. They are able to make deals for huge quantities of pigs with little concern about the security of transactions.

### Capital and Money

The six effects of an integrated property process mean that Westerners' houses no longer merely keep the rain and cold out.

Endowed with representational existence, these houses can now lead a parallel life, doing *economic* things they could not have done before. A well-integrated legal property system in essence does two things: First, it tremendously reduces the costs of knowing the economic qualities of assets by representing them in a way that our senses can pick up quickly; and second, it facilitates the capacity to agree on how to use assets to create further production and increase the division of labor. The genius of the West was to have created a system that allowed people to grasp with the mind values that human eyes could never see and to manipulate things that hands could never touch.

Centuries ago, scholars speculated that we use the word "capital" (from the Latin for "head") because the head is where we hold the tools with which we create capital. This suggests that the reason why capital has always been shrouded in mystery is because, like energy, it can be discovered and managed only with the mind. The only way to touch capital is if the property system can record its economic aspects on paper and anchor them to a specific location and owner.

Property, then, is not mere paper but a mediating device that captures and stores most of the stuff required to make a market economy run. Property seeds the system by making people accountable and assets fungible, by tracking transactions, and so providing all the mechanisms required for the monetary and banking system to work and for investment to function. The connection between capital and modern money runs through property.

Today it is records of property ownership and transactions that provide monetary authorities with the crucial evidence they need to issue additional legal tender. As cognitive scientists George A. Miller and Philip N. Johnson-Laird wrote in 1976: "Paper currency owes its origins to the writing of debt notes. [Therefore] money ... presupposes the institution of property."<sup>9</sup> It is property documentation that

fixes the economic characteristics of assets so that they can be used to secure commercial and financial transactions and ultimately to provide the justification against which central banks issue money. To create credit and generate investment, what people encumber are not the physical assets themselves, but their property representations—the recorded titles or shares—governed by rules that can be enforced nationwide. Money does not earn money. You need a property right before you can make money. Even if you loan money, the only way you can earn on it is by loaning or investing it against some kind of property document that establishes your rights to principal and interests. To repeat: Money presupposes property.

As the eminent German economists Gunnar Heinsohn and Otto Steiger point out, “Money is *never created ex nihilo* from the point of view of property, which must always exist *before* money can come into existence.”<sup>10</sup> Recognizing similarities between their work and mine, they brought to my attention an unpublished draft of an article stating “that interest and money cannot be understood without the institution of property.”<sup>11</sup> This relationship is obscured, they maintain, by the common misapprehension that central banks issue notes and support the ability of commercial banks to make payments. In Heinsohn and Steiger’s view, what escapes the naked eye is “that all advances are made in good banking against securities,”<sup>12</sup> or in my terms, legal property paper. They agree with Harold Demsetz that the property rights foundation of capitalism has been taken for granted and note that Joseph Schumpeter already had an inkling that it is property rights that secure the creation of money. As Tom Bethell correctly states in his extraordinary book *The Noblest Triumph*, “the many blessings of a private property system have never been properly analyzed.”<sup>13</sup>

Capital, as I argued earlier, is therefore not created by money; it is created by people whose property systems help them to cooperate and think about how they can get the assets they accumulate to

deploy additional production. The substantial increase of capital in the West over the past two centuries is the consequence of gradually improving property systems, which allowed economic agents to discover and realize the potential in their assets, and thus to be in a position to produce the noninflationary money with which to finance and generate additional production.

So, we are more than squirrels who store food for winter and engage in deferred consumption. We know, through the sophisticated use of property institutions, how to give the things we accumulate a parallel life. When advanced nations pulled together all the information and rules about their known assets and established property systems that tracked their economic evolution, they gathered into one order the whole institutional process that underpins the creation of capital. If capitalism had a mind, it would be located in the legal property system. But like most things pertaining to the mind, much of “capitalism” today operates at a subconscious level.

Why did the classical economists, who knew capital was abstract and had to be fixed, not make the connection between capital and property? One explanation may be that in Adam Smith’s or even Marx’s day property systems were still restricted and undeveloped, and their importance was difficult to gauge. Perhaps more significantly, the battle for the future of capitalism shifted from the book-lined studies of theoreticians into a vast web of entrepreneurs, financiers, politicians, and jurists. The attention of the world turned from theories to the real deals being made on the ground, day by day, fiscal year after fiscal year.

Once the vast machine of capitalism was firmly in place and its masters were busy creating wealth, the question of how it all came into being lost its urgency. Like people living in the rich and fertile delta of a long river, the advocates of capitalism had no pressing need to explore upstream for the source of their prosperity. Why bother? With the end of the Cold War, however, capitalism became

the only serious option for development. So the rest of the world turned to the West for help and was advised to imitate the conditions of life on the delta: stable currencies, open markets, and private businesses, the objectives of so-called macroeconomic and structural adjustment reforms. Everyone forgot that the reason for the delta's rich life lay far upriver, in its unexplored headwaters. Widely accessible legal property systems are the silt from upriver that permits modern capital to flourish.

This is one of the principal reasons macroeconomic reforms are not working. Imitating capitalism at the level of the delta, by importing McDonald's and Blockbuster franchises, is not enough to create wealth. What is needed is capital, and this requires a complex and mighty system of legal property that we have all taken for granted.

### Braudel's Bell Jar

Much of the marginalization of the poor in developing and former communist nations comes from their inability to benefit from the six effects that property provides. The challenge these countries face is not whether they should produce or receive more money but whether they can understand the legal institutions and summon the political will necessary to build a property system that is easily accessible to the poor.

The French historian Fernand Braudel found it a great mystery that at its inception, Western capitalism served only a privileged few, just as it does elsewhere in the world today:

The key problem is to find out why that sector of society of the past, which I would not hesitate to call capitalist, should have lived as if in a bell jar, cut off from the rest; why was it not able to expand and conquer the whole of society? ... [Why was it that] a significant rate of

capital formation was possible only in certain sectors and not in the whole market economy of the time?... It would perhaps be teasingly paradoxical to say that whatever else was in short supply, money certainly was not ... so this was an age where poor land was bought up and magnificent country residences built, great monuments erected, and cultural extravagance financed.... [How do we] resolve the contradiction ... between the depressed economic climate and the splendors of Florence under Lorenzo the Magnificent?<sup>214</sup>

I believe the answer to Braudel's question lies in restricted access to formal property, both in the West's past and in developing and former communist countries today. Local and foreign investors do have capital; their assets are more or less integrated, fungible, networked, and protected by formal property systems. But they are only a tiny minority—those who can afford the expert lawyers, insider connections, and patience required to navigate the red tape of their property systems. The great majority of people, who cannot get the fruits of their labor represented by the formal property system, live outside Braudel's bell jar.

The bell jar makes capitalism a private club, open only to a privileged few, and enrages the billions standing outside looking in. This capitalist apartheid will inevitably continue until we all come to terms with the critical flaw in many countries' legal and political systems that prevents the majority from entering the formal property system.

The time is right to find out why most countries have not been able to create open formal property systems. This is the moment, as Third World and former communist nations are living through their most ambitious attempts to implement capitalist systems, to lift the bell jar.

But before we answer that question, we have to solve the rest of the mystery of why governments have been so slow to realize that a bell jar exists.